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Before the
United States House of Representatives
Committee on Financial Services Subcommittee on Capital Markets

Hearing on the General Accounting Office Report on Recovery and Renewal Efforts Post Sept. 11
February 12, 2003

I would like to thank Chairman Oxley and Chairman Baker for the opportunity to testify today on The Bond Market Association's efforts to help restore trading in the bond market following the attacks of September 11, 2001 and steps we have taken to prepare for emergencies in the future. I am Micah S. Green, president of The Bond Market Association, which represents approximately 200 securities firms and banks that underwrite, trade, and sell fixed-income securities both domestically and internationally.

The despicable attacks on America in September 2001 wrought tragic consequences for thousands of New Yorkers and Washingtonians. Indeed, no American has been untouched by those events. The financial services industry was especially affected by the attacks. A significant portion of the 2,800 people killed in the attacks made their living in the capital markets, and a large number of them worked in the bond markets. It was a tragic time that tested the mettle of the families, friends and colleagues of those who were killed. At the same time, September 11 elicited noble actions on the part of many, including many fixed-income market professionals.

The Bond Market

Many people do not realize that the U.S. bond markets dwarf the stock markets in size, with respect to both outstanding securities and volume of transactions. Through the third quarter of 2002, there were nearly $20 trillion of bonds and other fixed-income securities outstanding versus a total stock market capitalization of $11.5 trillion. Average daily bond market “cash” trading volume in the first half of this year was nearly $630 billion, compared to a $64 billion combined average volume on the three major stock markets. Hundreds of billions of dollars more in transactions are conducted daily under repurchase agreements. Processing such a large volume of fixed-income transactions every day requires a highly sophisticated and automated market infrastructure composed of numerous players. These participants are all inter-connected via complex telecommunications links. Also, unlike a stock market such as the New York Stock Exchange, bonds trade in a decentralized, over-the-counter market. There is no single, central physical point of contact for participants in the bond markets, save, perhaps, for certain clearance and settlement facilities.

There is, of course, a concentration of financial services firms in lower Manhattan. Several key participants in the U.S. fixed-income markets were located in or near the World Trade Center.

Both Cantor Fitzgerald and Garban/ICAP, two of the largest fixed-income inter-dealer brokers, had their principal New York offices in the twin towers. Morgan Stanley, one of the largest participants in the fixed-income markets, was also one of the Trade Center's largest tenants. Two more of the market's largest fixed-income dealers, Merrill Lynch and Lehman Brothers, were located in the World Financial Center, which, of course, sustained significant physical damage. Euro Brokers, another fixed-income inter-dealer broker, also had its offices in the World Trade Center. The market's two largest clearing banks, the Bank of New York and J.P. Morgan Chase—together responsible for processing hundreds of billions of dollars in transactions every day—were located just a few blocks from ground zero. Numerous other firms active in the markets had offices in or near the World Trade Center and were directly affected by the attacks. The Bond Market Association itself was displaced from its New York offices on Broad Street in lower Manhattan for a week after September 11.

The Association plays an important role in market operations by bringing together dealers and other participants and fostering open discussion of critical issues. In addition, the Association helps facilitate orderly and efficient markets by issuing market practice recommendations to dealers. These recommendations generally cover areas such as clearance and settlement, documentation and standard calculations. Compliance is purely voluntary. The Association's role as a forum for discussion and issuer of market practice recommendations help ensure that the markets operate smoothly. This was never more important than in the days following the terrorist attacks.

A Speedy Resumption of Bond Trading Following the Attacks

On the morning of September 11, the staff of the Association, along with most others in lower Manhattan, evacuated its offices when the planes crashed into the World Trade Center and the twin towers fell. Later that day, after consulting with key market participants and regulators, Association staff issued a recommendation that the U.S. fixed-income markets be closed until further notice.[1] Again, compliance with the Association's recommendations is strictly voluntary. In reality, the decentralized, over-the-counter fixed-income markets never close. Participants are free to trade with each other any time they wish. Moreover, the fixed-income market, especially the market for U.S. government securities, is truly global in nature. Government securities trading takes place in every major financial center in the world. Our recommendation for a market close on September 11 and 12 applied only to New York trading hours.

On September 12, we convened several conference calls with Association leadership and government officials to determine whether market participants felt prepared to resume activity on September 13. It quickly became clear that the fixed-income markets had suffered extraordinarily on September 11. Both Cantor Fitzgerald and Euro Brokers, important sources of market liquidity, were tragically devastated. Garban/ICAP, another important source of liquidity, lost its primary trading facility. (Fortunately, Cantor's backup facility in New Jersey and its London location were soon able to support trading via their electronic trading platform, eSpeed.) The two major clearing banks that support the system for clearing and settling securities transactions had lost significant telecommunications capability. A number of dealers

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[1] A detailed account of emergency meetings and actions taken by the Association following the attacks on September 11 is available on the Association's Web site at www.bondmarkets.com/market/9-11_minutes.shtml.

did not have access to their primary trading sites in lower Manhattan. Personnel were strained by dealing with issues and problems raised by the attacks, often in backup facilities. Nevertheless, the consensus of our membership was that, despite the extreme loss of life and other hardships, the market was ready to resume activity on September 13. We issued a statement on the afternoon of September 12 recommending that the market reopen, albeit with an abbreviated trading day and an extended cycle for clearing and settling trades in government securities. On the morning of September 13, less than 48 hours after the first plane was flown into the World Trade Center, the bond markets resumed trading.

The trading day on September 13 proceeded fairly smoothly in an abbreviated session. The biggest problem the market faced was clearing and settling transactions from previous trading days. Since the bulk of government securities cash and repo trading takes place before 9:00 a.m., it is important to note that September 11 was close to a full trading day. Telecommunications connectivity problems among the largest dealers, the Government Securities Clearance Corporation (GSCC) and the two largest clearing banks led to the inability of these institutions to reconcile their systems due to incomplete trade and settlement information. Over the next several days, the Association hosted a number of conference calls with key market participants and regulators to address the problem. Although some market participants continued to experience problems in the area of clearance and settlement, the markets slowly returned to normalcy in the weeks following the attacks.

Because of the disruption to normal clearance and settlement activities that resulted from the attacks, the Association, in consultation with regulatory authorities, also considered whether to issue recommendations that market participants allow extended settlement terms on a temporary basis. Transactions in government securities and bonds issued by government-sponsored agencies typically settle the day after the transaction is executed—so-called "T+1" settlement. In order to ensure that market participants who may have lost telecommunications connectivity to clearing banks and clearance and settlement utilities had adequate time to process transactions, we recommended an extended settlement cycle for government and agency securities—first to the third day after trade execution, or T+3, and then to T+5—in the days following September 11. We also continued to recommend abbreviated trading hours, with early market closes of 2:00 p.m. We believe these actions helped some market participants deal with telecommunications systems destroyed in the attacks. By September 20, most systems had been brought fully back online, and we had withdrawn our recommendation for abbreviated trading hours. By Monday, September 24, we had withdrawn our recommendation for extended settlement cycles.

The Association helped the recovery in other ways, as well. Our Manhattan office of the Association was inaccessible during the week following the attacks and suffered spotty telephone and data communications even after we returned. During that time, our Washington and London offices coordinated communications among industry members and with government officials. We also helped industry members with facilities located in lower Manhattan work with federal and city agencies to gain access to their buildings when that part of the city was effectively shut down. This helped market liquidity in the days following the attacks by ensuring that dealers who wanted to trade were able to do so.

The quick recovery of the bond markets following such a destructive attack is a testament to the thousands of dedicated fixed-income professionals who worked very hard under extremely difficult conditions in the days following September 11 to bring the markets back. It is also a demonstration of the resiliency of decentralized, over-the-counter market, which are not dependent on a single physical location in order to continue trading in the face of a market emergency.

Lessons of 9/11: Business Continuity Planning

The market continues to learn from the experiences of September 11. Contingency planning has become more than just a new buzzword. Virtually every major market participant has now developed and implemented plans for dealing with disasters of the scale we witnessed in 2001. The Association has implemented its own contingency planning. In the event of another emergency of the scale and impact of September 11, Association leadership, staff and members of key committees will meet via conference call to assess the situation and make recommendations on market operations.

The Association has also worked closely with other industry groups, including the Securities Industry Association (SIA), whose representative is also testifying here today, to help ensure that market participants and government officials are able to make contact with each other and coordinate responses should a major disaster occur again.

Regulators have also examined issues raised by September 11 attacks. In May 2002, the Federal Reserve Board (Fed) and the Securities and Exchange Commission (SEC) issued a white paper outlining issues raised by September 11 with regard to the nation's clearance and settlement systems for government securities. In particular, the two agencies asked whether the clearance and settlement system for government securities is too concentrated and whether changes are warranted. The Association told regulators that the current clearance and settlement system has evolved as a result of market forces. The Association told the Fed and the SEC that although wholesale, mandated changes are not warranted, certain steps to mitigate systemic risks are worth considering. (Please see appendix A for a copy of the Association's comment letter on this issue.)

In addition, in August of last year, the SEC, Fed, and Office of the Comptroller of the Currency issued a draft white paper discussing business contingency steps that clearing organizations and other firms that play significant roles in critical financial markets would be expected to implement. The Association submitted a joint comment letter with the SIA which supported continuing efforts to fortify contingency plans and systems but argued against imposing inflexible "one-size fits all" requirements on each firm. The agencies have been considering these and other comments in preparation for issuing a final white paper. (Please see appendix B for a copy of the Association's joint comment letter with the SIA on this issue.)

The Association has established the Business Continuity Management Council (BCMC) to engage members in fixed-income-specific business continuity issues. The BCMC is made up of senior fixed-income operations and business continuity professionals from the Association's member firms and works closely with the SIA's Business Continuity Planning Committee. The Association also works with the SIA and the American Bankers Association on business continuity issues through the Federal Financial Services Sector Coordinating Council (FSSCC). The FSSCC is an industry organization that coordinates with federal financial services regulators on security issues.

The Association and the SIA have also been working with various telecommunications industry associations and federal committees to encourage dialog with industry leaders, the FCC and others to achieve real change in the telecommunications infrastructure. Resilience in telecommunications, which is the bedrock of the bond market, should support resilience in bond market operations infrastructure. This support would enable us to trade more effectively in the event of another business disruption.

MSRB Trading Halt Proposal

In the aftermath of September 11, federal regulators and self-regulatory organizations have been appropriately focused on whether they have the authority and means necessary to address market emergencies. As an outgrowth of this review, the Municipal Securities Rulemaking Board (MSRB) recently filed a rule proposal seeking the authority to declare an emergency halt to trading in the municipal securities market. At the SEC's request, the MSRB recently extended by 30 days what was to have been an unusually brief comment period. The Association is grateful to have the opportunity for a more thorough vetting of the important policy implications presented by the MSRB's proposal.

While the Association appreciates the MSRB is motivated by the need to address issues raised by the tragic events of September 11, we believe that the case has not been made for new trading halt authority, and that imposing a blanket trading halt on the entire municipal bond market is on balance likely to do more harm than good. Even in times of stress or damage to “critical infrastructure,” bond market participants should be permitted to trade and to provide liquidity to investors and each other that is critical to our nation’s economy and banking system. Rather than focus on closing the market, the aim should be to prepare for keeping the market open in times of emergency.

The fixed-income markets are inter-linked, global and trade continuously and are highly inter-related. Accordingly, any consideration of whether to grant trading halt authority in the municipal markets should be undertaken only in conjunction with a broader review of how a market emergency may impact fixed income markets generally. The decision to suspend trading in a specific security should not be made without consideration of the effect it will have on the market for other fixed-income securities. It follows that the authority to suspend trading in a specific security, if deemed necessary, should not rest with a non-governmental agency with a limited mandate.

The Association strongly believes that the focus of debate concerning the proposal should be on the significant public policy issues surrounding the appropriateness of a trading halt in an OTC market, and ultimately on what is in the best interest of the investing public and the nation’s economic and financial system. Every other question is secondary. The Association's concerns—briefly outlined below—were discussed in a letter to the President's Working Group on Financial Markets (see appendix C) and will be detailed in a more comprehensive comment letter to be filed with the SEC.

- **A Blanket Trading Halt Is Unlikely To Be Needed, Or Helpful**

Because the OTC bond markets are decentralized and flexible, there is no need for a blanket trading halt. The proposed "cure" of closing the market in times of emergency likely would do more harm than allowing the private sector to function and adapt to the circumstances.

Because there is no exchange or central platform needed for trading fixed-income securities, trading can occur on a bilateral basis even in times of disruption so long as individual parties have the capacity to do so. The only possible central point of failure is the settlement and clearance system provided by the Depository Trust and Clearing Corporation ("DTCC"). But even if DTCC—which has its own sophisticated contingency plans in place—were to encounter difficulties, parties can decide whether to refrain from trading, or to extend the settlement period, or to make alternate settlement arrangements. Hence, even during an emergency, private sector participants should have the flexibility to decide whether to trade, subject to investor protection rules.

Moreover, the municipal securities market, to which the MSRB's proposal would apply, is actually the smallest sector of the U.S. bond market in terms of trading volume. Less than two percent of total daily bond market trading volume is in municipals. In the days following September 11, municipal market volume actually fell significantly. Even if there was a significant breakdown in the nation's clearance and settlement system, the low transaction volume in the municipal sector suggests it would be least affected. The low volume also suggests that alternative clearance and settlement arrangements would potentially be viable.

Whatever the circumstances, there is a benefit to economic and banking policy makers in allowing market participants to express views on credit and rates in a continuous way and to provide liquidity for investors who need it. The Association's members are major participants and providers of liquidity in the municipal bond market and the other OTC bond markets. Their own knowledge and experience informs their strong belief that the flexibility to continue trading and to provide liquidity would in all conceivable circumstances be better than a regulatory market close.

- **September 11 Demonstrated The Market's Resilience**

The performance of the fixed income markets following September 11—as detailed above—helps illustrate why a blanket trading halt is unlikely to be necessary or helpful. Market participants were able to communicate and make voluntary adjustments to respond to the circumstances. Regulators and market participants recognized the importance of re-opening the markets quickly, to restore the financial markets and to support national security and confidence.

It also bears noting that the difficulties encountered with the clearance and settlement of Treasury securities following September 11 related almost entirely to trades executed *before* the terrorist attacks on September 11. A trading halt issued after the crisis occurred, such as the MSRB contemplates in its proposal, would not have avoided these problems.

- **Targeted Rules And Procedures Are Preferable To A Market Close**

Rather than focus on closing the markets in an emergency, it would be better to work toward keeping the markets open. This can be achieved by targeting issues that might arise during an emergency with firm-specific measures and enhanced investor protection and capital adequacy rules. Moreover, to the extent the MSRB is motivated by a concern that market participants could take advantage of a chaotic market to commit fraud or abuse, it should be noted that investor protection and anti-fraud rules are already in place.

The Association recognizes that the worthy goal of the MSRB and other regulators is to prepare for emergencies such as September 11. But we believe it would be better to work toward keeping the markets *open* in such circumstances, rather than focus on *closing* the markets. As noted above, the Association is currently working with other industry groups and federal financial regulators on business continuity plans intended to minimize the disruption to the financial system in the event of an emergency. Ironically, because firms devote resources to business continuity measures partly to be able to continue trading when other firms are unable to, the ability to halt trading by all firms could act as a disincentive to strengthen such measures.

Conclusions

The terrorist attacks of September 11, 2001 sent an emotional and physical shock through the bond market, tearing apart lives along with the market infrastructure. Despite countless personal tragedies, bond market participants—with the Association acting as a facilitator and in consultation with regulators—rallied to reopen trading in only two days. The display of resolve is testament to the dedicated professionals in our industry who immediately grasped the broader importance of returning the financial markets to normalcy as quickly as possible.

September 11 also serves as a valuable reminder of the need to always be prepared. Though bonds are traded in a decentralized, over-the-counter fashion, the Association and its members recognize the value of business continuity planning to minimize the disruptions stemming from any future emergencies. The Association is working with other sectors of the financial industry and regulators on this issue. While guidance and new rules in this area governing critical market infrastructure may be necessary, the Association opposes the MSRB's proposal to adopt the authority to suspend trading in the municipal bond market. Regulatory efforts should remain focused on keeping the markets open in times of crisis, not on the authority to close markets.

Appendix A

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August 19, 2002

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RE: Docket No. R-1122, Interagency White Paper on Structural Change in the Settlement of Government Securities: Issues and Options

Dear Ms. Johnson and Mr. Katz:

The Bond Market Association ("we" or the "Association"[1]) appreciates the opportunity to comment on the White Paper entitled "Structural Change in the Settlement of Government Securities: Issues and Options" (the "White Paper"), jointly issued by the Federal Reserve Board (the "Board"), and the Securities and Exchange Commission (the "Commission", collectively with the Board, the "Agencies") in May 2002. The Association applauds the Agencies for their examination of issues related to the clearance and settlement of U.S. government securities. [2] We believe that, given the important role the clearance and settlement system plays in the government securities markets, an examination of the issues related to the clearance and settlement system is a worthwhile and necessary exercise.[3]

Given the length of our letter, and in order to facilitate your review and easy reference, below please find a table of contents.

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1 The Association represents securities firms and banks that underwrite, distribute and trade in fixed income securities, both domestically and internationally, including all primary dealers recognized by the Federal Reserve Bank of New York. Our members are also actively involved in the funding markets for such securities, including the repurchase and securities lending markets. This letter has been the subject of intensive and widespread discussion within our membership and was drafted based on the input of the Association's Board and the following Association committees: Interagency White Paper Response Task Force, Primary Dealers Executive Committee, Primary Dealers Committee, Funding Division Executive Committee, Government Operations Committee, Risk Management Steering Committee, MBS Operations Committee, Government Legal Advisory Committee and the Funding Division Legal Advisory Committee. Further information regarding the Association and its members and activities can be obtained from our web site www.bondmarkets.com.

2 For purposes of this letter, we use the term "government security" to refer to securities that are eligible for the Fedwire book entry system.

3 In fact, the European Union ("EU") and the European Parliament are also currently in the process of evaluating how to create a more stable, efficient and integrated clearance and settlement system for Europe. A report recently published by the Commission of the European Communities focuses heavily on the importance of a well-functioning clearance and settlement system for facilitating the growth of a deep, liquid, efficient and cost-effective financial market. See Commission of the European Communities: Communication from the Commission to the Council and the European Parliament entitled "Clearing and Settlement in the European Union, Main Policy Issues and Future Challenges." (Brussels, May 28, 2002).

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1. EXECUTIVE SUMMARY

1.1 Central Observations

The Association *believes that*:

- The most important element of any government securities clearance and settlement system is the ability of such system to provide adequate intraday financing to dealers to maintain and enhance the high level of liquidity that the government securities trading and funding markets currently enjoy.

