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Report to the Federal Reserve Board

by the

Working Group on Government Securities Clearance and Settlement

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1. Executive Summary

Background

All of the major participants in the U.S. government securities markets depend critically on one of two commercial banks (the "clearing" banks) to settle their trades and to facilitate financing of their positions.[1] The terrorist attacks on New York City on September 11, 2001 demonstrated how operational disruptions to a clearing bank's services could disrupt the trading, clearance, and settlement of government securities. Those events also reinforced government officials' long-standing concerns about potential disruptions from voluntary or involuntary exit from this business by either of the two clearing banks. Interruption or termination of the services of a clearing bank has the potential to disrupt financial markets globally because of the widespread use of U.S. government securities to meet demands for funding liquidity. Federal Reserve open market operations and debt issuance by the United States Department of the Treasury ("U.S. Treasury") for the critical purpose of funding and operating the U.S. Government might also be disrupted.

In May 2002 the Board of Governors of the Federal Reserve System ("Federal Reserve Board") and the Securities and Exchange Commission ("SEC") issued a White Paper for public comment. The White Paper discussed the risks of operational and non-operational disruptions to a clearing bank's services and described possible approaches to structural change to the existing arrangements that would involve creation of some type of industry utility to assume the critical functions of the two clearing banks.

The comments (from the clearing banks, trade associations for securities dealers and mutual funds, the clearing corporation for U.S. government securities, and other interested parties) concurred that there are significant risks in the existing arrangements. However, the comments suggested that government policymakers should focus on mitigating those risks within the existing structure (two clearing banks) rather than on fostering development of a utility. To that end, the trade associations and several others suggested that a private-sector working group should be formed and asked to develop recommendations.

Accordingly, in November 2002 the Federal Reserve Board formed the Working Group on Government Securities Clearance and Settlement. A private consultant with extensive industry experience has chaired the group, which also has included representatives of clearing banks, securities dealers, mutual funds, trade associations and other interested parties. Staff members from the Federal Reserve, SEC, and the U.S. Treasury have participated as observers and technical advisors. The members of the Working Group are listed in the appendix at the end of this report.

[1] Throughout most of this report the term "U.S. government securities" is intended to include all securities that are issued, maintained, and transferred through the Federal Reserve's Fedwire Securities Service. These include not only securities issued by the U.S. Treasury Department but also securities issued by U.S. government agencies, government sponsored enterprises and corporations, and certain international organizations.

The Board asked the Working Group to prepare recommendations for mitigating the risks to the financial system from an interruption or termination of the services of either of the clearing banks. In particular, the Group was asked to explore the specific changes that would need to occur to enable the clearing banks to substitute for each other in such circumstances.

Analysis and Conclusions

The Working Group first sought to achieve a common understanding of the processes and systems that are involved in the clearing banks' provision of clearance, settlement, and tri-party repurchase agreement (repo) services. Two important findings that emerged were that (1) clearance and settlement and tri-party repo services are highly interdependent, and (2) tri-party repo programs involve significant amounts of securities that are not U.S. government securities (about 23 percent of the $1.1 trillion of securities financed daily through the two banks' tri-party programs as of August 22, 2003). Accordingly, the Working Group concluded that any plan to mitigate the effects of an interruption or termination of a clearing bank's services should cover their U.S. government clearance and settlement services and all tri-party repo services, that is, including repos of non-government securities.

At an early stage of its work the Working Group also discussed the scenarios that were being planned for. It concluded that there was no need to specify in detail the precise causes of a potential disruption or termination of a clearing bank's services. However, for planning it was very important to distinguish operational from non-operational problems. The critical difference is that it is reasonable to assume that a non-operational problem (e.g., a financial or legal problem) would not result in the loss of the data, equipment, systems, or staff of the affected bank.

Migration. Consistent with the Board's mandate, the Working Group initially focused on developing a plan that would permit the clients of a clearing bank whose services were interrupted or terminated to use the services of the other clearing bank. However, the Working Group concluded that implementation of such a plan would not be a practical means of addressing operational vulnerabilities. For such a plan to be effective, the systems and processes of the two clearing banks, which today are quite different, would have to be significantly standardized, and the clearing banks' clients would have to make corresponding changes to their systems. In addition, it would require the building of a real time data base, or data repository, to capture and track the status of the relevant transactions in order to enable the remaining clearing bank to recreate the cash and securities positions of the migrating customers. Both of these steps would divert resources from the clearing banks' efforts to enhance the resiliency of their current operating platforms. More important, migration of the clients of one clearing bank would substantially increase the concentration of risks to market participants and to the remaining clearing bank, should it become necessary for one of the clearing banks to begin providing services to the entire market. Indeed, the remaining clearing bank likely would not be willing or possibly able to provide the necessary liquidity to the full set of

market participants in such a scenario. For this reason, the Working Group does not believe that a single clearing bank is a viable model in the long run or even as an interim measure.

Nonetheless, the Working Group believes that steps can and should be taken to reduce risks to the financial system from the interruption or termination of the services of a clearing bank, be it as the result of operational or non-operational problems.

Operational Disruptions. With respect to operational vulnerabilities, the Working Group believes that risks can be addressed most effectively by focusing efforts on enhancing the resiliency of the clearing banks. Both clearing banks have committed to significantly enhancing their resiliency, including achieving geographically dispersed resources, covering equipment and systems, data, and staff, consistent with the sound practices for core clearing and settlement organizations that were identified by federal financial regulators in April 2003. The Working Group believes that regulators should monitor and test the progress of the clearing banks in complying with regulators' sound practices and implementation timelines. Once the clearing banks have fully implemented these plans, they should be able to perform the full range of required functions from multiple locations and should therefore have achieved a degree of resiliency comparable to the targets set for other core clearance and settlement organizations, including market utilities. Thus, even a wide-scale physical catastrophe should not completely interrupt processing.