- The prudent availability and access to cash and securities currently provided by JP Morgan Chase ("Chase") and the Bank of New York ("BONY", collectively with Chase, the "Clearing Banks") is crucial to the proper functioning of the government securities markets and the critical role these markets play in the global economy, as both a credit risk–free price discovery benchmark and a vehicle for financing the Federal government's operations.

- While it is difficult to predict whether an alternative structure may successfully separate "core" clearance and settlement from triparty repo services, our initial view is that such services would be difficult to unbundle.

- The current "duopoly" for the provision of clearance and settlement services is the result of natural market forces and therefore should not be artificially restructured, especially with the limited resources currently available to many dealers to explore different alternatives.

- While the "exit risk" connected with the Clearing Banks is indeed a real risk which is of appropriate concern to policy makers, the Association believes it is somewhat overstated in the White Paper and can be mitigated within the context of the existing structure.

- The majority of governmental and industry resources should be devoted to examining the manner in which risks in the current government securities clearance system can be addressed within the current structure, at least in the short-term.

- The development of common communications protocols, and the creation of a real-time data and software backup repository jointly shared by the Clearing Banks are potential enhancements to the existing system that should be explored as soon as possible.

- Alternative approaches that are not identified in the White Paper should also be considered.

1.2 Advisory Committee

The Association respectfully urges the formation of a Government Securities Clearance System Advisory Committee (the "Advisory Committee"). Such committee should be organized under the auspices of one or both of the Agencies, or pursuant to the Federal Advisory Committee Act.[4] The mission of the Advisory Committee would be not only to explore the viability of the alternative structures outlined in the White Paper, but also to consider enhancements to backup/contingency arrangements and to serve as a vehicle for coordinated actions in the event of a voluntary or involuntary exit of one of the Clearing Banks or other dislocations.[5] The formation of an Advisory Committee will also permit a level of open dialogue regarding competitive issues that a purely "private" group might be legally or commercially inhibited from discussing.[6]

We recommend that the Advisory Committee be composed of representatives from the Clearing Banks; the Depository Trust and Clearing Corporation ("DTCC", including representatives from the Government Securities Clearance Corporation (GSCC) and the MBS Clearing Corporation (MBSCC)); custodian banks; and representatives from relevant trade associations, the primary dealers[7] and institutional investors. This Advisory Committee should work with representatives from the Agencies, as well as with the Federal Reserve Bank of New York ("FRBNY") and the U.S. Department of the Treasury ("Treasury"), to more closely examine the issues raised by the White Paper, and to recommend and pursue as soon as practicable concrete steps to address such issues.[8]

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4 Pub. L. 92-463, Oct. 6, 1972, 86 Stat. 770. One alternative that may be worth exploring is having the Federal Reserve sponsor the Advisory Committee. The Federal Advisory Committee Act ("Advisory Committee Act") imposes certain procedural and record-keeping requirements that may reduce the effectiveness of the Advisory Committee. However, these technical requirements do not apply to certain committees including advisory committees established or utilized by the Federal Reserve System. See Advisory Committee Act, Section 4(b).

5 For example, one of the functions of the Advisory Committee would be to coordinate Clearing Bank disaster recovery planning and facilitate industry-wide scenario-based contingency planning and testing.

6 In general, coordinated commercial responses within an industry can raise serious issues under U.S. antitrust law that need to initially be addressed in order for adequate contingency planning and testing to be undertaken on an industry-wide basis. We believe the Advisory Committee, because of government participation, is an appropriate venue for open dialogue on these issues between and among competitors. See, e.g. Parker v. Brown 317 U.S. 341 (1943) (conduct among competitors that is undertaken at the direction of government may enjoy limited protection from antitrust law); see also The Bond Market Association's Antitrust Guidelines (July 1998) available at www.bondmarkets.com.

7 As noted in Appendix A to the White Paper, the trading of U.S. government securities, including federal agency securities and mortgage-backed securities is concentrated largely among the 22 primary dealers. Throughout the Association's response, the use of the word "dealer" or "primary dealer" is intended to refer to the 22 primary dealers through which the majority of trading volume in U.S. government securities takes place.

8 We do not believe that the Advisory Committee should have any independent regulatory authority, and we are not recommending any specific statutory changes to the existing federal regulatory regime for this market. As noted above, the purpose of the Advisory Committee is simply to facilitate further examination of the issues raised by the White Paper, and, if appropriate, publicly recommend steps to address such issues. Needless to say, any conclusions of the Advisory Committee with respect to any improvements to or restructuring of the current system should serve as a guide to - and not a substitute for - natural market forces.

1.3 Adequacy of the Current Government Securities Clearance System

As explained in further detail in Appendix A, the Association believes that the current clearance and settlement system provides a stable and efficient structure for the clearance and settlement of government securities. In particular, the current system provides liquidity crucial to the government securities market by providing adequate amounts of intraday financing to the dealer community. While risks exist in the current system, the Association believes that ongoing and future initiatives could adequately address such risks while maintaining the current system's existing structure. *As discussed in detail below, given the conversion costs of restructuring the current system, and given the uncertainty associated with the ability of an alternative system to support a deep and liquid government securities market, the Association recommends that the majority of the industry's and the regulatory community's efforts should be initially focused on enhancing the present system, at least in the short term.* However, the Association also believes that as part of a longer term strategy, the industry should explore in more detail alternative clearance and settlement structures, including certain of the alternatives outlined in the White Paper.

With respect to the current government securities clearance system, the Association *notes that*:

- The risks inherent in the current clearance and settlement system for government securities should, in the short term, be addressed within the current system.
- The voluntary exit risk present in the current system should be mitigated through private bilateral commercial assurances and express commitments by the Clearing Banks to regulatory authorities that they will not exit the clearing business without adequate notice.
- Problems arising through the involuntary exit by a Clearing Bank resulting from a criminal indictment or guilty plea, criminal conviction, or receivership or other financial difficulties be mitigated through the immediate development of an orderly transfer or unwind plan.
- The possibility of creating a common data and software repository for both Clearing Banks be further examined to determine the feasibility of this approach and the costs associated with its implementation.
- Operational risk be further mitigated through the continued development of robust contingency and back-up arrangements by key service providers and protocol initiatives that promote technological/systems interoperability between the Clearing Banks.

1.4 Private Limited Purpose Bank

The Association believes that this approach presents a number of potential benefits, including mitigating certain of the exit risks present in the current system. As discussed in Appendix B, this alternative would involve the formation of a single industry-owned private limited purpose bank (the "LP Bank") that was a member of the Federal Reserve System that would provide core clearance and settlement services, and potentially other services such as triparty repo services. The Association has some concerns about this approach, including the ability of the LP Bank to provide adequate intraday financing and securities lending to the government securities markets. While such concerns remain, the Association believes that these concerns might be overcome and that the potential benefits of this approach justify a closer examination.

With respect to the private limited purpose bank approach, the Association *notes that*:

- Such approach should be examined more closely to determine whether obstacles to its implementation could be addressed given the potential benefits such approach provides.
- The LP Bank should replicate the current business model of the Clearing Banks by "bundling" clearance and settlement with triparty repo services.
- The possibility of having the Clearing Banks create and initially own the LP Bank should also be considered. [9]

1.5 Old Euroclear Model

As noted in Appendix C, we agree with the White Paper's conclusion that it is unclear whether this model could adequately address the current system's shortcomings. Some of the benefits of this approach, as well as potential obstacles to its implementation, are similar in certain respects to that of the private limited purpose bank approach. However, the successful implementation of this approach depends quite heavily upon the willingness of two or more clearing banks to participate and enter into long-term service contracts with a central utility. It is also unclear whether many of the benefits to be gained from this approach could not be accomplished by simply enhancing the current system. Finally, given the potentially limited extent to which such approach could address existing operational vulnerabilities, it is doubtful that the expenditure of potentially significant costs in the implementation of this approach would be justified.

With respect to the old Euroclear model approach, the Association *notes that*:

- Such approach would have to utilize more than one triparty repo service provider in order for it to ensure sufficient intraday financing for the government securities markets.
- Such approach is not as viable an option as improving the existing structure or moving to the private limited purpose bank approach given the apparent obstacles to its implementation and limited benefits such approach provides.

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[9] While we assume for purposes of our analysis of the private limited purpose bank approach that the LP Bank would be owned and governed by a representative group of industry participants as a public industry-owned utility, another approach (the "Modified LP Bank Approach") that may be worth pursuing would involve having the Clearing Banks (perhaps together with certain custodial banks) form and initially own the LP Bank as a private joint venture or private consortium. Section 6 of Appendix B contains a more detailed discussion of the Modified LP Bank Approach.

1.6 Enhancement of Federal Reserve Services

Enhancing the Federal Reserve System's services to provide additional clearance and settlement functionality would probably provide the greatest reduction of the operational risks inherent in the current system. However, as we discuss further in Appendix D, it may be inappropriate from a public policy standpoint for the Federal Reserve System to extend substantial intraday financing to both dealers and institutional investors. In addition, while some costs may be reduced, others (such as DOD fees) may significantly increase under this approach. There are also concerns relating to the Federal Reserve's responsiveness to customer demand for greater efficiency, reduced fees and new and innovative products and services. Finally, this approach would seemingly require some sort of direct regulation or oversight of the dealers (and perhaps even institutional investors) by the Federal Reserve due to the additional risks posed by allowing such firms direct access to the payment system, thereby creating a new and potentially duplicative regulatory regime.

With respect to the enhancement of the Federal Reserve, the Association *notes that*:

- Further investigation would be needed to address concerns regarding the propriety of the Federal Reserve acting simultaneously as a direct intraday lender to the dealers, a transactional counterparty in open market operations and as a direct or indirect supervisor of the dealers.

- Such approach is not as viable an option as improving the existing clearance and settlement architecture or moving to the private limited bank approach given the obstacles to its implementation and the public policy concerns this approach creates.

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The Association believes that the importance of the issues raised by the White Paper become even more evident when viewed in the context of the important roles the government securities markets play. A brief description of the importance of the government securities market is set out below.

2. BACKGROUND

Any proper examination of the benefits to be derived from modifying the existing settlement system architecture must start with recognition of the extraordinary size, liquidity and global importance of this unique market. There is no fixed-income market that is more crucial to the global economy, nor more liquid, than today's primary and secondary market for U.S. government securities.[10] U.S. Treasury securities ("Treasuries") in particular exhibit a high level of liquidity given their low transaction costs and the perception by market participants that such instruments bear no credit risk.[11] The liquidity of the Treasury market allows dealers to sell Treasuries without necessarily owning such securities because of the ability,

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[10] For example, in the first quarter of 2002, daily trading volume as reported by the primary dealers in Treasury securities averaged $ 344.8 billion. See Federal Reserve Bank of New York, http://www.ny.frb.org/pihome/statistics/.

[11] Robert P. O'Quinn, *Economic Benefits From U.S. Treasury Securities,* Report of the Joint Economic Committee, U.S. Congress, 107th Congress, 2nd Session, Feb. 2002 at 2.

under "normal" market conditions, to easily "cover" a short position through the cash, repo or securities lending markets.

In addition to the integral role Treasuries play in the U.S. and global economy, its importance to individual investors and the federal government should also not be underestimated. Yields on government securities are used to set rates on financial instruments of significant importance to individuals, such as mortgages, car loans, and student loans. As the issuer of the world's most liquid debt instrument, the Treasury – and thus indirectly U.S. taxpayers - benefits from the presence of this liquid secondary market by receiving the lowest financing costs available. Economists today generally acknowledge that market participants will pay a liquidity premium[12] in order to obtain a particularly liquid financial asset.[13] The Treasury captures this premium whenever it auctions new securities. It is not surprising, therefore, that Treasuries are the most widely held debt securities in the world.[14]

The active repurchase ("repo") and securities lending market in government securities also plays an important role in our financial markets and our economy. For instance, the FRBNY utilizes government securities in the conduct of its open market operations, which are used to adjust the Federal Funds rate to meet the Fed Funds target set by the Federal Reserve System's Federal Open Market Committee. The success of these open market operations depends on the ability of the primary dealers to "reverse in" or "repo out" billions of dollars worth of government securities each business day.[15]

As important as the government securities trading markets are to Wall Street and Main Street alike, market participants also rely significantly on the proper functioning of the clearance and settlement system supporting these markets. While the tragic events of September 11, 2001 demonstrated that the cash and repo markets for government securities can still function (albeit with diminished liquidity) when the clearance and settlement system remained subject to a back-log of unsettled trades,[16] a substantial and sustained impairment of such system

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[12] Robert P. O'Quinn, *Economic Benefits From U.S. Treasury Securities,* Report of the Joint Economic Committee, U.S. Congress, 107th Congress, 2nd Session, Feb. 2002 at 2-4. See Yakov Amihud and Haim Mendelson, "Liquidity, Maturity, and the Yields on U.S. Treasuries," *Journal of Finance* 46 (September 1991): 1411- 1425; Avraham Kamara, "Liquidity, Taxes, and Short-Term Treasury Yields," *Journal of Financial and Quantitative Analysis* 29 (September 1994): 403-417; Francis A. Longstaff, "The Flight-To-Liquidity Premium in U.S. Treasury Bond Prices," *University of California Los Angeles Working Paper* (May 2001).

[13] Of course, investors are also attracted to Treasuries for other reasons. As noted above, they are regarded as free from any credit risk. In light of this fact, many institutional customers are attracted to Treasuries because they are an excellent vehicle for hedging interest rate exposures. A large supply of actively traded Treasuries allows financial market participants to develop a "true" credit risk-free yield curve, thereby facilitating more efficient pricing of financial instruments and allowing financial institutions to hedge interest rate risk more effectively. Such instruments also provide a liquid source of collateral for such institutions to pledge in swaps and other derivatives transactions and as a vehicle to obtain funding or other securities to fulfill their numerous financial obligations. Id.

[14] Robert P. O'Quinn, *Economic Benefits From U.S. Treasury Securities,* Report of the Joint Economic Committee, U.S. Congress, 107th Congress, 2nd Session, Feb. 2002.

[15] It is important to recognize that the cash and repo markets in Treasuries play similarly important roles in the functioning of economies around the globe; in a recent report, it was estimated that foreign institutions held 37% of all outstanding U.S. Treasury securities. See FRBNY Report (June 6, 2002), available at http://www.federalreserve.gov/releases/Z1/Current/z1r-4.pdf.

can ultimately lead to a significant adverse impact on trading in the government securities markets. Moreover, perceptions of instability in the clearance and settlement system can itself lead to impaired liquidity.[17]

It is therefore imperative that every effort be made to ensure that the government securities clearance and settlement system functions properly *both in times of relative normalcy, and in times of stress*, in order to guarantee that the government securities market continues to fulfill its several important functions. In this regard, the Association recognizes that the continued development of robust back-up facilities, joint data repositories and coordinated contingency planning by the Clearing Banks, DTCC, the dealers and other key participants in the government securities market is essential.[18] However, the events of September 11, 2001, also highlighted the fact that the current clearance and settlement system - including the operational aspects, trading practices and regulatory framework - were sufficiently flexible to allow market participants, regulators and key providers of clearance and settlement services to work efficiently together to quickly minimize the disruptive impact of the September 11 terrorist attacks.[19]

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The Association believes that the examination of the current clearance and settlement structure, as well as any alternative structures, should be undertaken against a framework of commonly accepted benchmark goals and objectives. We respectfully suggest that you consider utilizing the following analytical framework.

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16 See, generally, "Treasury Market is Faced with Incomplete Trades," The New York Times, October 3, 2001; Minutes of Emergency Meetings of The Bond Market Association, September 11-21, 2001, available at: http://www.bondmarkets.com/market/9-11_minutes.shtml.

17 It is the Association's understanding that there was substantial evidence that certain participants in the securities lending markets withdrew from lending their government securities in the days following the attacks thereby reducing liquidity. See "Summary of 'Lessons Learned' and Implications for Business Continuity," Discussion Notes at 2 (Feb. 13, 2002), ("Other institutions and their customers built up high cash balances or held on to government securities positions for precautionary reasons, exacerbating market liquidity imbalances"), available at: http://www.ny.frb.org/bankinfo/payments/discussion.pdf. [hereinafter "Business Continuity Summit Staff Notes"].

18 The Association also believes that implementation of certain netting arrangements among dealers and customers might also further enhance liquidity particularly in times of market stress. In 2000, the Association formed a Task Force specifically to look into this issue. Presently, our STP/T+1 Steering Committee, our MBS/ABS Securities Division and the Asset Managers Forum are all continuing to explore this idea.

19 For instance, despite the lingering difficulties in the operating and reconciliation environment in the weeks following September 11, 2001, GSCC continued to successfully compare submitted trades, net down the obligations of each of its members and novate the relevant transactions. GSCC's ability to perform such functions was facilitated by certain interim trading and settlement recommendations issued by the Association. These recommendations included: (i) a recommended T + 5 settlement cycle for all secondary market cash transactions in Treasury and agency securities (excluding discount notes); (ii) a limitation on substitutions of securities in repo transactions, and (iii) a moratorium for certain blind-brokered repo transactions submitted to GSCC. See Minutes of Emergency Meetings of The Bond Market Association, supra note 15; see also Government Securities Clearing Corporation, Important Notice GSCC073.01 dated Sept. 19, 2001, available at: www.gscc.com.

3. METHODOLOGY FOR THE EXAMINATION OF A GOVERNMENT SECURITIES CLEARANCE AND SETTLEMENT SYSTEM

We believe that the following criteria, *in order of priority*, represent the guiding principles that the Agencies and market participants should look to in assessing what form of clearance and settlement system can best support the primary and secondary market in government securities:

- Sufficient funds and securities must be available to market-makers, not only in “normal” market conditions, but also in times of market stress, to support a deep, liquid and transparent trading and funding market.

- Operational and exit risks that could disrupt the clearance and settlement process must be adequately mitigated.

- Incentives should exist for service providers to pursue innovations and invest in research and development (resulting from technology advances or trading practice advances) that are necessary to respond to the needs of market participants.

- The costs of operating the clearance and settlement system (including conversion costs associated with alternative or structural changes) should be reasonable and efficiently borne relative to the benefits afforded market participants.

3.1 Sufficient funds and securities must be available to market-makers, not only in “normal” market conditions, but also in times of market stress, to support a deep, liquid and transparent trading market.

The government securities markets currently enjoy a high level of liquidity[20] which, in turn, provides dealers with the ability to promptly fulfill their numerous financial obligations, including the ability to: (i) borrow securities to cover short positions; (ii) obtain needed cash to finance the outright purchase of securities; and (iii) obtain government securities to pledge as collateral in order to borrow other types of securities needed for delivery or to post as collateral for other types of obligations, such as to counterparties in derivatives transactions and to exchanges and clearinghouses.

Given the enormous volume of daily trading activity in government securities[21] and the importance of continued liquidity to the various roles the government securities market plays, it is imperative that financial institutions – and in particular market makers such as dealers –

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[20] For the purposes of this letter, we use the term “liquidity” to describe how easily a government security can be converted to cash. As discussed throughout our response, the Association believes the provision of adequate intraday financing by a government securities clearance and settlement structure is a key factor in maintaining the high level of liquidity in the government securities markets.