In addition, while the Working Group believes that complete standardization of the systems and technology of the two clearing banks would be very costly and distracting, it believes that the operational resiliency of the U.S. government securities clearance and settlement system could be enhanced in a cost effective way through some degree of standardization. Specifically, the Working Group supports adoption of a secure and resilient telecommunications infrastructure. The Working Group also believes that the threat to the clearing banks from cyber-terrorism, which cannot be addressed through geographic dispersion, deserves further study.

Furthermore, while a wide-scale physical catastrophe should not completely interrupt a clearing bank's processing capacity once it has enhanced its resiliency as planned, the Working Group believes that in such an event or possibly in other circumstances (e.g., a software-related problem), the processing capacity of a clearing bank could temporarily be diminished and that market participants should plan for such temporary reductions in capacity. Accordingly, the Working Group has reviewed and evaluated the steps that were taken by market participants, the Federal Reserve, and other regulators to address the temporary disruption that occurred after the September 11 terrorist attacks. The Working Group recognizes that the circumstances surrounding any future temporary disruption may differ significantly, so actions that were taken after September 11 may not be similarly effective or appropriate in a future disruption.

With that caveat in mind, the Working Group believes that market participants and regulators can take steps now to mitigate the adverse effects of future disruptions.

Specifically, the Working Group believes that market participants should review their existing documentation for U.S. government securities and repo transactions and seek to clarify their obligations to counterparties in the event of a future temporary disruption at a clearing bank. Also, it believes that market participants should ensure that the existing netting and guaranteed settlement services of the Fixed Income Clearing Corporation ("FICC") are used as much as practical. As an element of their contingency planning, regulators should undertake a review of their authority to temporarily liberalize or suspend various regulations when such liberalization or suspension would facilitate the restoration of orderly markets. In some cases various regulations may be unusually costly to comply with during a temporary disruption and regulators should consider in advance the costs and benefits of such liberalization or suspension of those regulations under the circumstances. Likewise, they should review their authority to suspend trading or settlement activity and consider in advance the costs and benefits of such measures. In the event of a temporary disruption, market participants, the Federal Reserve, and the regulatory community should consider the merits of various interim measures that proved effective in the aftermath of September 11.

Because the actions that are effective and appropriate would depend on the nature of the disruption and the circumstances in which it occurs, the Working Group believes that in such event reliable lines of communication must be established and maintained between market participants (including dealers, institutional investors, the FICC, and the clearing banks) and the Federal Reserve and other regulators. To that end, market participants and regulators should support efforts, such as efforts by The Bond Market Association ("TBMA") to enhance the value of the government securities emergency subcommittee of TBMA's Calendar Committee (the Emergency Subcommittee), that would provide real-time information on the functioning of the government securities clearance and settlement system and offer a potential sounding board for actions being contemplated by market participants, the Federal Reserve, the SEC, the U.S. Treasury, or other regulators.

Non-operational Disruptions. With respect to non-operational vulnerabilities, the business continuity plans of the clearing banks and their clients simply do not address the possibility of the exit of one of the clearing banks. Such an exit could be voluntary, although both clearing banks have indicated a sufficiently strong commitment to the business that the Working Group does not believe this possibility merits separate discussion. Or it could be involuntary, forced by a loss of market confidence in the face of financial problems or legal problems. Such problems are unlikely to materialize as rapidly as an operational problem. Still, recent history seems to indicate that certain problems, including accounting irregularities and indictments, can undermine market confidence quite quickly.

As already noted, the Working Group believes that it would be undesirable for the clients of an exiting clearing bank to migrate to the remaining clearing bank because of the concentration of risk that would result. The Working Group believes that the best possible outcome would be acquisition of the exiting bank's government securities clearance and tri-party repo business by another well-qualified bank. While no bank has

chosen to compete with the two existing clearing banks, the Working Group believes that several well-qualified banks might have an interest in acquiring the business of an exiting clearing bank. Still, it is not certain that a well-qualified bank would be interested or that it would come forward quickly enough to avoid significant disruptions to financial markets. Given the critical role that the clearing banks play in the financial system, the regulators strongly encouraged the Working Group to develop a plan to address the scenario in which a clearing bank exits and no well-qualified bank is willing immediately to purchase its business, even though the Working Group believes that the likelihood of this scenario is very small.

The Working Group is mindful that the circumstances that could trigger an involuntary exit of the clearing bank could be serious enough to threaten its continued existence, either immediately or within a short period of time. In such serious circumstances the Federal Deposit Insurance Corporation ("FDIC") might be required to intervene as a conservator or receiver to resolve the institution through the formation of a bridge bank, a merger or purchase and assumption transaction with another institution, or a liquidation. Because the Working Group was formed to develop private sector contingency plans, it has not fully considered a failure scenario and has premised its work on an assumption that the exiting clearing bank would be able to continue operating in some capacity. However, the Working Group recognizes that in light of a situation that is likely to be dynamic, the FDIC would have a strong interest in the nature of any private-sector remedy to deal with an exiting clearing bank.

In planning for the sudden involuntary exit of a clearing bank for reasons stemming from financial or legal issues, the Working Group believes that it is reasonable to assume that the staff, data, and equipment and systems of the exiting bank would still be intact and capable of processing clients' instructions. What could be needed in such circumstances is a new legal entity to hold the clients' securities and funds, an entity with sufficient financial resources to maintain the confidence of the clients and to meet their needs for intraday and overnight credit. In principle, the exiting clearing bank and its clients (both dealers and providers of tri-party repo financing) could agree to assign their contracts to the new entity and the exiting clearing bank could enter into a service contract with the new entity to process the clients' instructions. The results of the processing could then be posted to the clients' accounts with the new entity and the new entity could meet the clients' needs for intraday and overnight credit.

NewBank. Consequently, the Working Group believes that what could be needed is a new bank ("NewBank") that would have sufficient financial resources to hold the accounts and securities of clients of an exiting clearing bank and meet their credit needs on an interim basis until another well-qualified bank purchases the exiting clearing bank's business or on a permanent basis if no well-qualified bank steps forward.

The Working Group spent a considerable portion of its time discussing various aspects of the NewBank concept, including its charter, ownership, operations, risk management, and transition arrangements. The Working Group believes that it is essential for NewBank to be able to maintain funds and securities accounts on the books

of the Federal Reserve. In addition, it would need to have access to intraday credit from the Federal Reserve and potentially would need the flexibility to access the Federal Reserve's Discount Window as well. For these reasons, NewBank would need to be chartered as a bank and should become a member bank of the Federal Reserve Bank of New York. The Working Group does not believe the activities of NewBank would require it to have FDIC insurance, subject to concurrence with that assessment by the chartering authority. Discussions with staff of the New York State Banking Department ("NYSBD"), which charters both of the clearing banks, indicated that there is no obstacle in principle to granting NewBank a charter prior to any need to actually utilize it, and that NewBank could remain dormant (and would not need to be capitalized) until such time as a separate request was made to the NYSBD to permit its coming into active operation.

Because NewBank would be chartered as a bank, it would be highly desirable for it to have broad ownership, so as to eliminate the possibility of certain unintended consequences for non-bank dealers in relation to provisions of the Bank Holding Company Act. The Working Group believes that potential candidates for ownership of NewBank include the dealers that make use of tri-party repo financing, particularly the largest such firms (i.e., primary dealers), and possibly other significant market participants such as the large custodian banks. The Working Group believes that dealer customers of both clearing banks (not just customers of the exiting clearing bank) should participate as owners of NewBank, because all dealers would benefit directly or indirectly from a contingency plan for avoiding potential disruptions to settlement systems and financing mechanisms.

The Working Group discussed extensively the need for NewBank to be perceived as financially sound and capable of addressing the key risks to which it would be exposed. These discussions encompassed the issues of how much capital NewBank would need as well as NewBank's need for intraday liquidity. Based on preliminary analysis of data provided by the clearing banks to the Federal Reserve, the Working Group believes that it should be possible for NewBank to be considered financially sound and to comply with applicable regulatory capital requirements with an initial capital contribution measured in the hundreds of millions of dollars, perhaps in the vicinity of $500 million (implying a capital contribution of roughly $25 million per firm, assuming twenty firms make capital contributions of equal size). Given the potential for broad ownership of NewBank, the Working Group believes that raising amounts of equity capital in this general range would be feasible in the circumstances in which it would be needed. In addition, for NewBank to function effectively, the Working Group believes that the Federal Reserve would likely need to interpret its Payment System Risk Policy to allow NewBank larger levels of secured Fedwire overdrafts relative to capital than it currently allows either of the existing clearing banks.

The Working Group has discussed several issues associated with the transition of activity from an exiting clearing bank to NewBank. The clearing banks have legitimate concerns that NewBank not be activated precipitously and, if it is activated, that the terms of the purchase agreement and service agreement should be fair. A decision to activate NewBank is likely to emerge only as a consensus among a core of concerned

policymakers and market participants. Importantly, such a decision presumably would come only after it became clear that a lack of confidence in the clearing bank was disrupting the markets and that the business could not be sold to another well-qualified bank. With respect to terms of the purchase and service agreement and the compensation of the exiting clearing bank, the Working Group believes that consideration should be given to designing a model agreement that would provide for ex-post third-party arbitration and to the possibility that the exiting clearing bank would retain an equity stake in NewBank.

Perhaps the most important set of issues concerning the transition to NewBank concerns the perspective of tri-party repo investors, predominantly money market mutual funds. Based on discussions between members of the Working Group and representatives of a number of money market mutual funds, it is clear that this set of investors will not accept the possibility of "automatic assignment" of their tri-party contracts from the exiting clearing bank to NewBank. Rather, each fund would need to seek approval of assignment from its board of directors at the time of NewBank's activation. To facilitate this process, the Working Group believes that an information package should be prepared and kept current that would describe NewBank's charter and business, its pro forma balance sheet, its ownership and capitalization, its management and governance, and its contracts with the exiting bank. In addition, it believes that a standard form for consent to assignment should be developed. In general, the Working Group believes that additional detailed effort is necessary to determine the type of advance work that would make it more likely that money market mutual funds would be able to evaluate promptly the decision to use NewBank in the event that it was activated. The Working Group also believes that additional efforts should be undertaken to assess the feasibility of obtaining a public credit rating for NewBank promptly should it ever need to be activated.

In conclusion, the Working Group believes that the NewBank concept is, relative to other possibilities, the most promising approach for meeting the regulators' request that it develop a private-sector contingency plan for the sudden involuntary exit of one of the two clearing banks for non-operational reasons. The Working Group believes that additional detailed work is appropriate to flesh out the NewBank concept and address the challenges to implementing it. The Working Group believes that this additional work should be undertaken, and, if the work is completed successfully, the concept should be actualized through the chartering of NewBank as a dormant entity, ready for activation in the event that it is needed.

Recommendations

Consistent with this analysis and these conclusions, the Working Group makes the following recommendations for mitigating the risks from an interruption or termination of the services of a clearing bank:

R1. Regulators should monitor and test implementation of the clearing banks' plans to satisfy the regulators' sound practices and implementation timelines for core clearing and settlement organizations.

R2. The private sector should seek to develop a secure and resilient telecommunications infrastructure for clearance and settlement of U.S. government securities. The official sector should support this effort.

R3. Market participants, regulators, and others in the official sector should encourage further efforts to reduce the specific threats posed by cyber-terrorism.

R4. To minimize the adverse impacts of any temporary reduction in clearing bank capacity, market participants should act now to: (1) review their existing documentation for U.S. government securities and repo transactions and seek to clarify their obligations to counterparties in the event of a future temporary disruption at a clearing bank; and (2) ensure that FICC's existing netting and guaranteed settlement services are used as much as practical.

R5. With the same objective, regulators should undertake a review of their authority to temporarily liberalize or suspend various regulations where such actions could contribute to the restoration of orderly markets or where compliance with such regulations may be unusually costly during a temporary disruption. As an element of their contingency planning, regulators should consider in advance the costs and benefits of liberalization or suspension of such regulations. Likewise, they should review their authority to suspend trading or settlement activity and consider in advance the costs and benefits of such measures.