[21] According to statistics issued by GSCC, $153.4 trillion of Treasuries were utilized in repurchase (“repo”) transactions in 2001 indicating an average daily trading volume of approximately $600 billion. In addition, GSCC recently experienced a record level of volume, netting over $5 trillion worth of trading activity. See GSCC Important Notice, "A Five Trillion Dollar Day," August 16, 2002, available at http://www.gscc.com/important_notices_frame.html.

operate in a trading environment where they feel confident that their contractual obligations to buy or sell securities will be satisfied on the settlement date for such trades, and that fails[22] which occur in the normal course of dealings can be promptly reconciled and ultimately settled.[23]

The smooth functioning of the settlement system and the ample availability of funds and securities is also important to the reduction of systemic risk due to the interconnected nature of the financial obligations that exist among participants in the government securities market. Often, dealers are dependent upon receiving funds or securities from another financial institution in order to meet their own obligations. The failure by one dealer to receive expected funds or securities from a financial institution may cause it to fail on its obligations to another dealer, potentially leading to a chain of fails.[24]

The provision of intraday financing by a government securities clearance and settlement system is also an integral part of maintaining liquidity in the secondary market for government securities, both in times of relative normalcy and in times of severe market stress. "Intraday financing" essentially involves providing a financial institution with the means to obtain and utilize securities without immediately paying for such securities, and allowing such dealer to pay for - or return - such securities before the end of the day. In light of the enormous volume of trading in the government securities markets and the interconnected nature of obligations in such markets, it is imperative that dealers have access to adequate intraday financing in order to allow them to promptly obtain and deliver government securities throughout the business day.[25]

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[22] It is important to note that fails often occur in the ordinary course of trading in the government securities markets (including both the cash and repo markets). However, a disproportionately high level of fails can cause a severe reduction in liquidity, raising the potential for systemic risk. For example, based on reports we have received from GSCC and market participants, the government securities markets may experience $1-3 billion in fails each day under "normal" market conditions. However, the market experienced a high of $190 billion in fails on an average basis in the weeks immediately following September 11, 2001. This contributed to an overall reduction in liquidity in the marketplace which, in turn, lead to a same-day auction by the Treasury of $6 billion of 10-year notes in an effort to alleviate this situation. See e.g. "Treasury Market is Faced with Incomplete Trades," The New York Times, October 3, 2001.

[23] In addition to the need to fulfill delivery obligations promptly, broker-dealers may also be adversely affected by outstanding fails pursuant to certain regulations. See, e.g., 1934 Exchange Act Rule 15c3-1 (requiring a broker-dealer to deduct from its net capital outstanding fails which exceed a certain length of time); 1934 Exchange Act Rule 15c3-3 (requiring cash and/or qualified securities to be maintained in a "Special Reserve Bank Account for the Exclusive Benefit of Customers" in connection with certain outstanding fails and unresolved reconciliation differences with accounts, clearing corporations, or depositories).

[24] Congress and other policymakers have long recognized that certain interrelated financial activities and markets have the potential to create broader systemic risk. Systemic risk arises when a disruption at a firm, in a market segment, or to a settlement system causes widespread difficulties to other markets or the financial system as a whole. In order to minimize the risk of such systemic events, the Bankruptcy Code, the Federal Deposit Insurance Act ("FDIA") and the Federal Deposit Insurance Corporation Improvement Act ("FDICIA") each contain provisions protecting the right of financial institutions and certain other creditors to terminate, close out and net financial contracts with an insolvent entity in a timely manner. See, e.g. Bankruptcy Code Sections 555, 556, 559, 560, 362(b)(6),(7) and (17), 546(e), (f) and (g). See also FDIA Section 11(e)(8); 12 U.S.C. 4401 et seq.

[25] The importance of intraday financing to the government securities markets is widely acknowledged and was highlighted in the "Vision 2000" project which also sought to facilitate changes to the existing government securities clearance and settlement system. This project, initiated by the National Securities Clearing Corporation (NSCC) in 1996, contemplated the creation of a structure similar to the "old Euroclear model"

The provision of intraday financing takes a number of forms. The most straightforward manner of intraday financing is the extension of unsecured and secured intraday credit by a financial institution lender (which may or may not be the clearance and settlement facility) to a dealer or other market participant. In the current structure, this intraday credit is readily available, in part, because the Clearing Banks can, if necessary, temporarily draw down their accounts at the FRBNY and incur daylight overdraft ("DOD").[26] Some of this intraday credit, in turn, is utilized by dealers through their accounts at the Clearing Banks when purchasing government securities when they do not have sufficient funds to do so.[27] It is our understanding that the two Clearing Banks each extend approximately $1 trillion in intraday credit to their dealer/clearing customers each day.[28]

The Clearing Banks also provide intraday financing by allowing a dealer the use of securities on an intraday basis in connection with triparty repo services offered by the Clearing Banks. The securities sold (or "repoed") by a repo seller and cash used to purchase (or "reverse in") the repoed securities by a repo buyer are placed in a triparty custody account, usually with the dealer's Clearing Bank, which provides essential administrative functions, including the allocation of repoed securities in accordance with guidelines set by the repo buyer, and revaluing (or "marking-to-market") of securities in the triparty repo facility. On the day of a repo trade, by day's end, the triparty custodian transfers the repoed securities from the dealer's proprietary account to a custody account maintained by the triparty custodian on behalf of the repo buyer. The following morning, the triparty repo "unwinds", and in simultaneous transfers the repo securities are returned to the repo seller/dealer and the cash used to purchase such securities is returned to the repo buyer. The repo seller/dealer thereby has access to its securities during the day and can use them intraday to make

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discussed in the White Paper. While the proponents of this project believed that it would reduce certain costs associated with the clearance and settlement process, others believed at that time that such structure would adversely impact the provision of intraday financing to clearance participants. Given such concerns, the Vision 2000 project was shelved in 1997.

26 The most recent version of the Board's Payments System Risk (PSR) policy (effective December 10, 2001) (the "PSR Policy") limits the maximum amount of DOD a depository institution may incur by imposing a limit – or "net debit cap" – on each depository institution, including the Clearing Banks; however, depository institutions may exceed their net debit caps, to an extent, by pledging collateral for overdrafts in excess of their caps.

27 The Fedwire payments system is "passive to the receiver" of securities; in other words, the purchaser of securities is automatically debited funds from its account at the Clearing Banks upon the receipt of securities. As such, in a situation where such purchaser has insufficient funds at the moment it receives securities, the provision of intraday credit is essential to ensure that the bonds are not "Dk'd" and the purchaser is able to pay for such securities even if the purchaser has insufficient funds in its account.

28 To the extent a clearance and settlement facility provides intraday financing to a dealer, such a facility is exposed to the risk that such dealer will fail. In such an event, the clearance facility's exposure would be measured by the extent of intraday financing extended by the clearance facility to the dealer, minus the liquidation value of any collateral that the clearance facility may have held for the provision of such intraday financing. In addition to requiring collateral for the extension of intraday credit, this risk can be mitigated through an evaluation of the creditworthiness of the dealer being financed. More stringent controls could take the form of a limitation on the provision of unsecured intraday credit; increased collateralization requirements to obtain intraday credit; limitations on or elimination of unsecured extensions of intraday credit; elimination of any "subjective" discretion to extend such intraday credit; and limitations on the amount of other forms of intraday financing (such as limits on the amount of securities a dealer may use intraday during the "unwind" of a triparty repo). However, the imposition of rigid credit risk mitigation controls may have the effect of reducing the amount of intraday financing by the clearance facility to such an extent as to cause a potentially problematic reduction of secondary market liquidity.

deliveries in connection with its trading and financing activities. The triparty custodian through its management of the transfer process essentially finances the dealer's securities intraday. Under circumstances in which the repo buyer leaves the cash it used to purchase securities in its triparty account intraday (as could be the case in connection with a term repo transaction), no DOD is incurred by the triparty repo provider, or passed along to the repo seller. However, in cases where the repo buyer removes such cash from the triparty repo facility (as could be the case in connection with an overnight repo transaction or a transaction that is otherwise closing-out), the repo seller's overdrafts are not funded by such cash in the repo buyer's triparty account, and such triparty custodian/repo provider may incur a DOD from the FRBNY; if so, it would pass along such credit - and the attendant DOD fees it incurs - to the repo seller.

For all the above reasons, the Association believes that any restructuring of the clearance and settlement system must, at a minimum, guarantee that such system continues to provide sufficient intraday financing to dealers.

3.2 Operational and exit risks that could disrupt the clearance and settlement process must be adequately mitigated.

While the Association believes that the reduction of operational risk[29] or exit risk[30] in any clearance system is an important factor in reviewing how such system should be ideally structured, we believe that it should not be the sole - or even the determinative - factor. As discussed in detail above, we believe that the adequate provision of intraday financing by a clearance system should be the primary factor taken into account in examining a government securities clearance system.

Exit risk and operational risk can be present in a number of forms. In addition to the risk of a voluntary exit by a clearance facility, the involuntary exit of such facility may occur as a result of financial difficulties experienced by such facility, either in connection with or apart from the clearance and settlement of government securities (e.g. the insolvency or the criminal indictment, guilty plea or conviction of a provider of clearance services). Operational risk can arise from a physical disruption at a primary or backup facility (e.g. a power or communications outage or physical damage experienced at a clearance facility).[31]

Operational and exit risks can be mitigated in a number of different ways. For example, operational risk can be mitigated through the creation of redundant lines of communication that are not in close physical proximity to one another and utilization of multiple primary sites or active (“hot”) back-up facilities that could operate should the main funds or securities

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[29] For the purposes of this letter, we use the term “operational risk” to refer to a temporary and material disruption in the physical or technological operations of a clearance facility or other key service provider.

[30] For the purposes of this letter, we use the term “exit risk” to refer to the potential for the permanent cessation of functioning of a particular clearance and settlement facility, whether brought about by a voluntary exit from the business, the existence of significant financial or legal difficulties or the insolvency of such facility.

[31] The events surrounding September 11, 2001 and the temporary disruption of services are an example of the operational risk present in the current government securities clearance and settlement system. Of course, such an event can also indirectly create exit risk to the extent a provider elects not to resume business after suffering a severe operational disruption.

clearance facility become inoperable. The potential for a clearance facility to experience financial difficulties resulting from financial transactions apart from the clearance of government securities may also be mitigated or eliminated by limiting the activities of a clearance facility to the clearance and settlement of government securities and related services.

It is clearly important that any potential for systemic disruptions to the financial markets and payments systems should be minimized where possible. However, while it is imperative that operational and exit risks are adequately managed, the Association believes that a successful clearance and settlement system must seek to prudently manage these risks without adversely impacting the operation of the clearance and settlement system by, for example, unduly restricting intraday financing.

3.3 Incentives should exist for service providers to pursue innovations and invest in research and development (resulting from technology advances or trading practice advances) that are necessary to respond to the needs of market participants.

The Association believes that incentives to innovate clearance and settlement functionalities and risk mitigation controls must be present in any potential clearance and settlement system in order to adequately address the inherent risks in such system, to continue to provide necessary liquidity, and to maintain a reasonable level of fees with regard to the operation of such system. While such incentives to innovate may come from competitive pressures between clearance facilities, a governance structure that involves the participation by the dealer community may also provide the necessary incentives for innovation. In short, the context in which a clearance system operates must encourage service providers to continuously improve their systems. [32]

Fortunately, both GSCC and the Clearing Banks have demonstrated a strong tendency to provide new and innovative services. For instance, in late 2000, GSCC rolled out a new real time trade matching system[33] that facilitates prompt matching and confirmation of transactions on a real-time basis.[34] Likewise, the Clearing Banks not only helped develop the

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[32] The Association is not commenting at this time on whether the current structure of the marketplace for providing government securities clearance services is, in fact, the most efficient structure possible. We do believe that market forces have "naturally" helped evolve the clearance and settlement of government securities in the U.S. to a state where there are only two major clearance facilities. As with most industries, the nature of technology and associated costs, together with demand, are also important determinants of market structure. Specifically, if the technology is such that a typical firm's average costs decline over a broad range of output levels, it may be efficient for a limited number of firms to supply total industry output. In the extreme, a "natural monopoly" may minimize the costs of producing total output demanded. . In the case of clearing and settlement facilities, therefore, substantial economies of scale and scope may have caused the current concentrated industry structure to emerge. See, *e.g.,* Robert S. Pindyck and Daniel L. Rubinfeld, *Microeconomics* (New York: Macmillan Publishing Company, 1989), at 354-355, (discussing natural monopolies and the regulation thereof.); Alexis Jacquemin, *The New Industrial Organization: Market Forces and Strategic Behavior,* translated by Fatemeh Mehta (Cambridge, MA: MIT Press, 1987), at 23.

[33] See Government Securities Clearing Corporation Important Notice: "Interactive Messaging For Real-Time Trade Comparison to be Implemented November 17, 2000; Doc. GSCC085.00, October 26, 2000.

[34] This service helped prevent broader reconciliation problems at GSCC stemming from incomplete trade information in the days following the September 11, 2001 attacks, given that it helped ensure that transactions entered into prior to the intraday disruption in the clearance system still had a confirmed counterparty match for all trades submitted to GSCC up to the point of such disruption.

concept of utilizing a triparty custodian to engage more efficiently in repo transactions, they also worked closely with GSCC to support the introduction of GSCC's general collateral finance ("GCF") Repo service.[35]

3.4 The costs of operating the clearance and settlement system (including conversion costs associated with alternative or structural changes) should be reasonable and efficiently borne relative to the benefits afforded market participants.

As set out below, there are a number of costs associated with the clearance and settlement of government securities. Certain of these costs are "discretionary", in the sense that they are commercially determined by a clearance facility. Other costs are dictated by the Board and the FRBNY, and in this manner are "non-discretionary" costs.[36] Discretionary fees include clearing fees charged by a clearance facility on a per-transaction basis. Triparty repo fees are typically based on a combination of a per-transaction fee and a fee based on a percentage of the dollar volume of triparty repo transactions conducted. Fixed fees include DOD fees, which are determined by the Board's Payment Systems Risk (PSR) Policy.[37] Transactions which utilize the Fedwire are also assessed a fee on a per-transaction basis that is fixed by the FRBNY.[38]

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35 See Government Securities Clearing Corporation Important Notice: "GCF Repo Service Implementation"; Doc. GSCC093.98, November 13, 1998.

36 In addition, there are benefits that if not retained would be a "cost." For example, a dealer receives balance sheet relief under Financial Accounting Standards Board Interpretation No. 41 ("FIN 41") depending in part on the manner in which securities are cleared. Under FIN 41, a financial institution may offset amounts recognized as payables and receivables that represent repos and reverse repos with the same counterparty for accounting purposes if they meet certain requirements specifically: (i) the repo and reverse repo are executed with the same counterparty; (ii) the repo and reverse repo have the same settlement date; (iii) the repo and reverse repo are executed under a master netting arrangement; (iv) the underlying securities exist in "book entry" form and can be transferred only by means of entry in the record of the transfer system operator or securities custodian; (v) the repo and reverse repo are settled on a securities transfer system, and the bank has associated banking arrangements in place; and (vi) the bank intends to use the same account at the clearing bank or other financial institution at the settlement date in transacting both (a) the cash inflows resulting from the settlement of the reverse repo and (b) the cash outflows in settlement of the offsetting repo. While the Association wishes to call the attention of the Agencies to the benefits of FIN 41, we are not commenting at this time on whether any of the proposed clearance system alternatives discussed in the White Paper would meet the requirements set out under FIN 41.

37 Federal Reserve DOD fees are calculated on a daily basis and are equal to the effective daily rate charged for daylight overdrafts multiplied by the average daylight overdraft for the day minus a deductible valued at the effective daily rate. The Board has considered implementing a two-tiered DOD fee structure, which potentially would involve assessing lower fees for the use of collateralized DOD by depository institutions. See "Potential Longer-Term Policy Direction," Docket No. R-1111, available at: http://www.federalreserve.gov/boarddocs/press/boardacts/2001/20010530/. The Association has expressed its support for such proposal. See Comment Letter from the Association, dated December 21, 2001, on the Board's Potential Longer-Term Policy Direction, available at: http://www.bondmarkets.com/regulatory/fund.shtml.

38 Under Operating Circular 7, the Reserve Banks may set certain fees for the transfer of Fedwire Book-Entry Securities. The fees set by the FRBNY are available at: http://www.frbservices.org/Book-Entry/FeeSchedBook.cfm.

The Association believes that the reduction of costs in the clearance and settlement of government securities would benefit the financial markets by allowing dealers to utilize capital that would otherwise be devoted to clearance-related fees.[39] While costs should not be a determinative factor in reviewing how a clearance and settlement system should be structured, it is clear that they should always bear some reasonable relationship to the benefits being conveyed to market participants.

Finally, additional costs may arise, in the context of an industry-owned utility, from clearing fund[40] and other margin requirements imposed on clearing members, as well as from "loss sharing" arrangements utilized by such facilities that could indirectly burden participants. Typically, a commonly owned utility will employ such loss mitigation practices to protect it and its members from the failure of one or more of its members. To the extent the collateral contained in the failed member's margin fund and clearing fund accounts are insufficient to fully cover the failed member's reimbursement obligation to the utility, there are additional layers of protection before a reimbursement obligation is imposed on the clearing members generally. However, assuming that these facilities utilized adequate risk management systems and marked-to-market the collateral they collected from clearing members, it would be unlikely that such loss sharing arrangements would add substantially to the costs of utilizing the utility.[41]

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By applying the above principles to the current clearance system and the alternatives set out in the White Paper, our conclusion at this time is that the risks in the current system should be addressed while retaining the structure of the current system, at least in the short term. Although the Association believes that the long-term strategy for the industry should include exploring alternative clearance and settlement arrangements, including those outlined in the White Paper, our initial review suggests concerns with the ability of alternative structures to provide sufficient intraday financing to the government securities markets.

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[39] In this regard, it is interesting to note that one of the main impetuses for restructuring the pan-European trading and settlement systems is to reduce the post-trading costs of clearing, settling and safekeeping securities. See Linda Goldberg, John Kambhu et.al. "Securities Trading and Settlement in Europe: Issues and Outlook" in current Issues in Economics and Finance: April 2002; Volume 8 Number 3 at 2 [hereinafter "Goldberg & Kambhu"].

[40] For instance, GSCC requires its clearing members to maintain certain clearing fund margin in order to have on deposit from each netting member funds sufficient to satisfy any losses that may otherwise be incurred by GSCC (and its members) as a result of such member's default as well as to ensure that GSCC has sufficient liquidity to meet its payment and delivery obligations.