R6. In the event of a temporary reduction in clearing bank processing capacity: (1) market participants should explore changes to the settlement cycle for U.S. government securities and limitations on collateral substitutions in repo transactions; (2) the Federal Reserve should consider extending or reducing the operating hours of the Fedwire system, liberalizing the terms of its governments securities lending program, and, where necessary and appropriate, injecting additional liquidity into the marketplace; and (3) consistent with their contingency plans, regulators should consider liberalizing or suspending relevant regulations where appropriate to mitigate adverse effects on the trading and settlement of government securities.

R7. Market participants and regulators should support efforts, such as TBMA's efforts to enhance the value of its Emergency Subcommittee, that would provide a source of real-time information on the functioning of the government securities clearance and

settlement system and offer a potential sounding board for actions being contemplated by market participants, the Federal Reserve, the SEC, the U.S. Treasury, or other regulators.

R8. In the event of a permanent exit of a clearing bank, every effort should be made to sell the exiting bank's clearing business to another well-qualified bank.

R9. Additional work should be undertaken to flesh out the NewBank concept and address the challenges to implementing it. If the work is completed successfully, the concept should be actualized through the chartering of NewBank as a dormant entity, ready for activation in the event that it is needed.

2. Introduction

U.S. Government Securities Clearance and Settlement

The trading of U.S. government securities is concentrated largely among 22 primary dealers and a few inter-dealer brokers ("IDBs"). Trading includes outright purchases and sales and repurchase agreement (repo) transactions. After a trade is executed the trade must be cleared, that is, the two counterparties must compare and confirm the trade details and determine their settlement obligations. To clear inter-dealer trades, all of the primary dealers and IDBs and many other dealers use the trade comparison system operated by the Fixed Income Clearing Corporation ("FICC"), a securities clearing agency registered with and regulated by the SEC. Many also make use of FICC's netting system, in which trades among participants are netted multilaterally through substitution of FICC as central counterparty, that is, the buyer to every seller and the seller to every buyer. Once trades are cleared, the resulting obligations must be settled, that is, the seller must deliver the securities to the buyer and the buyer must make payment to the seller. Trades executed between FICC members and non-FICC members are settled directly between the counterparties without the involvement of FICC.

Outright purchases and sales of U.S. government securities typically are settled on the business day after the trade date (T+1), while the opening legs of repos often are settled on the trade date itself (T+0). Mortgage-backed securities issued by government agencies and government-sponsored enterprises, which are considered together with government securities for purposes of this report, typically are settled once a month. U.S. government securities are typically issued several days after they are auctioned and held in book-entry form at the Federal Reserve Banks. Many trades in government securities are settled through transfers between sellers and buyers that are effected through the Fedwire Securities Service. But access to Fedwire generally is restricted to banks and other depository institutions and most primary dealers, the IDBs, and the FICC are not depository institutions. In addition, Fedwire currently provides only basic settlement services. It does not provide certain services that the most active dealers regard as essential, such as automated position management, collateral management, and support for overnight and term financing of positions. Consequently, the most active government securities dealers hold their securities, settle their trades, and finance their positions through private commercial banks known as "clearing banks." In the early 1980s there were five clearing banks. But, primarily because of mergers, by the early 1990s there remained only two – The Bank of New York and Chase Manhattan Bank (now J.P. Morgan Chase Bank).

As the clearing bank business became increasingly concentrated, policymakers became increasingly concerned about potential disruptions to financial markets and to their own operations, should the services of either of the clearing banks be interrupted or terminated. All of the primary dealers depend critically on one or the other clearing bank for settling their trades in U.S. government securities and for financing their positions in government securities and in other securities. (FICC is in a different position from the

dealers, in that it does not finance itself through tri-party repos. To settle its members' trades it maintains accounts with, utilizes the services of, and depends on, both clearing banks.) Mutual funds and other investors rely on the clearing banks to ensure that their liquid funds are securely invested in repos. The Federal Reserve depends on the clearing banks' records for open market transactions conducted through repos, and the U.S. Treasury relies on the clearing banks for the settlement of the major share of its securities at issuances, which are critical for the purpose of keeping the U.S. Government funded and operating. Indeed, government securities are used to meet funding and liquidity needs throughout global financial markets.

These concerns about potential disruptions crystallized when the September 11, 2001 terrorist attacks in New York City significantly disrupted the operations of one of the clearing banks, in part because of the physical destruction of its processing facilities and data centers and in part because of the destruction of its telecommunications connectivity with its clients. That episode underscored how a temporary disruption to the services of just one clearing bank can disrupt settlements in the government securities markets and in funding markets generally.

In the aftermath of September 11, staff from the Federal Reserve, the SEC, and the Treasury Department held discussions with market participants to learn their perspectives on vulnerabilities associated with the concentration of risks created by their dependence on the services of the two banks. During the course of those discussions some market participants expressed interest in exploring structural change to the existing arrangements, including the concept of an industry utility. Discussions of such a utility were hampered, however, by different conceptions of how it might be organized.

The White Paper and Public Comments Thereon

In order to foster discussion of possible structural changes, on May 13, 2002 the Federal Reserve Board and the SEC published for public comment a White Paper entitled *Structural Change in the Settlement of Government Securities: Issues and Options.* The White Paper expressed concerns about operational, financial, and structural vulnerabilities and described three possible approaches to structural change through organization of a new utility. The agencies made clear that they had not concluded that any of these possible approaches would represent an improvement over the status quo or that structural change was necessary. The White Paper requested comments on the vulnerabilities, on whether structural change was needed to address the vulnerabilities, and on the three possible approaches for organizing a utility.