[41] Thus, for instance, only those members at GSCC that dealt with a defaulting member prior to its default will be asked to help satisfy in full the loss to GSCC on a pro rata basis (based on the amount of trading activity each member had with the defaulting member) if the margin posted by the defaulting member was insufficient to cover GSCC's loss upon liquidation of the defaulting member's positions. Likewise at GSCC, only if one of those members that traded with the defaulting member prior to its default itself fails to pay in full its allocation, would other members be asked to generally share in the remaining loss. See, e.g. "GSCC Rulebook," Rule 4, *Clearing Fund, Surveillance Status and Loss Allocation*," p. 63, available at http://www.gscc.com/important_notices_frame.html.

A detailed evaluation of the current system and the alternatives described in the White Paper is set out in the attached appendices. However, given our view that the current system should not be artificially restructured, at least in the short term, we would like to close by noting specific conclusions we have reached with respect to enhancing the current clearance and settlement system.

4. ENHANCING THE CURRENT SYSTEM

4.1 The Current Government Clearance and Settlement System Allows For a High Level of Liquidity in the Government Securities Markets by Providing an Adequate Amount of Intraday Financing to Dealers.

As mentioned earlier, the Association is convinced that the critical importance of dealer access to sufficient intraday financing dictates that the risks inherent in the current system can and should be addressed without fundamentally modifying the current settlement architecture. There is a clear and unambiguous relationship between the uniquely liquid secondary market for government securities in this country and the availability of adequate levels of intraday financing currently provided by the Clearing Banks. The current system facilitates a high level of liquidity in the government securities markets through the provision of an adequate amount of intraday financing, including secured and unsecured extensions of intraday credit through DOD, triparty repo, and intraday securities lending. The difficulty that alternative structures may have in providing similar amounts of intraday financing strongly suggest having the industry focus initially on addressing the risks inherent in the current system and not on fundamentally altering the existing clearance and settlement system.

The Clearing Banks currently provide crucial intraday credit to the dealers on both an unsecured and secured basis, and this credit extension involves a comprehensive review by the Clearing Banks of such dealer's creditworthiness and the dealer's ability to provide collateral to the Clearing Banks. In addition to providing standing lines of secured and unsecured intraday credit, it is our understanding that the Clearing Banks also provide additional settlement-related credit depending on a dealer's past history with the Clearing Bank, and current potential exposure as a result of its settlement activities. This aspect of the current system is critically important because it allows for needed flexibility in the provision of intraday credit, given that the availability of credit to market-makers is based not just on the Clearing Banks' settlement services but also on the broader financial relationship each Clearing Bank has with its dealer/customers.

4.2 The Current Government Securities Clearance and Settlement System Presents a Level of Operational and Exit Risk that Can be Managed within the Existing System

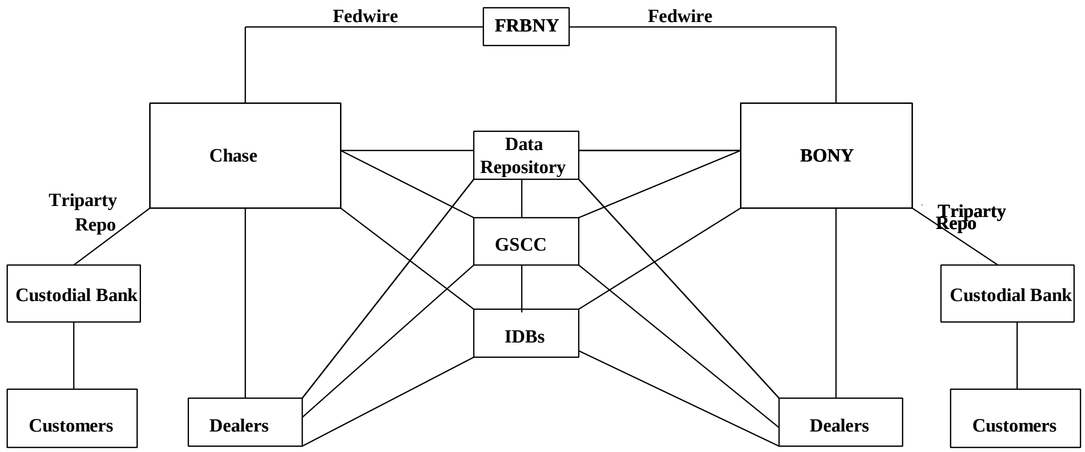
The events of September 11, 2001 not only served as a painful reminder that our financial markets depend upon the smooth functioning of the securities clearance and settlement infrastructure, but also that such infrastructure was reliant on the interdependent operations of critical service providers. This highlighted the fact that the specific disaster recovery capabilities and level of preparedness at a few key institutions could significantly impact not only the dealers and investors that rely on such institutions for clearing and triparty repo services but also the government securities clearance and settlement system as a whole.

Fortunately, as explained in Appendix A, many of the specific vulnerabilities that were highlighted in our system by the events of September 11 are capable of being addressed without having to fundamentally alter the system's current architecture. The Clearing Banks (as well as other industry participants, such as DTCC and the dealers), continue to improve their contingency and back-up arrangements through, for example, the creation of multiple "hot" back-up sites. Notwithstanding these efforts, the Association believes additional steps can be taken to mitigate operational risk, particularly in connection with the development of common communication protocols to facilitate the transfer, if necessary, of information from one Clearing Bank to another, as well as "redundant connectivity" between the dealer community and the Clearing Banks. The Association believes voluntary and involuntary exit risk can be mitigated by private bilateral assurances from the Clearing Banks to their customers and the broader regulatory community that they will continue to provide clearance and settlement services. Notwithstanding these assurances, the development of an unwind plan should be explored to ensure the orderly closure and transfer of clearance services in the event of an exit by one of the Clearing Banks. With regard to all of the above solutions, the Advisory Committee would play a crucial role in examining and further developing the Association's proposed solutions.

We also believe it is important that institutions that play a critical role in the current clearance and settlement system should be recognized as such from a regulatory standpoint and be held to a higher standard in terms of their recovery capabilities. For instance, given the unique role the Clearing Banks currently play in the government securities clearing system, it might be appropriate to revise certain banking regulations that currently apply to the Clearing Banks to more formally acknowledge their special status. A regime for designating and regulating a bank as a "primary clearing bank" might even be structured in a manner that is similar to being identified currently by FRBNY as a primary dealer. Likewise, the Board's current PSR Policy could be modified to specifically recognize the special status that the Clearing Banks currently occupy in the clearance and settlement of government securities. Such special regulatory status could enhance the franchise value of the Clearing Banks' functions and may, in turn, provide sufficient economic incentive for other banks to compete with the Clearing Banks in providing clearance services. In addition, such clarifications could also provide incentives for another bank to acquire a Clearing Bank in the event of a voluntary or involuntary exit by one of the Clearing Banks.

4.3 Creation of a Data and Software Repository May Also Alleviate Problems Arising from the Exit of a Clearing Bank, While Maintaining the Level of Intraday Liquidity under the Current System.

We believe that an important step towards a more coordinated and comprehensive industry-wide contingency plan may be the creation of a shared backup data repository (the "Data Repository"). As outlined below, this Data Repository would serve as a repository for maintaining, on a real-time basis, "mirror image" data files containing the positions of dealers both inter-Clearing Bank and intra-Clearing Bank.



With the existence of the Data Repository, a rapid switching of positions from one Clearing Bank could be facilitated. The Data Repository could thus ensure prompt recovery by both Clearing Banks as the settlement processing for one Clearing Bank could be stored in the Data Repository. This would allow many of the benefits of the current system – particularly the provision of intraday financing – to remain the same, while still mitigating certain operational risks present in the current system.

The most significant obstacle to the implementation of a Data Repository is the cost that would be incurred in order to implement such an approach. Even assuming that such Data Repository would be formed as an expansion of an existing utility, the costs involved in creating a facility that would reflect, in real-time, positions both inter- and intra-Clearing Bank could potentially be very high. In addition, it is likely that in order for the Data Repository to accurately reflect the positions of dealers within a Clearing Bank, dealers would need to connect to such Data Repository, in addition to their Clearing Bank, in order for the Data Repository to track positions internal to the Clearing Banks. Such additional connectivity from the dealers to the Data Repository would potentially amount to a significant expenditure on the part of the dealers to rework their operational infrastructure to establish the necessary connectivity to the Data Repository.

In sum, creating a common Data Repository could help reduce some of the more significant risks inherent in the current system while retaining the benefits of the current system. However, while the Association believes that this approach holds the potential for resolving a number of significant issues present in the current clearance and settlement structure, it is unclear whether the potentially high conversion costs of implementing such approach would justify the benefits that it would present.

5. CONCLUSION

The Association greatly appreciates the opportunity to comment on an issue of such significance not only to the government securities markets, but also to the U.S. and global economy, and to large financial institutions and individual investors alike. The numerous issues raised by the White Paper cannot, of course, be thoroughly addressed within the space of our letter or within the attached appendices, which present a more detailed analysis of the current system and the alternatives set out in the White Paper based on the methodology set out above. The Association hopes that our response will serve as a useful framework in addressing these issues, and further assist the Agencies and any future Advisory Committee in their continuing examination of the government securities clearance and settlement system. In this regard, the Association stands ready to assist in providing whatever additional input the Agencies may wish to obtain with regards to their examination.

As we approach the one year anniversary of the September 11, 2001 terrorist attacks, the Association, with due reflection, would also like to acknowledge the extraordinary assistance and support both of your organizations, the Treasury and the FRBNY provided the Association, its staff and its members in the days and weeks that followed the tragedy. We feel strongly that our shared history of working together with you in an open and cooperative manner helped facilitate the rapid resumption of trading in the government securities market. In that regard, we look forward to once again working with you as the evaluative process continues to ensure an efficient, cost-effective and reliable government securities clearance and settlement system for all market participants.

Please feel free to contact Paul Saltzman (212.440.9459), Omer Oztan (212.440.9474) or Eric L. Foster (212.440.9448) at the Association should you have any questions or comments regarding our response.

Sincerely,

/s/ Thomas C. Connor

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JP Morgan Chase & Co.
Chairman
Primary Dealers Executive Committee

/s/ Thomas G. Wipf

Thomas G. Wipf, *Managing Director*
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Funding Division Executive Committee

/s/ Thomas J. Paul

Thomas J. Paul, *Managing Director*
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Vice Chairman
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/s/ Robin Vince

Robin Vince, *Vice President*
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/s/ Frank DiMarco

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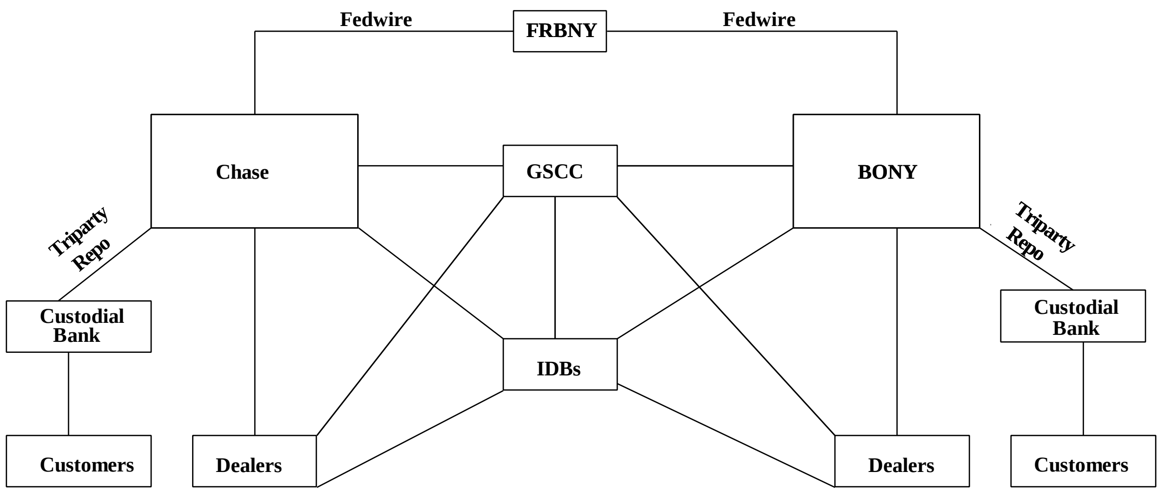
Business Continuity Management Council
Steven Bernstein, *Chair, Head of Business Continuity, Citigroup*
Micah Green, *President*
Paul Saltzman, *Executive Vice President and General Counsel*

Attachments

Appendix A - Analysis of the Current Government Securities Clearance System
Appendix B - Analysis of the Limited Purpose Bank Approach
Appendix C - Analysis of the Old Euroclear Model
Appendix D - Analysis of Enhancing the Federal Reserve System
Appendix E - List of Task Force Members

Appendix A

Analysis of the Current Government Securities Clearance System



As mentioned in our letter (the "Comment Letter"), we feel that, at least in the short term, the shortcomings inherent in the current system can and should be addressed by enhancing the current structure. The Association believes that the adequate level of intraday financing currently provided by the Clearing Banks and the difficulty the alternative structures may have in providing similar amounts of intraday financing argue strongly in favor of having the industry focus initially on addressing the risks inherent in the current system and not on fundamentally altering the existing clearance and settlement architecture.

1. *<u>The Current Government Clearance and Settlement System Allows For a High Level of Liquidity in the Government Securities Markets By Providing an Adequate Amount of Intraday Financing to Dealers.</u>*

In addition to clearing and settling government securities, the Clearing Banks provide custodial and tri-party repo services to dealers. Both of these services give rise to Clearing Bank extensions of intraday financing to the dealers. In particular, such intraday financing may involve the Clearing Banks extending intraday credit by accessing DOD from the FRBNY and passing along some amount of that credit to the dealers.[42] The Clearing Banks provide such intraday credit to the dealers on both an unsecured and secured basis. The lending of securities intraday and the provision of secured and unsecured credit is determined by the Clearing Banks based on a review of such dealer's creditworthiness and

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[42] As described in greater detail in our Comment Letter, the Board's recently revised PSR Policy allows for the extension of uncollateralized DOD by the Reserve Banks to depository institutions, up to the amount of their net debit caps. Depository institutions may draw upon DOD in excess of their caps, to an extent, by posting collateral acceptable to the Reserve Banks.

the availability of collateral. While standing lines of secured and unsecured intraday credit provided by the Clearing Banks are available to the dealers, the Clearing Banks in their discretion also provide for expansions of such credit lines depending on a dealer's past history with the Clearing Bank, the availability of additional collateral, and current potential exposure as a result of its settlement activities. This is a critical point, because it demonstrates that the flexibility the Clearing Banks have in extending credit to market-makers is based on their ability to view settlement activity and on their overall relationship to their dealer customers.

The Clearing Banks also provide intraday financing by allowing a dealer the use of securities on an intraday basis in connection with triparty repo services offered by the Clearing Banks. The securities sold (or "repoed") by a repo seller and cash used to purchase (or "reverse in") the repoed securities by a repo buyer are placed in a triparty custody account, usually with the dealer's Clearing Bank, which provides essential administrative functions, including the allocation of repoed securities in accordance with guidelines set by the repo buyer, and revaluing (or "marking-to-market") of securities in the triparty repo facility. On the day of a repo trade, by day's end, the triparty custodian transfers the repoed securities from the dealer's proprietary account to a custody account maintained by the triparty custodian on behalf of the repo buyer. The following morning, the triparty repo "unwinds", and in simultaneous transfers the repo securities are returned to the repo seller/dealer and the cash used to purchase such securities is returned to the repo buyer. The repo seller/dealer thereby has access to its securities during the day and can use them intraday to make deliveries in connection with its trading and financing activities (that is, up until the end of the day allocations). The triparty custodian through its management of the transfer process essentially finances the dealer's securities intraday. Under circumstances in which the repo buyer leaves the cash it used to purchase securities in its triparty account intraday (as could be the case in connection with a term repo transaction), no DOD is incurred by the triparty repo provider, or passed along to the repo seller. However, in cases where the repo buyer removes such cash from the triparty repo facility (as could be the case in connection with an overnight repo transaction or a transaction that is otherwise closing-out), the repo seller's overdrafts are not funded by such cash in the repo buyer's triparty account, and such triparty custodian/repo provider may incur a DOD from the FRBNY; if so, it would pass along such credit - and the attendant DOD fees it incurs - to the repo seller. Given that the cash used to purchase securities is often kept by the repo buyer at its account at the triparty bank, the unwind provides repo sellers with the inexpensive use of the repoed securities on an intraday basis.[43]

In addition to the use of securities resulting from the unwind of a triparty repo, the Clearing Banks also occasionally provide dealers with intraday loans of other securities on their books to allow dealers to promptly make deliveries of securities.[44]

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43 It should also be noted that the Clearing Banks also provide intraday financing through the operation of GSCC's GCF service. Much like triparty repo services offered within each Clearing Bank, the GCF service involves an "unwind" during which securities are returned to the repo seller and funds are returned to the repo buyer on an intraday basis.

44 Under the PSR Policy, a dealer must make deliveries of Fedwire book-entry securities totaling more than $50 million in $50 million blocks, plus a "tail-piece" for the remaining amount. As such, intraday lending of securities is sometimes necessary for a dealer to promptly obtain a $50 million block of a particular security for delivery.

The Association believes that these liquidity enhancing services the Clearing Banks currently provide are absolutely essential to the smooth operation of the government securities clearance system, in times of relative normalcy, and particularly in times of market stress. As discussed in more detail in the following appendices, it is unclear if the alternative clearance systems set out in the White Paper would be able to provide adequate intraday financing to the government securities markets.[45]

2. *The Current Government Clearance and Settlement System Presents Operational Risk.*

The events of September 11, 2001 were a painful reminder of the interdependent nature of the operations of critical service providers, and that there are certain operational risks inherent in the current government securities clearance and settlement system. They also underscored the fact that the proper functioning of our financial markets depend, in large part, upon the smooth functioning of the clearance and settlement infrastructure. Yet, as with any clearance and settlement system, some level of operational risk will always exist in each of the important entities in the current clearance and settlement structure – including the Clearing Banks, FRBNY, Fedwire, GSCC, MBSCC, the IDBs and the dealers – and the connections between such participants. As discussed in the White Paper, we agree that an operational problem at certain points in the current clearance system could cause serious disruptions throughout the entire system. For example, given its essential nature as a "bridge" for the delivery and receipt of funds and government securities, an interruption in Fedwire service would bring all inter-Clearing Bank clearance and settlement of government securities to a halt, and further prevent the Clearing Banks from accessing DOD from the FRBNY. Likewise, a disruption in services at one of the Clearing Banks would not only cause significant problems for the dealers clearing through such Clearing Bank, but also adversely affect dealers at the functioning Clearing Bank, given their inability to receive securities from dealers who clear through the affected Clearing Bank. Likewise, a disruption at GSCC could potentially be even more problematic than a failure at a Clearing Bank. Given GSCC's integral role in today's clearance and settlement process,[46] such disruption would raise the potential that its participants would not receive expected deliveries of cash and securities, and would not be able to determine their positions.