The comments supported the view that there were significant vulnerabilities in the arrangement that then existed. Some believed that the agencies had overstated the likelihood that either clearing bank would exit the business, either on its own accord (voluntary exit) or because of financial or legal problems (involuntary exit). Nonetheless, there was agreement that should the services of either of the banks be disrupted or terminated, it would be extremely disruptive, because the clients of that bank could not in the short run obtain those services from any other entity, including the other clearing

bank. The comments expressed concern that creation of an industry utility would involve very large transition costs and that a utility might not meet the needs of market participants, especially dealers, for very large amounts of intraday credit. Rather than devoting governmental and industry resources to creation of an industry utility, many suggested that efforts should be focused on mitigating risks within the current structure of two clearing banks, at least in the short run. Several comments, including those submitted by TBMA and the Investment Company Institute ("ICI"), recommended that a group be created to develop plans for mitigating those risks, including the exploration of changes that would need to occur to enable the two clearing banks to substitute for each other in the event that the services of either were interrupted or terminated.

The Working Group on Government Securities Clearance and Settlement

In response to these comments, on November 26, 2002 the Federal Reserve Board created the Working Group on Government Securities Clearance and Settlement. The Working Group is a private-sector group. It has been chaired by Michael Urkowitz, Senior Adviser to Deloitte Consulting, and has included fourteen other representatives of the two clearing banks, securities dealers, IDBs, mutual funds, custodian banks, the FICC, TBMA, and the ICI. Staff of the Federal Reserve, the SEC, and the Department of the Treasury have participated in the Working Group as observers and technical advisors.

The Board asked the Working Group to prepare recommendations for mitigating risks to the financial system from an interruption or termination of the services of either clearing bank. In particular, the Group was asked to explore the specific changes that would need to occur to enable the clearing banks to substitute for each other in such circumstances.

The Working Group met 11 times at the Federal Reserve Bank of New York, beginning in December 2002 and continuing into November 2003. In addition, two subgroups, which were formed to focus on addressing temporary disruptions and permanent exit, respectively, held many additional meetings and teleconferences. This report sets out the Working Group's conclusions and recommendations. The next section discusses some preliminary issues relating to the critical services of the clearing banks and the disruption scenarios that were considered. Section 4 presents the Working Group's analysis of the operational and non-operational risks and the options for risk mitigation. Section 5 discusses options for mitigating the adverse impacts of a temporary reduction in clearing bank capacity. Section 6 discusses the creation of a new bank ("NewBank") that, in the event of the sudden involuntary exit of a clearing bank as a result of financial or legal problems, could meet the needs of its clients on an interim or, if necessary, on a permanent basis.

3. Preliminary Issues

Before it could evaluate options for mitigating the risks to the financial system from the interruption or termination of the services of either of the clearing banks, the Working Group needed to specify more precisely the services that were to be protected and the scenarios that were to be planned for.

Services

The Working Group first sought to achieve a common understanding of the services that the clearing banks provide and the business processes and systems that support delivery of those services. A series of presentations by the clearing banks described the structure and functions of their clearing systems, which are similar in design, even though the systems and technology that the two banks employ are quite different. The clearance and settlement systems for U.S. government securities cover all instruments that are eligible for issuance and transfer within the Federal Reserve's Fedwire Securities Service. In addition to basic clearance and settlement (accepting clients' instructions to receive or deliver securities, matching incoming securities against clients' instructions to receive, and sending outbound transfer messages to settle instructions to deliver), other critical systems and the functions they perform include collateral management, risk management systems for providing intraday and overnight credit, client and depository links for handling messages, file transfer facilities to support exchanges of large-volume data files, networks and connectivity for communications, and redundant data centers and network connections to support business recovery and resumption objectives. Performance of these clearing and settlement functions also requires the banks to maintain critical interfaces with other internal processing systems, including funds transfer, custody, securities lending, demand deposit accounts and accounting systems, lending, funding, and general ledger.

The critical services that the clearing banks provide also include tri-party repurchase agreements, under which the banks assume responsibility for ensuring adherence to the terms of the repo contracts and for effecting transfers of funds and securities between the counterparties. Tri-party services are highly interdependent with clearance and settlement systems, because they rely on many of the same systems. Moreover, tri-party services are not limited to U.S. government securities collateral. Data compiled by the clearing banks indicated that, on a typical day in recent months, about 23 percent of the $1.1 trillion of securities funded through tri-party repos were not U.S. government securities. The non-U.S. government securities principally were corporate and municipal bonds and equity securities held at the Depository Trust Company, although they also included international securities held at Euroclear Bank and even some physical securities.

Because of the interdependence between clearance and settlement services and tri-party services and the critical importance of tri-party financing to dealers and tri-party liquidity to money market mutual funds and other cash investors, the Working Group concluded that plans to mitigate the risks of an interruption or termination of services

should cover tri-party repo services. The Group also concluded that, because tri-party repo services are integrated across securities types, the plans should cover repos of both U.S. government securities and non-U.S. government securities. The Working Group discussed whether the scope of its planning should be expanded to include clearance and settlement of trades as well as repos of non-U.S. government securities. Although some were concerned that a plan that addressed only trades of government securities might have adverse consequences for trades of non-government securities, the Group decided to limit its focus to trades of government securities, consistent with the Group's request from the Board. It was noted that the Board's focus on U.S. government securities clearance and settlement (including tri-party repos) reflected the unique role that such securities play in assuring liquidity in global financial markets.

Scenarios

The Working Group discussed potential disruption scenarios. The White Paper and the Board's request made clear that both operational disruptions and non-operational disruptions (voluntary exit or involuntary exit because of a clearing bank's financial or legal problems) should be addressed. Initially the Group believed that the development of effective plans for mitigating the risks from a disruption would require assumptions about the specific causes of the disruption. However, it became convinced that the only critical distinction for its purposes was between operational and non-operational disruptions. This distinction is critical because it seems reasonable to assume that non-operational exit of the bank would not result in the loss of data, equipment, or systems, and that it should be possible to retain key staff, at least for some time. This assumption would be unreasonable only if exit was accompanied by operational problems. But the risk of operational disruptions can and should be addressed independently of the risks of non-operational problems.

4. Analysis of Risks and Options for Risk Mitigation

Migration

The Board's mandate to the Working Group included a specific request that it explore the changes that would need to occur to enable the clearing banks to substitute for each other in the event that the services of either was interrupted or terminated. The Working Group confirmed that the systems and technologies used by the two clearing banks are quite different and that each has developed a variety of customized services to meet the needs of individual clients. Consequently, the Working Group estimates that it currently would take three to six months for a single dealer to migrate from one clearing bank to another. In part because of the time and effort that would be required, such migrations have very seldom occurred.

The changes that would be needed to permit migration would differ greatly, depending on the nature of the disruption to a clearing bank's services. If the disruption were non-operational (voluntary or involuntary exit) rather modest changes might suffice. As noted above, the Working Group believes that it is reasonable to assume that in such

circumstances there would be no loss of the exiting clearing bank's data, equipment, or systems. If so, the exiting clearing bank could continue to process its clients' instructions and simply post the results to funds and securities accounts at the surviving clearing bank. The changes that would be required to permit this type of migration would be limited to changes that would facilitate the assignment of clients' contracts with an exiting clearing bank to the remaining clearing bank and contingent agreements between the clearing banks to continue to process transactions on behalf of the remaining clearing bank following the exit of either.

By contrast, if the disruption were operational, extensive and very costly steps would be necessary to ensure that migration could be accomplished promptly and without disruption. First, the systems and technology of the two clearing banks, which currently are quite different, would have to be significantly standardized. Otherwise, the clients of the bank whose services had been interrupted would not be able to use the services of the other bank without extensive changes to the clients' systems to conform to the requirements of the other bank and training and testing to ensure that the clients could meet those requirements.[2] Furthermore, even if the systems and technology were completely standardized, a smooth migration would not be possible if the operational disruption resulted in the loss of data on clients' funds and securities positions. In such event, even if there were an agreement to transfer the positions of the clients of the affected bank to the other bank, transfer might not be possible if the size of those positions could not be determined. To guard against this possibility, market participants would need to build a data center and appropriate systems, separate from either clearing bank, that would record the results of each clearing bank's processing in real time. Both the standardization of systems and technology and the creation of a new independent data center would be very costly. Worse yet, they would divert resources from efforts by the clearing banks and their clients to enhance the resiliency of their current operating platforms.

Even if these changes were not costly (or, in the case of a non-operational disruption, not necessary), the Working Group believes that migration of clients from one clearing bank to another would be highly undesirable because it would produce even greater concentration of risks in the financial system. There would be a concern with the concentration of risks that would result from providing these credit-intensive services to all market participants. The clearing banks may not be willing or possibly be able to meet the liquidity needs of the full set of market participants. Likewise, the dealers, money market mutual funds, and other clients of the clearing banks do not wish to depend on a single commercial bank for these critical purposes. Nor does the Working Group believe such an outcome would be acceptable to regulators, whose concerns about the concentration of risks in two clearing banks led to creation of this Working Group. These concerns about concentration are relevant even if the migration of clients were viewed as a temporary measure. Moreover, what was viewed as a temporary measure could well result in a permanent increase in concentration, should some of the dealers

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[2] One exception is FICC, which as previously noted, has accounts and connections at both clearing banks, and could move its activities to the surviving clearing bank as an interim measure if this contributed to an orderly implementation of the recommendations of this report.

choose to continue to use the services of the bank to which they had migrated. Indeed, if enough dealers made this choice, the business of the clearing bank that had exited might no longer be viable, and its "temporary" exit could be made permanent.

Finally, as will be discussed, the Working Group believes that there are alternative steps that can and should be taken to mitigate the risks of operational and non-operational disruptions to a clearing bank's services.

Alternative Steps to Mitigate Risks from Operational Disruptions

Since the terrorist attacks on September 11, 2001 each of the clearing banks has established a plan to enhance significantly the resiliency for its securities clearing, tri-party repo, and funds transfer activities, consistent with the sound practices for core clearing and settlement organizations that were identified in the *Interagency Paper on Sound Practices to Strengthen the Resilience of the Financial System* that was issued on April 8, 2003 by the Board, the SEC, and the Office of the Comptroller of the Currency.

The Working Group has discussed both of the banks' plans. Although the plans of the two banks differ in their details, they share several critical features. All of the business processes and functions necessary for clearance and settlement of government securities and tri-party repo services would be dispersed to two or more locations. All required business processes and functions would be exercised currently at more than one geographically dispersed site, each of which would access separate staff and equipment. Data centers would be far enough apart that they would depend upon different staff and equipment yet close enough to enable synchronous backup of data.

The Working Group believes that once the clearing banks have fully implemented these plans, even an area-wide physical catastrophe would not completely disrupt their provision of U.S. government securities clearance and settlement and tri-party repo services, although some temporary loss of capacity might result. In the event of the loss of processing and data centers in one geographical area, processing would continue at the other centers. In this respect, by implementing these plans the clearing banks will achieve a degree of resiliency comparable to the targets set for market utilities. The Working Group recommends that regulators monitor and test implementation of the clearing banks' plans to satisfy the regulators' sound practices and implementation timelines for core clearing and settlement organizations. However, the Working Group does not believe that the clearing banks should be held to more demanding standards than market utilities.

In addition, although, as noted above, the Working Group is concerned that any effort to completely standardize the systems and technology of the two clearing banks would be very costly, it believes that the operational resiliency of the clearing banks could be enhanced in a cost effective way through some degree of standardization. Specifically, the Working Group recommends that the private sector work together to develop a secure and resilient telecommunications infrastructure for the settlement of U.S. government securities, and that the official sector support this effort

Furthermore, the Working Group believes that the threat to the clearing bank from cyber-terrorism deserves further study. The geographic dispersion of systems may not fully address the threat of cyber-terrorism, including attacks by persons not affiliated with terrorist organizations. The Working Group is concerned that maliciously created computer codes or data could be transferred among geographically separated systems components, and thereby interrupt a clearing bank's services, even after the clearing banks have implemented their plans to enhance their operational resiliency. The Working Group does not have the expertise to explore these issues fully. It is aware, however, that there are other industry initiatives underway to address these concerns, which are not unique to U.S. government securities clearance and settlement. The Working Group recommends that market participants, regulators, and others in the official sector encourage these other initiatives to reduce the threat posed by cyber-terrorism.