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[45] In addition, as the Board acknowledges, one of its motives in the revision of its PSR Policy was to alleviate potential liquidity pressures that depository institutions may face in light of new payment system initiatives such as the Clearing House Interbank Payments System with intraday finality (CHIPS), the Continuous Linked Settlement (CLS) system, and the Federal Reserve's settlement-day finality for automated clearing house (ACH) credit transactions. See, e.g., Interim Policy Statement with Request for Comment, Docket No. R-1107 at 4-6. Such initiatives highlight the importance of ensuring that any government securities clearance and settlement system continues to provide sufficient intraday financing.

[46] By comparing and matching trades between GSCC participants, offsetting such deliver and receive obligations to arrive at a net position, and becoming the counterparty for (or "novating") such trades, GSCC plays an integral role in the reduction of settlement and credit risk in the current clearance system. By netting compared trades, GSCC reduces delivery and receive obligations to only one net deliver or receive obligation per dealer, per CUSIP, thereby reducing settlement risk. In addition, through novation, GSCC steps in as a highly creditworthy counterparty for such transactions, reducing the risk that a dealer would otherwise have with a lower-rated counterparty. While GSCC aides in the reduction of risk in the current government securities markets, additional "concentration" risks are presented by the integral role that GSCC plays in the clearance and settlement system, as described above.

Fortunately, many of the specific vulnerabilities that were highlighted in our system by the events of September 11 are capable of being addressed within the current structure and do not require a fundamental change in the system's current architecture. These "lessons learned" include the fact that business continuity planning at the Clearing Banks, GSCC, the dealers and the IDBs need to adequately take into account the potential for an area-wide disaster, such as the one experienced in lower Manhattan, and for the loss or inaccessibility of critical staff. Likewise, we all now more fully appreciate the possibility that a broad regional power or telecommunications failure could affect both the primary and the back-up sites of critical institutions especially if these sites are located in the same region. We believe the lesson has been learned that redundancy in communications systems is not necessarily achieved by making arrangements with multiple telecommunications providers because such communications lines may nevertheless still travel through a single potential point of failure.

The Association is therefore convinced that many of the operational risks inherent in the current system can and should be addressed through more coordinated industry-wide contingency planning and testing and the joint development by the industry and supervisory authorities of a model set of "sound practices" for business continuity planning.[47]

3. The Current Government Clearance and Settlement System Presents Exit Risk.

The current system also presents certain exit risks due to the concentration of services in just two providers. Under the current system, exit risks generally stem from the fact that the Clearing Banks are two privately owned financial institutions that engage in a number of financial activities aside from clearance and settlement. Nevertheless, we believe that the exit risks present in the current system have been somewhat overstated in the White Paper. There is no question that, given the private nature of the Clearing Banks, one or both of the Clearing Banks may voluntarily exit from the clearance and settlement business. However, no safeguards or advance plan currently exists to prevent such voluntary exit. Although it is highly unlikely that either Clearing Bank would voluntarily exit the clearance and settlement business on short notice,[48] an orderly unwind would need to take place with sufficient time to transfer clearance and settlement operations to another facility.

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[47] We feel that many of these significant vulnerabilities are already starting to be addressed through more robust business continuity planning and enhanced back-up facilities at the Clearing Banks and other key institutions. The Federal Reserve, the SEC, as well as other bank regulatory agencies have been jointly analyzing the events that followed the September 11 terrorist attacks to identify how the overall resilience of the financial system might be strengthened. As part of this effort, a "Financial Industry Summit on Business Continuity" was held at the Federal Reserve Bank of New York on February 26, 2002. In preparation for this summit, discussion notes were circulated that suggested that there may be benefits from developing more robust business continuity plans across the financial sector including rapid resumption of critical operations following the loss of one or more major operating locations or a wide-scale regional disruption. See Business Continuity Summit Staff Notes, Comment Letter, note 16 at 1. It is the Association's understanding that the regulatory agencies referenced above continue to explore the possibility of developing and issuing a model set of "sound practices" that would embrace certain business continuity objectives and identify the sorts of firms and activities those sound practices should cover. The Association fully supports these efforts.

[48] The events surrounding the voluntary exit of Security Pacific National Trust Company ("SecPac") from the business of providing government securities clearance and settlement services in the early 1990s offers considerable comfort that any such voluntary exit by one of the Clearing Banks would allow for an orderly migration of services. It is our understanding that SecPac continued to operate and provide clearance services for two years after Bank of America (which had acquired SecPac earlier) announced that it was

Potentially more problematic would be the involuntary exit by one of the Clearing Banks as a result, for example, of financial difficulties experienced by one of them or their criminal conviction. An example of an involuntary exit resulting from financial difficulties would be an insolvency brought on by activities of the Clearing Banks unrelated to clearance and settlement. In such an event, the Federal Deposit Insurance Corporation (FDIC), as receiver of the failed Clearing Bank, would need to determine how to resolve the failure in a manner that presents the lowest costs to its insured depositors.[49] It is unclear whether the FDIC would determine if the transfer of clearance functions from the failed Clearing Bank to a temporary clearance facility or "bridge bank" would be the least-costly resolution.[50] A de facto involuntary exit could also occur by an event – such as criminal conviction or guilty plea by one of the Clearing Banks – that would potentially cause such Clearing Bank's participants not to clear and settle through the Clearing Bank and to remove their assets from the Clearing Bank.[51]

4. The Exit and Operational Risks Present in the Current Government Clearance and Settlement System Should Be Addressed Without Structural Change.

The Association recommends that the industry and the Clearing Banks work with the Advisory Committee to develop a comprehensive transition plan, to obtain broader commitments from the Clearing Banks to regulatory authorities regarding adequate notice in the event of a voluntary exit, and to generally enhance existing private bilateral commercial assurances provided by the Clearing Banks. In addition, the Association recommends that the industry, working in conjunction with the Advisory Committee, study the involuntary exit risks present in the current system and work towards developing a comprehensive plan to mitigate such risks. In any event, the Association believes that in the near term the exit and operational risks present in the current system can best be addressed within the current structure of the system.

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planning to exit the business, in order to facilitate the smooth, seamless conversions of its customers to other clearing banks.

[49] See 12 C.F.R. Section 360.1.

[50] The FDIC may still transfer clearance functions to a bridge bank, even if it is not the least-cost resolution, if the FDIC and the Board recommend otherwise, and if the Secretary of the Treasury invokes a "systemic-risk exception" by stating that such least-cost resolution would have an adverse impact on financial stability and economic conditions, and that the more costly resolution would help avoid such adverse effects. See, e.g., White Paper, at 4 and note 6. It is also somewhat unclear if the FDIC's new bridge bank would be able to provide sufficient intraday financing to the dealers given the undercapitalized condition of the failed institution. It seems likely that the Federal Reserve System would offer the bridge bank some reduced amount of DOD that it could utilize to extend intraday credit to the dealers for which it clears. However, the FDIC would probably have to offer some sort of guarantee to the FRBNY for any future losses it suffers in connection with extending DOD to the bridge bank.

[51] Although the criminal conviction of a bank (or guilty plea) might not legally prohibit a depository institution from providing settlement services, we believe it is likely that many pension funds, municipalities and other buy-side firms that utilize a tri-party repo service would be either legally required under ERISA or otherwise inclined to move their funds and securities elsewhere.

Voluntary exit risk may be mitigated through a commitment by the Clearing Banks to maintain their clearance operations over a period of time. This commitment should take the form of private bilateral commercial assurances between each Clearing Bank and each of its dealer customers. In addition, the Clearing Banks should both make express commitments to the Federal Reserve and other supervisory authorities that they will not exit the business without giving adequate notice. Finally, as mentioned earlier, a comprehensive plan needs to be developed by the industry that provides general guidelines for an orderly transfer or unwind of the business in the event of either a voluntary or involuntary exit by the Clearing Banks.[52]

While contractual provisions may help mitigate problems arising from a Clearing Bank's involuntary exit, commitments to regulatory authorities and private bilateral commercial assurances cannot, of course, mitigate involuntary exit risk itself. However, the Association believes that there are currently controls in place which help mitigate the risk of a Clearing Bank involuntarily exiting the clearance and settlement business as a result of financial difficulties. Such existing controls include risk-based capital requirements for the conduct of financial activities by both of the Clearing Banks and regulatory oversight by the Board of these and other banking and securities related activities. Specific to the clearance and settlement of securities, the Board's PSR Policy, for example, regulates and limits the extension of intraday credit in the form of DOD.[53]

There are also additional steps that can be taken in the near future to address uncertainties regarding the involuntary exit of the Clearing Banks due to financial difficulties. An unwind plan (either as part of or apart from a contractual commitment by the Clearing Banks as discussed above), created in a time of relative calm, could set out steps for an industry consortium to agree, potentially along with one of the existing utilities, to a buyout of the insolvent Clearing Bank from the FDIC. Details regarding the continued provision of services could thereby be worked out in advance as part of a broader pre-packaged transfer plan or involuntary exit plan.

In addition to action by the industry, the relevant regulatory agencies could potentially help reduce the involuntary exit of the Clearing Banks as a result of financial difficulty, and further help mitigate issues arising were such an exit to occur. For example, there is currently an overlapping regulatory framework between the regulation of the Clearing Banks, which is conducted by the Board in conjunction with other bank regulators, and the regulation of GSCC, which is conducted solely by the Commission. While the Association does not believe that such entities should be regulated by both agencies, we do believe that an Advisory Committee, as discussed above, could help aid the coordination of the Agencies' treatment of such facilities. Uncertainty with regards to how the insolvency of a Clearing Bank would be treated by the FDIC[54] (and the amount of DOD available to a bridge bank)

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52 As mentioned earlier, the orderly exit of SecPac from the government securities clearance business suggests that voluntary exit risk may be somewhat overstated in the White Paper. See supra note 7.

53 See Comment Letter note 25 (describing PSR Policy).

54 As noted earlier, it is unclear if the FDIC would determine that a transfer of the clearance functions from a failed Clearing Bank to a "bridge" bank would be the least-cost resolution to the liquidation of the Clearing Bank, or if the Secretary of the Treasury would invoke the systemic risk exception if the FDIC found that such transfer were not the least-cost resolution. See supra note 9.

could also be addressed by the FDIC, the Board, and the Treasury resolving this issue in advance.[55]

Of course, as discussed earlier, a Clearing Bank may also face sustained operational difficulties. In this regard, the Association commends the Clearing Banks and GSCC for their continued efforts to mitigate operational risk through the implementation of robust contingency plans and their ongoing efforts to develop additional back-up data centers and more redundant telecommunications lines. We feel confident that these efforts, when coupled with the publication of model business continuity practices[56] and the development of a coordinated industry-wide approach to enhancing business continuity planning, will substantially reduce risk in the current system. These efforts should facilitate a new operating environment with enhanced redundancy, real-time backup capability and an adequate dispersal of staff and systems that is sufficient to ensure continued operations of key services through even sustained and severe disasters.

These plans include a review of the lines of communication between the Clearing Banks and other relevant entities to ensure that not only are such lines maintained by different service providers, but also are physically separate from one another to protect against a physical disruption at a certain point. We have been advised that many service providers are migrating toward using a split-operations (or active/active) model[57] for disaster recovery in lieu of the more traditional business continuity model that assumes the use of an "active" operating site with a corresponding backup site. Still others are using a combination of both approaches. The implementation of such real-time (or “hot”) backup facilities should help ensure that there will be no interruption of service should a Clearing Bank’s primary site experience operational difficulties. Plans to ensure that the correct personnel will be able to access and operate out of such backup facilities also continue to be reviewed and improved upon. Further initiatives such as the implementation of real-time trade matching (RTTM) at GSCC will ensure prompt matching and confirmation of transactions on a real-time basis to ensure that counterparties to transactions entered into prior to a disruption in the clearance

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55 In addition, given the unique role the Clearing Banks currently play in the government securities clearing system, it may be appropriate to revise certain regulations that currently apply to the Clearing Banks without regard to their special status. For example, the Board’s current PSR Policy does not specifically recognize the special status that the Clearing Banks currently occupy in the clearance and settlement of government securities. As noted in our Comment Letter, an examination by an Advisory Committee should be conducted to determine whether certain aspects of the PSR Policy – such as the calculation of maximum daylight overdraft capacity – should apply in a different manner to the Clearing Banks’ in comparison to other depository institutions. See Comment Letter, Section 4.2.

56 See Business Continuity Summit Staff Notes, Comment Letter note 16 at 1; see also Financial Industry Summit on Business Continuity, Meeting Summary, Federal Reserve Bank of New York, Feb. 26, 2002 [hereinafter “Summit Meeting Summary”].

57 In a split operations model, two or more active operating sites provide backup for one another with each site being capable of absorbing some or all of the work of another for an extended time period. However, implementing this approach can involve significant costs relating to maintaining excess capacity at each site. In contrast, a traditional model of business continuity involves an “active” operating site and a corresponding backup site. Under this approach, staff from the active site are expected to relocate to the backup site with the back-up site housing current backup copies of the relevant system hardware and software to support both the front office and the back-office clearance and settlement operations. Another shortcoming with this approach is that an effective backup site requires continuous testing.

system will have a confirmed counterparty match for all trades up to the point of such disruption.[58]

While the Association believes that the ongoing improvement of the clearance and settlement system will aid in reducing operational risk, we believe that more can and should be done. Along with creating a Data Repository as noted in the Comment Letter, another area in particular that should be addressed relates to the method of communication between the Clearing Banks and their participants. The standard messaging formats and data content differ at each of Chase and BONY. As such, in the event of a disruption of service, there is no ability to easily switch the clearance and settlement of government securities transactions from one Clearing Bank to the other or to a bridge facility.

One possible solution to this problem might be to use a structure similar to the sub-custodial account structure, which GSCC currently utilizes in its General Collateral Finance (GCF) service to allocate securities after the close of the Fedwire. Such a facility might be created between the Clearing Banks as a possible mechanism for "switching" positions between Clearing Banks in the event of an emergency. Another potential solution is the implementation of a standard or common communications protocol.[59] Although such a protocol would not automatically enable the switching of positions from one Clearing Bank to another,[60] it is a necessary first step in enabling such switch to ultimately take place. In addition, creating common protocols would allow the Clearing Banks to pool and share resources with regard to back-up data recovery capability and contingency plans, as described in our Comment Letter.[61] Finally, another useful step in industry-wide contingency planning, might be to have each dealer and triparty customer as a precaution execute all necessary account agreements with the Clearing Bank it does not currently clear through.

As with addressing involuntary exit risk resulting from financial difficulties, the Association believes that the relevant regulatory agencies could also aid in the reduction of operational risk. For example, as part of their overall supervisory responsibilities, it is important that the Board and the other federal bank supervisory agencies encourage the development of

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[58] See Government Securities Clearing Corporation Important Notice: "Interactive Messaging For Real-Time Trade Comparison to be Implemented November 17, 2000; Doc. GSCC085.00, October 26, 2000. See also Comment Letter, note 33.

[59] The Association is currently involved in the development of various communication protocols for the fixed-income markets, the most recent being our efforts to facilitate T+ 1 and straight through processing of fixed income transactions by helping develop a new standard messaging format. Information regarding the Association's various e-commerce initiatives, including the work of the Association's Online Bond Steering Committee and the protocols efforts of the joint BMA FIX Fixed Income Working Group, can be found at: http://www.bondmarkets.com/e-comissues.shtml.

[60] While a protocol would enable communication in a common "language" between the Clearing Banks, connectivity between the Clearing Banks would need to exist to enable the switching of positions. For example, if one of the Clearing Banks experienced operational difficulties, the necessary connectivity between the two banks would not be operating properly. In addition, the internal positions of the dealers at the affected Clearing Bank would need to be transferred to the remaining Clearing Bank or bridge facility.

[61] A common protocol might have benefits beyond its effects in reducing operational risk. For example, to the extent that a common protocol facilitates customers' switching their business between the Clearing Banks, it is likely to increase competition and reduce prices.

industry-wide best practices for business continuity planning. Consistency among key institutions involved in the settlement of government securities transactions with respect to their contingency planning and disaster recovery capabilities is critical. Such guidance and coordination among peers would be particularly useful for the Clearing Banks and other institutions critical to the government securities clearance and settlement process since the services these institutions provide are so interdependent. In addition, given that the most efficient and effective manner of implementing contingency plans for the Clearing Banks is to ensure close coordination between the two, and a sharing of resources where appropriate, the Association believes that the Advisory Committee should play a central role in reducing operational risk in the current system. We envision the Advisory Committee facilitating coordination and cooperation between and among the Clearing Banks, GSCC and the Federal Reserve, coordination that might otherwise not take place given concerns about the applicability of antitrust laws to these conversations. Given that the clearance and settlement system has naturally evolved to today's duopoly[62] of service providers in which the two Clearing Banks are the principal providers of clearance and settlement services for government securities, steps need to be taken to ensure that the antitrust laws do not prevent these institutions from working together to improve both of their disaster recovery capabilities.

In addition to the proposals set forth above with regard to reducing operational risk and financial vulnerability, concentration risk may also be addressed through providing incentives for additional financial institutions to provide clearance and settlement services. Such incentives may take the form of tax incentives, subsidies, or regulatory incentives. The Association believes that an Advisory Committee should review the possibility of an additional clearance and settlement facility entering the current clearance system, and determine what incentives may exist to induce additional clearance facilities to enter.

5. The Private Nature of the Clearing Banks Provide Incentives for Innovation & Facilitate a Market Drive Fees Structure.

Given the private commercial nature of the Clearing Banks, the Association believes natural market forces act on the Clearing Banks to ensure a level of responsiveness to the dealers' needs as customers even if as a practical matter it is costly for dealers to switch Clearing Banks. A dealer's ability to threaten to move its clearance operations from one Clearing Bank to another arguably provide sufficient incentives for the Clearing Banks to implement innovative practices and more robust contingency arrangements to prevent a loss of business. While some might argue that the LP Bank approach could facilitate greater innovation because dealers and other users could be directly represented on the LP Bank's board, we are not convinced that this would necessarily be the case. Whereas a Clearing Bank or other private service provider might have a sufficient profit incentive to purse new products and approaches, the LP Bank's board might simply end up deadlocked on such issues and ultimately refrain from taking new initiatives. In short, we do not view the formation of an industry owned LP Bank as necessarily being a panacea for the industry's concerns about adequate innovation by service providers. Rather, we view the presence of customers on the LP Bank's board of directors as only marginally improving the responsiveness of the LP Bank to customer demands for innovation, efficiency and reduced costs.

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[62] See Comment Letter, note 30.

Moreover, current economic literature suggests that neither pure monopoly nor the textbook model of perfect competition necessarily provide the greatest incentives for innovation and technological change.[63] In fact, in some markets a certain amount of monopoly power that is manifested through structural concentration can be quite conducive to innovation especially in an industry undergoing rapid technological change.[64] On the other hand, very high concentrations of monopoly power rarely have a positive effect and are just as likely to retard progress by restricting the number of independent sources of new products and by dampening the incentive to gain market share through accelerated investment in research and development. In our case it seems that, while the two Clearing Banks actively competing with each other might have adequate incentives to innovate, it is nevertheless important to promote healthy competition between the Clearing Banks by further facilitating customers' ability to switch between them.

As noted above, the clearance and settlement of government securities involves "discretionary" fees, set by a clearance facility, and "non-discretionary" costs which are set by the Board and the FRBNY and passed along by the clearance facility to its participants. Given the private, "for-profit" nature of the Clearing Banks, we believe it would be inappropriate to comment on the "discretionary" fees that are charged, and equally inappropriate to implement any regulation that would dictate what such fees should be. However, the Association believes that increased competitive pressures with the implementation of common protocols (as discussed above), in addition to spurring innovation, will also allow market forces to act upon such discretionary fees in a positive manner.

The Association also notes that, under the current system, DOD fees are reduced given the netting effects of the Clearing Banks. While certain dealer participants are in an overdraft position, others are in a net positive position. As such, at the Clearing Bank level, the DOD drawn by the Clearing Bank is net of the positive and overdraft positions of its participants. This netting effect results in lowered DOD fees that the Clearing Bank passes along in the form of credits to its participants.[65]

6. *Conclusion*

The Association believes that the current clearance and settlement system provides a stable and efficient structure for the clearance and settlement of government securities. In particular, such system provides crucial liquidity to the government securities market by providing adequate amounts of intraday financing to the dealer community. While risks exist in the current system, the Association believes that such risks are somewhat overstated in

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63 See F.M. Scherer and David Ross, *Industrial Market Structure and Economic Performance,* third ed. (Boston: Houghton Mifflin Company, 1990), p. 660)("viewed in their entirety, the theory and evidence suggest a threshold concept of the most favorable climate for rapid technological change. A bit of monopoly power in the form of structural concentration is conducive to innovation, … [since the risk of spillover — *i.e.,* sharing the profits of innovation with other suppliers — is smaller than in an industry with many suppliers]").

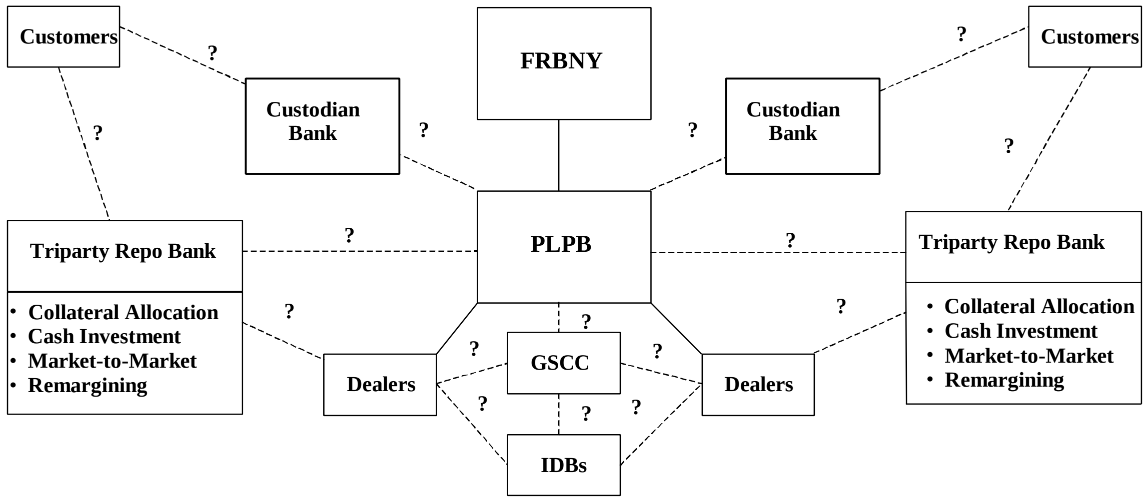
64 Id.

65 As noted in our Comment Letter, the Association has previously supported the potential longer-term policy direction of the Board to potentially reduce DOD fees to the extent such DOD is collateralized. See Comment Letter, note 35.

the White Paper, and that ongoing and future initiatives could adequately address such risks while maintaining the structure of the current system. As discussed in detail in the remaining appendices, given concerns with the ability of an alternate system to provide necessary intraday financing and given the conversion costs of restructuring the current system, the Association believes that the majority of the industry's and the regulatory community's efforts should be focused on addressing the risks currently present without fundamentally altering the existing structure.

Appendix B

Analysis of the Private Limited Purpose Bank Approach



This alternative would involve the formation of a private limited purpose bank (the "LP Bank") that would provide core clearance and settlement services, and potentially other services such as triparty repo. As mentioned in our letter (the "Comment Letter"), the Association believes that this approach presents a number of potential benefits, including mitigating certain of the exit risks present in the current system. However, based on an initial review, it is not clear that this alternative could provide the needed liquidity for the clearance and settlement of the government securities market especially absent a bundling of triparty repo and core clearance services within the LP Bank itself. Nevertheless, the Association believes that the potential benefits this alternative provides makes it an approach that is worthy of further investigation.

1. *Operational Risks and Exit Risks that Exist in the Current Clearance and Settlement Structure Could Potentially be Mitigated by Pursuing the Private Limited Bank Approach.*

A number of operational risks and exit risks present in the current clearance and settlement system could be mitigated under this approach. If the LP Bank was formed as an industry owned utility,[66] it would not be subject to voluntary exit risk. Involuntary exit resulting from financial difficulties could also be mitigated by limiting the activities of the LP Bank to the clearance and settlement of government securities, thereby eliminating the possibility that the LP Bank could experience financial difficulties through the conduct of financial activities related or unrelated to clearance and settlement. Limitations on the LP Bank's financial activities would also theoretically limit the risk of other adverse events – such as criminal

[66] We assume for purposes of our analysis of this approach that the LP Bank would be organized, owned and governed by a representative group of industry participants as a public industry-owned utility. However, as we mention in our Comment Letter, an equally viable approach (the "Modified LP Bank Approach") may be for the Clearing Banks (perhaps together with certain custodial banks) to form and initially own the LP Bank as a private joint venture. See Comment Letter, Note 8. This approach is described in Section 6 of this appendix.

conviction – that could otherwise cause a de facto involuntary exit of a clearance facility.[67] In addition, as discussed below under Section 3, a strong corporate governance structure focused on mitigating the risks involved in clearance and settlement could also closely monitor the financial exposure of the LP Bank by setting and implementing stringent controls on intraday financing activities of the LP Bank.

While the LP Bank approach may potentially reduce a number of risks present in the current system, one risk that may potentially increase is concentration risk, since the clearance and settlement of government securities would be conducted in one location. The Association believes, however, that this risk can be significantly mitigated in the LP Bank approach in a number of different ways. In particular, a governance structure focused on ensuring the uninterrupted clearance and settlement of government securities would presumably implement robust contingency arrangements to protect against operational difficulties and to quickly address problems arising from such difficulties should they occur. Further, although the structure of the private limited purpose bank approach concentrates the clearance and settlement of government securities in one place, it may actually reduce operational risk by reducing the number of critical locations/interfaces that exist in the current system, where a disruption or failure could have a major adverse impact on the clearance and settlement of government securities generally.

2. *It is Unclear Whether the Private Limited Purpose Bank Approach Would Provide Sufficient Intraday Financing to the Government Securities Markets.*

Upon an initial review, it is unclear if the LP Bank would be able to provide sufficient intraday financing to ensure the continued liquidity of the government securities market. The Association's concerns revolve around the ability of a single entity to provide sufficient intraday financing, and the ability to "unbundle" triparty repo services from the provision of clearance and settlement services in general. The Association believes that, were this approach pursued, the LP Bank should provide both "core" clearance and settlement, as well as triparty repo services. However, even with such "bundling" of services, issues regarding the sufficient provision of intraday financing remain, as detailed below.

The ability of a single utility to provide sufficient intraday financing is of significant concern. For instance, it is our understanding that each Clearing Bank currently provides in excess of $ 1 trillion[68] in intraday credit each day to the broader dealer community as part of its core clearance and settlement services. While it is likely that the need for Federal Reserve DOD would be substantially reduced if the LP Bank were the exclusive provider of clearance and settlement services to the dealers (as detailed below), it remains unclear if the LP Bank could obtain and provide sufficient intraday liquidity especially given the amount of exposure that the LP Bank and the Reserve Bank System would be subjected to.

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[67] See Appendix A, note 10.

[68] Each Clearing Bank has a large number of smaller and regional dealers, in additional to the primary dealers, that clear through them, and this figure includes these clearance customers.

As detailed in our Comment Letter,[69] additional controls to mitigate the LP Bank's exposure to a clearance participant could include limitations on its provision of unsecured intraday credit or the elimination of any "subjective" discretion to extend such intraday credit. Such additional controls would not only mitigate the risk of loss to the LP Bank, but would also help prevent a risk of loss to the LP Bank's clearance participants assuming that they were subject to mutualization of loss for any costs incurred by the LP Bank. As an industry-owned utility, however, the LP Bank would also engage in a different risk/reward analysis than a purely private clearing bank when deciding whether to extend additional intraday credit to one of its dealer/customers. Because a user-owned utility typically returns any of its excess profits to its member/customers in the form of reduced fees or a special dividend, it does not have quite the same profit "reward" as one of the Clearing Banks. This difference may impact the LP Bank's behavior when providing intraday financing and make the reduction of such intraday financing under this approach more likely.

The imposition of stringent controls on intraday financing also gives rise to liquidity risk. While such controls may help mitigate the exposure of the LP Bank to its clearance participants, it may also restrict the provision of intraday financing to such an extent as to prevent the prompt delivery of funds and securities. For example, limitations on the amount of unsecured credit provided to clearance participants may provide insufficient liquidity to such clearance participants, resulting in delays in the delivery of funds and securities. Additional collateralization requirements may also reduce liquidity by forcing clearance participants to utilize government securities that would otherwise be available to settle trades to instead be used to obtain intraday credit. As noted in our Comment Letter, given the high level of liquidity in the government securities markets, and the reliance of dealers on such liquidity to make markets, a reduction in liquidity stemming from the imposition of more stringent intraday financing controls could directly impact the functioning of this market.

Assuming that the LP Bank were also to provide triparty repo services, it is similarly unclear if it would be able to provide the amount of intraday financing currently extended by the Clearing Banks through the "unwind" of triparty repo transactions. In addition to the large amount of credit that is extended each day to dealers as part of the general clearance and settlement of securities over Fedwire, each Clearing Bank also currently provides an average of $ 400 - 500 billion in intraday financing of securities through the unwind of triparty repo transactions and related services.[70] Given the concerns stated above, it is unclear whether a single entity could appropriately manage such a high level of credit exposure on an intraday basis.

However, a strong argument can be made that, with the creation of a single entity, the demand for intraday DOD from the Federal Reserve may be very substantially reduced. First, with the LP Bank being the exclusive provider of government securities clearance and settlement services to the dealers, most inter-dealer transactions would occur intraday on the books of the LP Bank and not over Fedwire. As a result, there would be less need for the LP Bank to obtain DOD from the Federal Reserve System in connection with settling Fedwire transactions. Second, the need for dealers to obtain necessary intraday funding would be

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69 See Comment Letter, note 27.

70 It should also be noted that the Clearing Banks also provide intraday financing through the operation of GSCC's GCF service.

reduced because funds transfer and DVP delivery of securities between separate Clearing Banks would substantially diminish. In other words, conducting transactions within the LP Bank would further reduce the amount of intraday credit being extended by the Federal Reserve System to the LP Bank. Finally, if triparty repo services were provided by the LP Bank, it is also possible that under the LP Bank approach, Federal Reserve and LP Bank DOD charges would not increase if repo buyers utilizing the LP Bank's triparty repo service left their funds in the LP Bank during the unwind of the triparty repo on an intraday basis. While it is unclear, the fact that all intra-dealer settlements in government securities would take place within the LP Bank, instead of over the Fedwire, may provide additional incentive for repo buyers to leave their funds at the LP Bank.[71]

A potential problem with the LP Bank approach is that the LP Bank may not have the same propensity to take on additional credit risk by providing intraday credit based on more subjective criteria. For instance, the Clearing Banks are currently in an advantageous position to manage the risks presented through their provision of clearance, settlement and triparty repo services given their broad financial relationship with their dealer/customers and their ability to obtain a security interest in a broad range of collateral that is unrelated to the clearance business. While it is likely that the LP Bank would be in a similar legal position as a creditor of a defaulting customer, Clearing Banks are able to be active liquidity providers to their customers, in part, because they have a well recognized contractual lien[72] and a statutory right[73] to claim against a broader pool of financial assets already pledged to or held

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[71] Alternatively, the LP Bank might attempt to reduce intraday financing needs arising from triparty repo transactions by structuring their triparty repo services in a manner similar to the current Euroclear system. Euroclear offers triparty repo services to its members that are in certain ways substantially different from those offered by the Clearing Banks. Under the U.S. system, the Clearing Banks unwind the triparty repo transactions each morning by returning the cash to the repo buyer and the securities to the repo seller. As described above, this situation results in the Clearing Bank financing the repo buyer's securities position on an intraday basis. In contrast, under the current Euroclear model, triparty repos are not generally unwound each day. Instead, triparty customers rely on their ability to substitute securities intraday on the books of Euroclear and thereby gain full use of their securities. This results in Euroclear providing far less intraday financing resulting from its triparty repo services than is found in the current U.S. structure.

[72] Clearing Banks generally rely on at least two separate legal bases for their claim to have successfully created and perfected a lien on the cash and securities contained in a broker/dealer's clearance accounts. First, the lien conveyed in the clearance agreement that it enters into with the dealer generally provides the Clearing Banks with certain rights in relation to assets kept by a dealer at the Clearing Bank. Clearance agreements typically give the Clearing Banks a broad lien on and right of set-off against all the customer's right, title and interest in securities, cash and other assets held in accounts at the Clearing Banks with the exception of client segregated accounts. This lien secures the customer's obligations to repay the Clearing Banks for any and all existing or future indebtedness or other obligations. Such agreements also commonly give the Clearing Banks broad remedies to enforce this interest, including the rights afforded a secured party under Article 9 of the Uniform Commercial Code ("UCC").

[73] The Clearing Banks, as securities intermediaries, typically obtain a perfected security interest in the securities held on their books under the relevant provisions of the UCC. Section 9-206 of Revised Article 9 of the UCC, for instance, provides that a security interest in a person's security entitlement automatically attaches and is automatically perfected in favor of a securities intermediary if (i) the person buys a financial asset through the securities intermediary in a transaction in which the person is obligated to pay the purchase price to the securities intermediary at the time of the purchase; and (ii) the securities intermediary credits the financial asset to the buyer's securities account before the buyer pays the securities intermediary. <u>See</u> 9-206 of the UCC; <u>see also</u> Note 4 in the Official Comment to Section 9-206, (indicating that a securities intermediary's security interest under this section is perfected by obtaining control over the asset and without further action.)

through the bank by a dealer. These liens provide the Clearing Banks with added security and allow the Clearing Banks added comfort when financing a repo seller's securities positions intraday during the triparty repo unwind. (However, the statutory security interest automatically obtained by the Clearing Bank under the UCC is more limited than the general rights conveyed in a clearance agreement.)[74] All in all, these rights provide the Clearing Banks with the ability to make subjective determinations on whether to expand a dealer's existing intraday credit lines.

Issues would also arise if the Bank were unable to provide triparty repo services. It is unclear whether a structure could exist where one could "unbundle" triparty repo from the clearance and settlement structure. By combining custodial and clearance and settlement services with triparty repo, the Clearing Banks have several means (some of which are detailed above) by which they prudently manage the risks that the provision of triparty repo services present. It is unclear if any potential triparty repo provider that had to rely exclusively on an agreement with a separate custodian/clearance entity in order to obtain a similar security interest in the dealer's securities and funds would have the same incentive to risk financing a dealer's positions intraday. The inability of such triparty repo provider to immediately and directly seize a dealer's securities that the triparty repo provider would finance during the unwind of the triparty repo could create a strong disincentive to provide such triparty services. In addition, by unbundling clearance and settlement and triparty repo, the triparty repo provider could not view the settlement activity of the repo seller intraday, further inhibiting such provider from determining a dealer's risk position and potential for failure. Further, unbundling triparty repo services from core clearance and settlement would likely encourage a repo buyer to remove its cash from the triparty repo facility during the unwind of such triparty repo. As discussed in Section 4 below, this may ultimately result in increased DOD fees.[75]

Even assuming that triparty repo services could be unbundled from the clearance and settlement of government securities, other issues remain. For example, it is unclear if sufficient liquidity would be provided by several separate triparty repo providers during times of market stress. Even assuming that several triparty repo providers cumulatively would provide as much intraday financing of government securities as currently provided by the Clearing Banks through their triparty repo facilities, the willingness of a triparty repo bank to provide such liquidity in times of market stress without having a direct lien on the dealer's assets kept outside of such triparty repo facility is unclear. Such fragmentation of triparty repo services may therefore reduce liquidity during times of market stress where it may be

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[74] In addition, it is our understanding that the Clearing Banks typically receive copies of the weekly focus reports that each dealer/customer submits to the NASD. They also are often granted the right to receive additional and more timely financial information if the credit rating of the dealer/customer falls below a certain level. When combined with the general lien and other security interests obtained by the Clearing Bank in the dealer's cash and securities under its control, the Clearing Banks, and to a lesser extent, the LP Bank, are arguably in a good position to evaluate and manage its exposure to the dealer resulting from a dealer's intraday overdraft position.

[75] One example of the unbundling of tri-party repo with clearance and settlement services was the previous experience of the Participants Trust Company (PTC) with providing this service. While PTC allowed financial institutions to provide triparty repo services to securities cleared through PTC, no financial institutions were willing to do so. However, PTC's inability to attract dealers may have had more to do with practical considerations (including the strength of existing relationships and a common desire to use only one triparty agent) than any fundamental flaw in PTC's service.

most needed. Certain operational issues would also need to be addressed in connection with unbundling the triparty repo facility from the Bank; as the White Paper notes, a sub-custodial arrangement would need to be agreed upon between the triparty repo bank and the LP Bank for the transfer of funds and securities between the two. Such structure would increase operational risk by increasing the amount of connections needed for the operation of the clearance and settlement system.

3. *A Strong Corporate Governance Structure May Offset the Lack of Competitive Pressures to Innovate under the Private Limited Bank Approach.*

The Association believes that any potentially detrimental effects resulting from a lack of competition under the private limited purpose bank approach could possibly be addressed through the corporate governance structure of the LP Bank. In addition to the advantages set out above, the formation of the LP Bank as an industry owned utility would allow the industry to create a corporate governance structure that would allow for direct industry input and oversight of the LP Bank. This may help ensure that the LP Bank would continue to implement innovative practices, particularly with regard to risk management, regardless of the lack of competitive pressure.[76] However, it is unclear if such governance structure would present as great an incentive to innovate as the current system. The fact that dealers and other users were directly represented on the LP Bank's board might also simply lead to board deadlock and inaction on occasion, thereby preventing the investment in research and new software necessary to create new products and services.