Finally, even once the clearing banks have implemented their plans, the Working Group believes that it is worth developing plans for reducing demands on the clearing banks in the event of temporary reductions in capacity and for limiting the adverse effects of a loss of such capacity on market participants. Such temporary reductions could result from a physical catastrophe or from certain types of operational disruptions that cannot be addressed through geographical dispersion (e.g., a software-related problems). Section 5 discusses various potential measures, many of which were implemented temporarily following the September 11 catastrophe, and makes several pertinent recommendations.

Alternative Steps to Mitigate Risks from Non-Operational Disruptions

With respect to non-operational vulnerabilities, the business continuity plans of the clearing banks and their clients simply do not address the possibility of the exit of one of the clearing banks. Such an exit could be voluntary, although both clearing banks have indicated a sufficiently strong commitment to the business that the Working Group does not believe this possibility merits separate discussion. Or it could be involuntary, forced by a loss of market confidence in the face of financial or legal problems. Such problems are unlikely to materialize as rapidly as an operational problem. Still, recent history seems to indicate that certain problems, including accounting irregularities and indictments, can destroy market confidence quite quickly. Moreover, even a modest deterioration in a clearing bank's financial condition could make key repo investors unwilling to continue to use its services. The Working Group believes that a clearing bank's loss of its investment-grade credit rating could be sufficient to cause disruptions, even though a rating just below investment-grade objectively would imply only a modest chance of serious financial problems.

As already noted, the Working Group has concluded that it would be undesirable for the clients of an exiting clearing bank to migrate to the remaining clearing bank because of the concentration of risk that would result. The Working Group believes that the best possible outcome would be acquisition of the exiting bank's business by another well-qualified bank. Consistent with the comments on the White Paper, the Working

Group sees the market as best served by competition between at least two providers of clearing bank services. Together, the two clearing banks have met market demands for liquidity and operational capacity. Competition within the existing structure has produced the critical services efficiently. Moreover, it has promoted important innovations, including the development and ongoing expansion of tri-party repo services. Consequently, in the event of a permanent exit of a clearing bank, the Working Group recommends that every effort should be made to sell the exiting bank's clearing business to another well-qualified bank.

While no bank has chosen to compete with the two existing clearing banks, the Working Group believes that several well-qualified banks might have an interest in acquiring the business of an exiting clearing bank. De novo entry would require very substantial investments in systems, equipment, and staff, and, given the time and effort required to switch clearing banks, a de novo entrant would not be confident that it would attract sufficient business to justify its investments. By contrast, the costs of switching clearing banks (and the considerable time that it would take to make a switch) would provide confidence to the buyer of the business of an exiting clearing bank that it would be able to retain much of its client base. Still, given the complexity of the clearing business and the risks that it entails, it is not certain that a well-qualified bank would be interested or that it would come forward quickly enough to avoid significant disruptions to financial markets. Given the critical role that the clearing banks play in the financial system, the regulators have strongly encouraged the Working Group to develop a plan to address the scenario in which a clearing bank exits and no well-qualified bank is willing immediately to purchase its business, even though many members of the Working Group believe that the likelihood of this scenario is very small.

As already noted, in planning for the involuntary exit of a clearing bank for reasons stemming from financial or legal issues, the Working Group believes that it is reasonable to assume that the staff, data, and equipment and systems of the exiting bank would still be intact and capable of processing clients' instructions. What would be needed in such circumstances is a new legal entity to hold the clients' securities and funds, an entity with sufficient financial resources to maintain the confidence of the clients and to meet their needs for intraday and overnight credit. In principle, the exiting clearing bank and its clients (dealers and providers of tri-party financing) would assign their contracts to the new entity and the exiting clearing bank would enter into a service contract with the new entity to process the clients' instructions. The results of the processing would then be posted to the clients' accounts with the new entity and the new entity would meet the clients' needs for intraday and overnight credit.

Consequently, the Working Group believes that what could be needed is a new bank (NewBank) that would have sufficient financial resources to hold the accounts and securities of clients of an exiting clearing bank and meet their credit needs on an interim basis until another well-qualified bank purchases the exiting clearing bank's business or on a permanent basis if no well-qualified bank steps forward. The creation of NewBank would require resolution of a host of important issues about its ownership, management,

and capitalization and its contractual relationships with the exiting clearing bank and its potential clients. These issues are discussed in greater detail in section 6.

5. Options for Minimizing the Adverse Impacts of a Temporary Reduction in Clearing Bank Capacity

Introduction

As discussed in the previous section, even once the clearing banks have fully implemented their plans to enhance their resiliency through geographical dispersion, physical catastrophes or certain software problems could result in temporary reductions in clearing bank capacity. The Working Group believes that it is worth developing plans to minimize the adverse impacts of such temporary reductions of capacity on primary issuance and secondary trading of U. S. government securities. Any significant reduction in capacity would necessarily affect the ability of a broad range of market participants to clear and settle government securities transactions, which could in turn affect the ability of these participants to meet their financial obligations. Because of the liquidity of government securities, many market participants utilize them in repos and other transactions to obtain funding to meet various other financial obligations.

In considering possible options to achieve this objective, the Working Group reviewed the steps that were taken by market participants and regulatory agencies to address the temporary disruption that occurred after the September 11 terrorist attacks.[3] It is cognizant, however, that the circumstances surrounding any future temporary disruption at a clearing bank may differ significantly from the September 11 attacks, so that actions that helped minimize disruptions to the government securities markets in that instance may not be similarly effective or appropriate in a future disruption. Given the impossibility of predicting how any future interim clearing bank disruption might unfold, the Working Group stresses that the propriety of many of the actions it suggests would ultimately be dependent on the actual cause and length of any temporary disruption.