4. *Conversion Costs May Be Potentially High Under the Private Limited Bank Approach, While the Ability of such Approach to Reduce Fees Is Unclear.*

The Association believes that, were the LP Bank approach to be implemented, an existing utility should be expanded to provide for the clearance and settlement of government securities. The costs of creating a central clearance facility may be limited if an existing utility – such as DTCC - were to be expanded to be utilized as such facility. Otherwise, while it is difficult to ascertain the exact amount of the costs involved in the formation of a clearance and settlement utility, such costs could potentially be very large.

Certain fees may be reduced under the private limited purpose bank approach. "Discretionary" transaction fees could potentially be reduced if the LP Bank was formed as a non-profit industry owned organization; presumably, such fees would cover the costs of ensuring a stable clearance and settlement system and would not be determined by profit motives. If securities were cleared and settled on the books of the LP Bank, the use of the Fedwire - and Fedwire fees - would also be significantly reduced.

It is possible that DOD fees may also be reduced. As noted in our Comment Letter, the DOD fees that the Clearing Banks currently pay are calculated on the basis of their net overdraft position, taking into account offsets between overdrafts in certain accounts with positive cash balances in others, thereby reducing DOD and related DOD fees. In this manner, a dealer pays a lower fee than it otherwise would if it were to incur DOD directly from the FRBNY

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[76] See Goldberg & Kambhu, Comment Letter, note 37, at 5.

without being able to take advantage of the beneficial effects of offsetting balances at the Clearing Bank level. It is possible that such offsetting effects in the LP Bank would be even greater, resulting in lower DOD fees for its clearance members.[77]

However, additional DOD fees may be assessed by triparty repo providers (assuming triparty repo services were unbundled from the LP Bank) if the funds which were "unwound" during the term of a triparty repo were removed from the triparty repo facility. While increased offset at the LP Bank may result in decreased DOD fees, the removal of funds from the triparty repo provider could result in substantial additional DOD fees. Assuming that triparty repo services were unbundled from the LP Bank, it is likely that the repo buyer would transfer the funds from the triparty repo provider to its account in the LP Bank, in order to utilize such funds to purchase securities. This would cause the repo seller to incur DOD at the triparty repo provider - and DOD fees.

Costs to the LP Bank could further be limited under a private limited purpose bank approach through the mutualization of loss in the event of a clearance participant's failure. By "mutualizing" the risk of loss, the costs incurred by the LP Bank resulting from a failure by a clearance participant would be shared by the remaining clearance participants. In the event that the LP Bank would incur a significant loss resulting from the failure of one of its clearance participants, such mutualization would help prevent a failure of the LP Bank itself by ensuring that its loss was mitigated or eliminated by the remaining participants, thereby reducing involuntary exit risk.

While mutualization of loss would mitigate the exposure of the LP Bank to loss resulting from the failure of one of its clearance participants, it is possible that it would increase certain other risks. For example, while mutualization of loss may help prevent the LP Bank's failure as a result of the failure of one of its clearance participants, such mutualization may cause financial difficulties for several of the remaining clearance participants responsible for reimbursing the LP Bank for losses it incurred. This risk would be especially acute in times of market stress, where certain clearance participants may already be exposed to financial difficulties. Reimbursing the LP Bank for its losses may exacerbate their current financial position, potentially causing additional failures.[78]

5. Summary

While a number of concerns exist regarding the ability of this structure to provide necessary liquidity to the government clearance and settlement system, the Association believes that

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[77] Note, however, that under the current system, the Clearing Banks are able to offset funds kept within their custody unrelated to the clearance and settlement of government securities (e.g. deposits, payments, etc., unrelated to the government securities markets) against overdrafts incurred by them in determining daily DOD. Assuming the Bank's activities would be limited to the clearance and settlement of government securities, such funds would not be present at the Bank, eliminating a source of offset that the Clearing Banks currently have to reduce their daily DOD position – and DOD fees.

[78] However, the LP Bank may institute other measures – such as clearing fund requirements – to mitigate the extent of loss incurred by each clearing member in the event of a failure by one clearing member. See Comment Letter at 16 and note 39.

the potential benefits this alternative provides makes it worth investigating further. While concerns remain about the ability of a single entity to provide as much intraday financing as the government securities markets currently utilize, the Association believes that the potential risk mitigating effects of this approach justifies further investigation of this approach. Another approach, which may overcome certain obstacles of the LP Bank approach, is set out below.

6. Modified LP Bank Approach

Finally, the Association notes that the LP Bank does not necessarily have to be owned by industry participants and operate as a public utility. For instance, while the analysis we provide of the LP Bank approach assumes that the LP Bank would be formed as an industry owned utility, there are other ownership structures that are equally viable under this approach. One such approach is having the Clearing Banks jointly create and own an LP Bank (a "Private LP Bank") and thereby merge their back-office operations.[79]

This approach would have a number of advantages with regards to the continued provision of adequate intraday financing and a reduction in the fees generally associated with clearance and settlement. First, under this approach, concerns about the adequate provision of intraday liquidity to the dealers might be minimized since the Private LP Bank would continue to have substantial Federal Reserve DOD capability assuming that each of the two Clearing Banks guaranteed any borrowing by the Private LP Bank. Second, as the exclusive provider of government securities clearance and settlement services to the dealers, most transactions would occur intraday on the books of the Private LP Bank and not over Fedwire, thereby reducing settlement risk for the Federal Reserve System and leading to greater efficiencies, reduced DOD charges and an overall reduction in the Fedwire transaction fees currently paid by the Clearing Banks on behalf of the dealers and other customers.[80] Third, since the provision of core clearance and settlement services would not be unbundled from triparty repo services, it is likely that the repo buyer would retain the cash used to purchase securities in the Private LP Bank after the unwind of a triparty repo. As such, dealers would have the Private LP Bank finance the intraday use of their securities without incurring DOD or DOD fees.[81]

Moreover, certain exit risks inherent in the current clearance and settlement architecture may also be mitigated under this approach. Voluntary exit risk would be substantially reduced, given that operations could continue despite the voluntary exit of one of the Clearing Banks.

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[79] It is also conceivable that greater cooperation and coordination between the Clearing Banks, such as the creation of common messaging formats and a Data Repository, could facilitate the Clearing Banks decision to create a Private LP Bank by physically merging both Clearing Banks' government securities clearance and settlement services and their triparty repo businesses.

[80] This assumes full usage of this facility by the participating clearing banks for all of their Fedwire activity and a maximization of internal clearances within the Private LP Bank.

[81] Unlike with an LP Bank formed as a common utility, the Private LP Bank might also have the ability to take on additional credit risk that was based on more subjective criteria.

Likewise, given that the Clearing Banks' ownership[82] of the Private LP Bank would consist of owning shares in the jointly owned facility, problems arising from involuntary exit risk might be reduced since such shares could more readily be offered to another bank in the event one of the Clearing Banks were to become insolvent. In other words, this approach would make any long-term disruption in the provision of services less likely upon the voluntary or involuntary exit of one of the Clearing Banks. Finally, under this approach, both Clearing Banks would have sufficient incentive during the transition from the current system to continue to invest in new technology because they could profit (at least in the short term)[83] from any efficiencies and cost reductions that were ultimately realized.[84]

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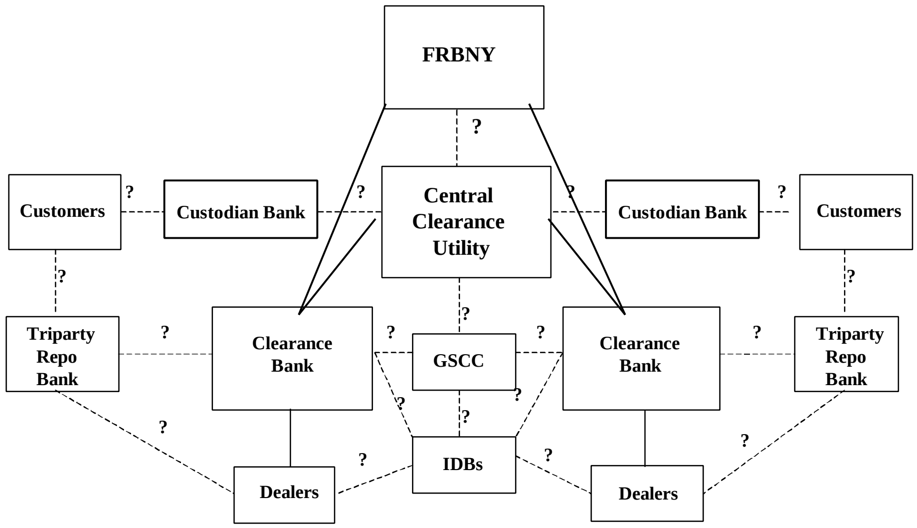
[82] While the Private LP Bank might initially be owned by the Clearing Banks, this would not necessarily preclude the Private LP Bank from having a board of directors that included representatives from the dealer and investor communities.

[83] It is unclear whether the Private LP Bank should not also contain some ownership mechanism that facilitated the bank's ultimate evolution into a broader industry-owned utility once a sufficient period of time had elapsed and the Clearing Banks had fully realized an adequate return on their investment in the new entity.

[84] However, as with the LP Bank approach in general, one drawback with this approach is that it would lead to greater concentration of operational risk.

Appendix C

Analysis of the Old Euroclear Model



This alternative would involve the establishment of a central utility (the "Central Utility") that would enter into long-term service contracts with one or more clearing banks as suppliers of critical services, potentially including tri-party repo services. While this model may present some advantages over the current system, we believe that the industry's goals could also be more easily achieved within the existing structure through current or future industry initiatives, particularly given the potential costs of creating a Central Utility. We agree with the conclusion in the White Paper that "[t]his model's ability to address the vulnerabilities in the current system is mixed."[85]

For reasons elaborated below, the Association believes that in order for this approach to provide any potential benefits over the current system, at least two clearing banks would need to provide credit and operational support to the Central Utility. Further, we believe that such clearing banks would also need to provide triparty repo services in order for this model to be successful, given the uncertainty as to whether triparty repo services could be unbundled from clearance and settlement, as noted under Appendix B, Section 2.

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[85] See White Paper at 8.

1. The Ability of the Old Euroclear Model Approach to Provide Necessary Intraday Financing is Dependent on the Inclusion of More Than One Clearance Bank.

It is possible that this alternative would provide as much intraday liquidity as currently provided by the Clearing Banks if it did not substantively alter the current clearance structure. Under this approach, it is possible that the existing Clearing Banks would agree to enter into long-term service contracts with the Central Utility, and would thus continue to provide intraday financing through the provision of intraday credit and triparty repo services. However, assuming that the clearance and settlement of government securities would be separated from the clearance of other securities, intraday liquidity may still be adversely affected if clearance participants were unable to utilize non-government securities as collateral to obtain secured intraday financing from the Clearing Banks.

However, if a single bank were to provide operational and credit services (including triparty repo services) for the Central Utility, it seems unlikely that such bank would be able to provide sufficient intraday financing, for many of the same reasons discussed under the private limited bank approach in Appendix B. As discussed therein, it is unclear if a single entity could provide as much intraday financing as the Clearing Banks currently do, given the limitations on the amount of DOD it could access. Even assuming that a single entity had the capability of providing as much intraday financing as both Clearing Banks, the propriety of allowing a single entity to provide such financing is unclear, given the concentration of credit exposure that would result from the amount of intraday financing it alone would extend each day. In addition, under the old Euroclear approach, assuming such clearance facility were a private entity, significant concerns would arise about such entity to provide or refuse intraday financing at its sole discretion.

While concerns regarding the ability or propriety of a single entity to provide sufficient intraday financing may be alleviated by subjecting such entity to requirements set out by the Central Utility, such requirements may adversely impact liquidity. As discussed in Section 2 of Appendix B, while such requirements may help alleviate credit risk or assuage concerns regarding the discretion of the clearing entity, such requirements could also severely affect liquidity by, for example, preventing the clearing bank from making "subjective" extensions of intraday credit or imposing onerous collateralization requirements.

Finally, the Association believes that, under this alternative, any clearing bank providing services to the Central Utility should also provide triparty repo services. As discussed in detail in Section 2 of Appendix B, it is unclear whether triparty repo services could be successfully unbundled from clearance and settlement services. However, as noted above, if only one clearance and triparty repo facility exists under the Central Utility, it is unclear if a single entity would (or should) have the ability to provide as much intraday financing resulting from the unwind of a triparty repo transaction as currently provided by both Clearing Banks.

2. The Old Euroclear Model Alternative May Potentially Mitigate Certain Operational Risks and Exit Risks Present in the Current Clearance Structure.

A number of exit risks and operational risks may be mitigated under this approach, although such risks could be as adequately addressed within the current system. Voluntary exit risk could be mitigated through a contractual arrangement by the Central Utility with the clearing bank or banks whereby the banks are legally obligated to provide operational and credit support to the Central Utility for a specified time period. Operational risks could be mitigated in a manner similar to the mitigation of such risks under the private LP Bank approach, as discussed under Section 1 of Appendix B. Specifically, the Central Utility could impose robust contingency and back-up requirements on such banks to protect against a temporary cessation of services resulting from operational failures. Involuntary exit risk resulting from financial difficulties could also be mitigated by having the Central Utility limit its own financial activities. However, unless the Central Utility imposed similar limitations on the participant clearance bank or banks, this approach may not lead to a net reduction in involuntary exit risk in the overall system because the Central Utility is likely to rely heavily on such clearing banks for critical operational and credit support including triparty repo services.[86]

While the old Euroclear approach may mitigate concentration risk through its dispersion of operational and credit risk through the use of multiple independent service providers, a level of concentration risk remains given the structure of this approach. Specifically, even if the Central Utility contracted with multiple clearing banks, concentration risk may still exist assuming that (as in the current structure) the exit by one clearing bank would materially affect the clearance and settlement of government securities. In addition, a temporary disruption by the Central Utility would presumably also materially impact the ability of the clearing banks to clear and settle government securities, further increasing concentration risk under this alternative.

Given the above analysis, the Association believes that, while this approach may potentially mitigate certain risks inherent in the current system, such risks may also be mitigated in a similar manner within the current clearance structure, as discussed in detail in Appendix A, Section 4. Addressing such risks in a similar manner within the existing system would provide the same risk mitigating benefits as under the old Euroclear model approach, while presenting the obvious advantage of eliminating any conversion costs that would be associated with such approach, as discussed below.

3. Conversion Costs May Be Potentially High Under the Old Euroclear Model Approach, Though Such Approach Could Reduce Fees.

As with the private limited purpose bank alternative, the Association believes that an existing utility should be expanded in order to create the Central Utility were the old Euroclear model alternative to be implemented. As noted in Appendix B, in all likelihood the costs involved in the formation of a new utility would be significant, whereas the expansion of an existing utility (such as DTC) would potentially limit such costs. Certain fees may be reduced under the old Euroclear model approach. Discretionary

[86] See White Paper at 14-15 (noting that "the utility would be exposed to the risk that a bank providing operational and credit services could involuntarily exit the business because of financial difficulties unrelated to clearing activities.")

fees, such as clearing bank fees, could be reduced under this approach if the Central Utility were able to negotiate a reduction of such fees with the clearing bank or banks. In a structure involving more than one clearing bank, Fedwire fees may also be significantly reduced if funds and securities were able to clear and settle within the Central Utility, instead of over the Fedwire. If only one clearing bank participated in this structure, Fedwire fees would be mitigated or eliminated assuming that the settlement of securities took place on the records of such clearing bank or the Central Utility. If the Central Utility were unable to clear and settle inter-clearing bank transactions, Fedwire fees would remain the same as under the current system, assuming a structure with more than one clearing bank.

As discussed in Appendix B, if the structure involved a single clearing bank, increased offsetting effects may reduce the amount of DOD needed by the clearance bank by netting positive and overdraft balances at the single clearing bank, thereby reducing the amount of DOD such bank would need to access. However, the extent to which DOD fees may ultimately be reduced would also be dependent upon the retention of funds in the clearing bank facility upon the unwind of a triparty repo, which in turn would likely depend upon whether triparty repo facilities were unbundled from the clearing bank, as discussed in detail in Appendix B. Regardless, the Association does not believe any potential benefit to be gained in relation to the reduction of DOD fees would justify the use of a single clearing bank, given the potential adverse impact on liquidity as discussed above, and in further detail in Appendix B, Section 2.

If the clearing bank or banks providing services to the Central Utility were private commercial institutions, the clearance participants would presumably not be subjected to mutualization of loss. However, assuming a structure that included more than one clearing bank subject to the Central Utility, it is unclear whether such approach would include the mutualization of loss at the clearing bank level. If so, upon the failure of one clearing bank, mutualization of loss at the clearing bank level could cause the remaining clearing bank or banks to encounter financial difficulties due to their obligations to share in any loss encountered by the Central Utility. If mutualization of loss was not present at the clearing bank level, the failure of a clearing bank or banks subject to the Central Utility could cause the Central Utility to undergo financial difficulties. In this manner, this approach would transfer to the Central Utility, rather than eliminate, problems arising from the involuntary exit of a participating clearing bank.

4. A Strong Corporate Governance Structure May Offset the Lack of Competitive Pressures to Innovate under the Old Euroclear Model Approach.

For the reasons discussed in Appendix B, Section 3 regarding the private limited purpose bank approach, the Association believes that the Central Utility should be formed as a publicly owned utility which would be governed by the industry. Industry governance and oversight of the Central Utility would help ensure continued innovation with regards to clearance and settlement functionality, provided the Central Utility was in a position to impose high standards on the clearing banks that supplied it with operational and credit support.[87]

[87] However, as noted in Appendix B, Section 3, it is possible that such governance structure would not provide as great an incentive for innovation as private competitive pressures, given the possibility of disagreement and deadlock of the board of the Central Utility, which would lead to inaction.

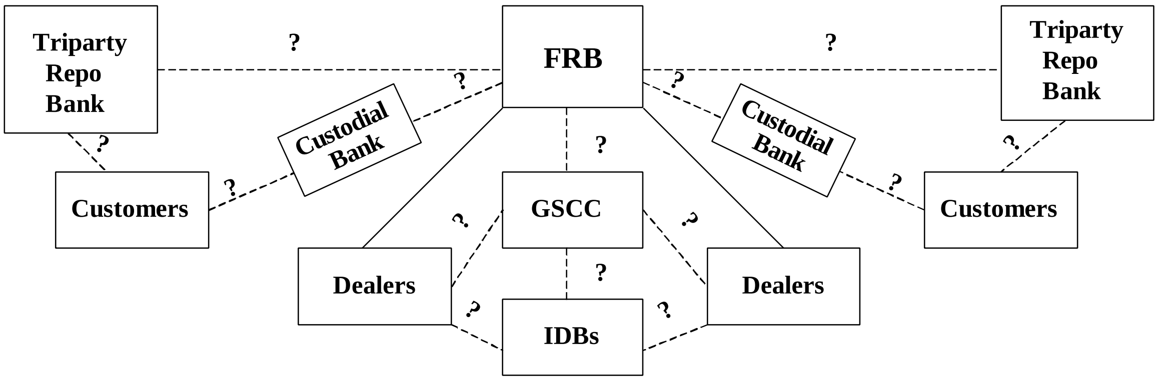
5. Conclusion

The Association is not yet convinced that this approach is as viable an option as improving the existing structure or moving to the private limited bank approach given: (i) the limited benefits such approach provides; (ii) the fact that many of the benefits it provides can also be achieved under the current structure; and (iii) the potentially significant costs involved in the creation of a Central Utility.

The benefits of this approach, as well as potential obstacles to its implementation, are similar in certain respects to that of the private limited purpose bank. Assuming at least two clearance facilities would participate under this approach, certain of the risks present in the current system could be mitigated while maintaining an adequate level of intraday financing. Further, certain costs may be reduced under this approach. However, it is unclear whether many of the benefits to be gained from this approach could not be accomplished by retaining and addressing the risks inherent in the current system, as discussed in detail in Appendix A, Section 1. If so, it is similarly unclear whether the expenditure of potentially significant costs in the creation of a Central Utility would be justified.

Appendix D

Analysis of Enhancing the Existing Federal Reserve System



As noted in our letter, this alternative envisages enhancing the Federal Reserve System in order to allow it to provide clearance and settlement services for government securities, as well as to potentially provide triparty repo services. While the Association believes that this approach may potentially eliminate many of the operational and exit risks inherent in the current system, we believe this approach to be the least viable of the alternatives set out in the White Paper. As discussed in detail below, our concerns stem mainly from questions regarding the ability and propriety of having the Federal Reserve act both as a provider of intraday financing to dealers as well as a direct or indirect regulator of such dealers.

7. A Number of Operational Risks and Exit Risks Could be Significantly Mitigated by Enhancing the Existing Federal Reserve System.

Voluntary exit risk, as well as involuntary exit risk resulting from financial difficulties, would effectively be eliminated under this approach. As the White Paper notes, "Federal Reserve services are not vulnerable to disruption because of financial difficulties."[88]

As with any clearance and settlement system, operational risk would still exist under this approach. However, the Federal Reserve System certainly has more robust contingency and back-up arrangements than most non-governmental entities. In addition, given that the Federal Reserve System has considerably more resources available to it than to a non-governmental entity, the Federal Reserve would presumably be in the best position to mitigate against operational risk.

As the White Paper notes, a major risk inherent in enhancing the Federal Reserve System to provide clearance and settlement for government securities is moral hazard. The provision of intraday financing directly by the Federal Reserve System may give rise to less disciplined risk-taking by dealer and other market participants. While the validity of such concern is difficult to ascertain, given the robust risk controls implemented by each dealer currently, the Association believes that moral hazard would not significantly rise under this approach. In addition, as discussed in Section 2 below, the Association believes that the imposition by the

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[88] See White Paper, at 10.

Federal Reserve of limitations on the amount of intraday liquidity provided by the Federal Reserve System would further reduce the risk of moral hazard.

2. The Federal Reserve System May Not Provide Sufficient Intraday Financing as a Clearance and Settlement Entity.

One of our main concerns with this approach is that it is unclear if it would provide sufficient intraday financing to maintain the level of liquidity currently present in the government securities market. Given the Agencies' recognition that the Federal Reserve System is not subject to financial difficulties, the limitations currently imposed on the Clearing Banks (and other depository institutions) on the maximum amount of DOD that may be extended could potentially be significantly expanded.

However, in all likelihood, the Federal Reserve System would limit the amount of intraday financing compared to the current system, by, for example, restricting the unsecured provision of DOD,[89] or eliminating subjective determinations to expand such forms of intraday credit. As mentioned above in Section 1, the Federal Reserve System would likely wish to limit credit risk to itself and to reduce the potential for moral hazard. In addition, unlike the Clearing Banks, the Federal Reserve System does not have any profit "reward" that it would reap in connection with the risks involved in their provision of intraday financing, further making the reduction of such intraday financing under this approach more likely. If the Federal Reserve System would not be as flexible as the Clearing Banks in the manner in which it would extend intraday credit, dealers may have insufficient access to needed funds, adversely impacting liquidity in the government securities markets.

The provision of additional forms of intraday credit – particularly "discretionary" forms of intraday credit – raises the related issue of whether the Federal Reserve System is an appropriate provider of additional forms of financing, particularly given their role as a regulator and their responsibility to avoid losses by the Federal Reserve System. In particular, many firms may be reluctant to access or request such additional forms of intraday credit, fearing that such request may raise increased scrutiny of a dealer's trading strategies and positions. Such reluctance may also apply to the Federal Reserve having direct knowledge of the positions in a dealer's securities and cash accounts; such direct access may adversely influence a dealer's trading strategy, causing such dealer to adopt overly conservative positions in the management of its portfolio, even if a more aggressive strategy may have been completely appropriate. Such adverse influence may adversely impact liquidity, leading to market distorting effects.

As discussed in detail under Appendix B, Section 2, the Association believes that the unbundling of triparty repo services from any clearance and settlement facility raises substantial issues with regards to risk management, as well as added operational concerns. As such, the Association believes that, were this approach to be implemented, the enhancement of the Federal Reserve System should include the provision of triparty repo services. As the White Paper acknowledges, however, were the Federal Reserve System to

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[89] The extension of DOD under the most recent version of the PSR Policy may be unsecured up to the amount of a depository institution's net debit cap, which may be exceeded to an extent by pledging collateral. See Comment Letter, note 25.

provide triparty repo facilities, this would necessitate the creation and maintenance of a large number of accounts for non-depository institutions.[90] This would entail the provision of intraday (and potentially overnight) financing from the Federal Reserve System to these institutions, certain of which are not otherwise regulated. Given that some of these institutions are not as creditworthy as the dealers, the extensions of intraday or overnight credit to these institutions would likely entail increased credit risk to the Federal Reserve System and may in turn, require changes to the Federal Reserve Act itself. While such risk could be mitigated by requiring a pledge of liquid collateral, such risk mitigation controls raise the potential of reducing liquidity in the government securities markets by requiring financial institutions to utilize government securities as collateral, thereby limiting the amount of such securities available in the market.

3. *While Conversion Costs May Potentially Be Low, Fees May Rise under the Enhanced Federal Reserve Approach.*

We also believe that certain costs may rise under this approach, specifically DOD fees, as discussed below. In addition, given the fact that the dealers are not currently directly represented on the boards of the Reserve Banks, they would not be in a position to encourage a lowering of transactional fees.

Initial conversion costs could potentially be significantly lower than the other alternatives set out in the White Paper if the Federal Reserve were to fund the enhancement of the Federal Reserve System services in order to offer the clearance, settlement, intraday financing and triparty repo services of government securities to dealers. However, such costs would presumably be recouped over time by the Federal Reserve through the inclusion of such costs in transaction fees.

Assuming that the Federal Reserve would maintain the fee structure currently in place for the provision of DOD, such fees may rise significantly, given that the offset that currently takes place at the Clearing Bank level, as discussed under Appendix A, Section 1, would no longer be present. It is unclear if Fedwire transaction fees would decrease or increase, though given the fact that the Federal Reserve would not be motivated by profit concerns, it is possible that such fees may be reduced. However, such fees may remain comparable to transaction fees charged by the Clearing Banks, or may even increase, were the costs of enhancing the Federal Reserve System included in such fees, as noted above. If the Fedwire were to be utilized in the same manner as it is under the current system, presumably Fedwire fees would remain the same. Given the fact that the Federal Reserve System would not be susceptible to financial difficulties, the Association believes that no mutualization of loss would be necessary to protect it against potential exposure to the failure of a clearance participant.

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[90] See White Paper at 11.

4. The Federal Reserve may not be Responsive to the Industry, Preventing the Implementation of Innovative Practices and Functionalities.

It is our view that the Federal Reserve would not be as responsive as a private institution or public utility to the industry's concerns or calls for innovation.[91] Unlike a private commercial bank that is motivated by profit, or a public utility governed by the industry, the Federal Reserve System would not be strongly influenced by the industry with regards to the manner in which the clearance and settlement system should be conducted; how – and to what extent - intraday liquidity should be provided; and how risks in the system could best be mitigated. While the Association believes that such independence could in certain circumstances be beneficial, the risk of unresponsiveness may prevent the implementation of measures that would be needed to maintain a stable and liquid government securities clearance and settlement system.

5. Conclusion

Enhancing the Federal Reserve to provide clearance and settlement for government securities arguably would present the greatest reduction in the risks that currently exist in the clearance and settlement system. However, the ability of (and the propriety of) the Federal Reserve to extend sufficient intraday financing is unclear. In addition, while some costs may be reduced, others (such as DOD fees) may significantly increase. Another issue of potentially significant concern relates to the responsiveness by the Federal Reserve to the industry in relation to calls for a reduction in fees or the implementation of innovative practices. For these reasons, the Association believes that this alternative is the least viable of those presented in the White Paper.

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[91] While the Association commends the Board's and the FRBNY's continuing dialogue with the dealer community in connection with a broad range of issues, there have been past instances where such agencies have not been as responsive to the dealer community as the Association believes such agencies could have been. These instances include issues concerning the unilateral adjustment for principal and interest payments for securities subject to the Fedwire's repo tracking functionality, as well as issues concerning the inter-Clearing Bank transfer of securities after the close of Fedwire in connection with GSCC's GCF service.

Appendix E

a. INTERAGENCY WHITE PAPER TASK FORCE

Name	***Firm***
Mr. Frank DiMarco, ***Task Force Chairman*** *Managing Director*	Merrill Lynch & Co., Inc.
Mr. Andrew W. Alter *Managing Director & Counsel*	Salomon Smith Barney Incorporated
Mr. Thomas M. Brady	Bank of America NT & SA
Mr. Martin Brennan *Managing Director*	UBS Warburg
Mr. Shawn Brosko *Managing Director, Head of Operations*	Greenwich Capital Markets Inc.
Mr. John F. Coghlan *Managing Director*	Lehman Brothers Inc.
Mr. Adam Gilbert *Managing Director*	JP Morgan Chase & Co.
Mr. Joseph J. Grima *Director of Operations*	BrokerTec Global
Mr. Robert G. Knox *Senior Vice President*	Zions First National Bank
Mr. Kenneth E. Librot *Senior Managing Director*	Bear, Stearns & Co., Inc.
Ms. Laura E. LoCosa *Managing Director*	Morgan Stanley
Ms. Sibyl C. Peyer *VP & Associate General Counsel FICC*	Goldman Sachs & Co.
Mr. Brian E. Reilly *Managing Director*	BNP Paribas
Ms. Michelle Turner *Director*	Barclays Capital
Mr. Thomas J. Paul *Managing Director, Head of Fixed Income*	Deutsche Bank Securities Inc.
Mr. Andrew S. Carron – Consultant *Senior Vice President*	National Economic Research Consultants
Mr. Ralph Monda – *Consultant*	Oasis Inc.
Mr. William J. Santangelo - *Consultant*	

Appendix C

January 16, 2003

Roger Ferguson
Vice Chairman
Board of Governors of the Federal Reserve System
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William J. McDonough
President
The Federal Reserve Bank of New York
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New York, NY 10045-1003

Gentlemen:

The Bond Market Association respectfully wishes to bring to your attention a recently filed proposal by the Municipal Securities Rulemaking Board ("MSRB") to allow the MSRB to halt trading in municipal securities by declaring an "emergency." While this proposal directly affects only the municipal securities markets, we believe that the implications for other markets are significant.

The MSRB's unprecedented initiative to prohibit (and make unlawful) trading in one asset class of the over-the-counter ("OTC") bond markets raises serious and fundamental issues that have not been thoroughly vetted. Although we fully appreciate that this proposal is motivated by the best of intentions, we have serious concerns about both the authority, and propriety, of any governmental action that would serve as a precedent to "close" the OTC bond markets, which in times of stress need to provide liquidity that is critical to our nation's economy and banking system.

A. The MSRB's Proposed Rule (the "Proposal")

We understand that the MSRB recently filed the Proposal with the Securities and Exchange Commission ("SEC"), and that it is awaiting publication in the Federal Register for a 30-day comment period. (A copy of the Proposal is attached.) If the Proposal is published for comment, we anticipate filing a detailed and comprehensive comment letter. Nevertheless, we thought a brief summary of our views would be appropriate.

The MSRB's proposal would add an interpretation to its general fair practices rule, Rule G-17, to provide that *if* the MSRB has declared an "emergency," any trading in municipal securities would violate Rule G-17. The proposed new interpretation sets out a broad and rather ill-defined range of circumstances under which the MSRB could declare an emergency. The MSRB also intends to reduce its quorum requirements when it considers making such a declaration. While the MSRB's Board of Directors comprises 15 members – bank dealers, securities firms and the public each have five representatives – a quorum for declaring an emergency would require only five members. Once a quorum is present, a majority vote could declare an emergency. Hence, a vote of three members of the MSRB's Board could conceivably close the municipal markets.

We also note that the Proposal appears to contradict the existing statutory regime for trading suspensions in two respects. First, section 12(k)(1)(B) of the Exchange Act, as amended in 1990, gives the SEC authority "summarily to suspend all trading on any national securities exchange or otherwise, *in securities other than exempted securities***,** for a period not exceeding 90 calendar days." Since exempted securities were carved out from the trading-suspension authority, there is no basis for the MSRB (which itself was created under the direction of the SEC) to assume that power. Second, section 12(k)(1) provides that even an SEC order to suspend trading "shall not take effect unless the Commission notifies the President of its decision and the President notifies the Commission that the President does not disapprove of such decision." Further, section 12(k)(3) permits the President to lift a trading-suspension order, by directing that the order "shall not continue in effect." Given that even market closure orders that the SEC is clearly authorized by Congress to issue are ultimately subject to the President's authority, it would be anomalous in the extreme to give the MSRB the power to close the municipal market, which the SEC itself does not have and which is not subject to this additional presidential check.

B. A Trading Halt in the OTC Markets Would Rarely, If Ever, Be Appropriate

The MSRB's proposal raises the question whether imposing a regulatory trading halt on a decentralized OTC market *ever* would be beneficial. We believe that the case has not been made that the grant of such authority is necessary or desirable. The municipal market, like other OTC bond markets, is highly decentralized, with participants dispersed across the country. Even in times of disruption, trading can occur on a bilateral basis so long as individual parties have the capacity to do so. The only possible central point of failure is the settlement and clearance system provided by the Depository Trust and Clearing Corporation ("DTCC"). But even if DTCC were to encounter difficulties, parties can decide whether to refrain from trading, or to extend the settlement period, or to make alternate settlement arrangements. Thus, even during an emergency, private sector participants should have the flexibility to decide whether to trade, subject to investor protection rules.

These points were well illustrated by the bond market's performance in the days following September 11, 2001. Market participants demonstrated an impressive ability to function in the crisis, by rapidly absorbing and assessing the facts and, where appropriate, making adjustments on a consensual and voluntary basis. After the attacks occurred, firms communicated with each other about their circumstances and capacities. Market participants collectively participated in this exchange of information and helped facilitate discussions about adjustments market participants might wish to consider. Through this process, market participants consensually agreed on voluntary recommendations in the days following September 11, including extended settlement periods for treasury securities (because that clearing system had experienced difficulties). This experience demonstrated the importance of allowing market participants the flexibility to adopt or reject temporary changes to business practices in time of emergency. Since September 11, the market's capacity for resilience has only strengthened, as firms have worked both individually and collectively to prepare for such contingencies.

Not only do we believe that imposing a regulatory trading halt is unnecessary, we also believe such a closing could be harmful. Whatever the circumstances, there is a benefit to economic and banking policy makers in allowing market participants to express views on credit and rates in a continuous way and to provide liquidity for investors who need it. To simply halt trading, even though some firms have the capacity to function, also could raise anti-competitive issues and reduce the incentive for firms to develop robust business continuity plans. Moreover, because most OTC markets today are interrelated and global, halting trading in one market could cause unexpected consequences in other markets or other parts of the world. Indeed, the notion of stopping all trading may itself be illusory, as derivatives and offshore trading may continue despite a ban on domestic trading – with the result that those subject to a governmental trading halt would be at a relative disadvantage.

Rather than prohibit trading, we respectfully suggest it would be better to address challenges raised by market emergencies in the OTC bond markets with firm-specific measures and targeted and enhanced investor protection and capital adequacy rules. Procedures could be developed, for example, to ensure that DTCC promptly notifies market participants of any difficulties it is experiencing, so that parties could decide what to do in light of potential problems or delays in settlement. Fair practice rules could be interpreted to provide that a firm should not enter into trades unless it reasonably believes it can complete them and that it should not knowingly misrepresent its capacity to execute or settle trades. Of course, existing rules already prohibit broker-dealers from charging excessive mark-ups. Other rules and procedures can be shaped to address any other specific problems that might occur during times of disruption.

In sum, as demonstrated by the events of September 11, market participants can respond to disruption in a fluid and flexible manner. Any additional regulation should be designed to support a nuanced and decentralized response to emergency conditions in the OTC markets. A regulatory trading halt is more likely to impede that process than assist it.

Particularly after September 11, regulators are appropriately focused on ensuring that markets continue to function as smoothly as possible during times of national emergency and that they have all the tools necessary to ensure that the public interest is served. We appreciate the efforts by the MSRB, SEC, and other regulators to undertake a thoughtful review of the existing regulatory system for this purpose. We do believe, however, that the instant Proposal by the MSRB raises complicated questions of law and public policy that need to be fully and deliberately vetted by the most senior of policy makers in our country in order to ensure that the public interest is best served by regulatory action in times of crisis. Further, because of the important interrelationships among market sectors, particularly in the fixed income arena, we think it is important that all agencies with an interest in the regulation of fixed income markets participate in this dialogue.

On behalf of our membership, we would welcome the opportunity to work with all interested parties in continuing to address these important issues. Please feel free to contact Paul Saltzman, Executive Vice President and General Counsel, at 646.637.9214 or e-mail at psaltzman@bondmarkets.com, or John Ramsay, Senior Vice President and Regulatory Counsel, at 646.637.9230 or e-mail at jramsay@bondmarkets.com, if you have any questions or comments.

Respectfully,

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Barclays Capital
Chair, Board of Directors
The Bond Market Association

Herbert (Bart) McDade
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Lehman Brothers Inc.
Vice Chair, Board of Directors
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Micah Green
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Cynthia A. Glassman, Commissioner
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Federal Reserve Board of Governors
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Federal Reserve Bank of New York
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Commodity Futures Trading Commission
James E. Newsome, Chairman

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