As a preliminary matter, the Working Group has been guided by the premise that the best way to address temporary disruptions is through the existing private-sector infrastructure. It believes that the service providers and financial institutions that ensure the smooth and efficient functioning of these markets are in the best position to act promptly and flexibly to resolve a crisis, and are highly motivated to do so. Nonetheless, as was evident in the aftermath of September 11, it may be necessary and appropriate for both the Federal Reserve and other regulators (especially the SEC and the Treasury Department) to take various actions to minimize disruptions to the government securities markets.

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[3] Much has been written regarding the impact of the September 11 attacks on the financial markets. Two reports that specifically describe the impact of September 11 on the government securities markets are Michael J. Fleming and Kenneth D. Garbade, "When the Back Office Moved to the Front Burner: Settlement Fails in the Treasury Market After 9/11," *FRBNY Economic Policy Review*, November 2002, pp. 35-57 (Fleming and Garbade); and a report by the General Accounting Office, *Potential Terrorist Attacks: Additional Actions Needed to Better Prepare Critical Financial Market Participants*, February 2003, GAO-03-414 (GAO).

Information on the impact of a disruption on financial institutions and markets is essential to assess whether such actions are necessary and appropriate. Accordingly, the Working Group believes that it is imperative that reliable lines of communication be established and maintained between market participants (including dealers, institutional investors, the FICC and the clearing banks) and the Federal Reserve and other regulators. Trade associations, such as TBMA and the ICI, can play an important role in such instances by coordinating communications between such market participants in order to ensure that all participants have an accurate and informed idea of the status of the clearance and settlement system. In particular, such lines of communication are necessary to determine whether a "temporary" disruption has occurred, how long it is likely to persist, and what impacts it is having on financial institutions and markets.

Operational disruptions caused by extraordinary circumstances, such as the terrorist attacks of September 11, should of course be readily discernible. However, a clearing bank experiencing operational difficulties, such as problems in communicating with industry participants, might not immediately and widely announce such difficulties to the marketplace given a good faith belief that they will be alleviated promptly. In addition, a temporary disruption at a clearing bank may turn out to be caused by problems of which the clearing bank is initially unaware, such as disruptions to other key industry participants. A realistic assessment of the likely duration of a disruption is important because many of the options that are considered below are most likely to be effective for only a short period, perhaps three days or less.

The remainder of this section discusses and makes recommendations with respect to potential actions by (1) market participants, (2) the FICC, (3) the Federal Reserve, and (4) the regulatory community. The last subsection discusses and makes recommendations with respect to enhancing lines of communication among market participants and between market participants and the Federal Reserve and other regulators.

Potential Actions by Market Participants

Potential actions by market participants include steps that can be taken in advance and market practice recommendations that could be adopted temporarily to reduce demands on the capacity of the clearing banks and on the clearance and settlement system as a whole. In the aftermath of September 11, TBMA made various trading practice recommendations for the government securities markets (as well as other fixed income markets) in an effort to alleviate pressures on the clearance and settlement system. As noted above, however, the propriety of such recommendations in addressing a short-term disruption would have to be judged in light of the particular circumstances of such disruption. The specific market practice recommendations that the Working Group has discussed are changes in the settlement period for U.S. government securities, limitations on repo collateral substitutions, and reduction or suspension of margin payments. By definition, trading practice recommendations are voluntary; while many market participants may follow such recommendations in an effort to promptly resolve the

temporary disruption, others may not for any number of reasons, diluting the recommendations' overall effectiveness.

Contractual Steps. Market participants can take important steps in advance to avoid confusion about the impact of a future disruption at a clearing bank or other market disruption on their contractual obligations to their counterparties under master agreements in use in the government securities market. The Working Group recommends that market participants review their existing documentation and consider incorporating provisions that clarify whether or not counterparties are excused or discharged from their obligations under common law doctrines of force majeure, impossibility, or impracticability, when events occur that could be construed as a force majeure. The Global Documentation Steering Committee has recommended that all associations that publish market documentation include provisions that clarify these issues.[4]

Changes in the Settlement Period. An extension of the settlement period beyond T+1 for new trades entered into post-disruption could allow financial institutions to continue to trade and at the same time could help alleviate pressures on the clearance and settlement system. In order to ease any trading disruptions caused by the extension of the settlement period, a gradual increase in settlement times could be recommended, with a gradual decrease once the temporary disruption has been addressed. By allowing settlement of government securities to be delayed, the extension of the settlement period could free up resources, allowing financial institutions to devote such resources to resolving the temporary disruption and addressing issues resulting from the disruption.

On the other hand, an extension of the settlement period would increase counterparty credit exposures. Thus, it may be inadvisable if the temporary disruption occurs in an environment in which there are significant concerns about counterparty defaults. Furthermore, this approach necessarily involves having one day where the clearance and settlement system would have to accommodate settlements from two different trading days.[5] However, by the time such additional settlement were to occur, the temporary disruption would have presumably been addressed, allowing operations professionals to handle the additional settlement activity during the normal functioning of the clearance and settlement system. A gradual increase and decrease in the settlement period may also help mitigate any potential impact of such additional settlements.

Other issues in connection with the recommended extension of settlement periods would also need to be addressed. For example, such extension may also impact the ability of financial institutions to purchase or sell government securities in connection

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[4] The Global Documentation Steering Group was established to implement the documentation-related recommendations in the 1999 report published by the Counterparty Risk Management Policy Group. One of its goals is to create standardized documentation to avoid documentation inconsistencies and thereby reduce risks and improve the functioning of markets.

[5] For example, if on Monday, October 1, a recommendation was made that the settlement window should be extended to T+5, and such recommendation was reduced to a T+1 settlement on Friday, October 5, on Monday, October 8, the clearance and settlement system would need to accommodate settlements from trades entered into from both October 1 and October 5.

with transactions in other asset classes, to the extent such activity relies upon the T+1 settlement period in government securities markets. Furthermore, there is also the possibility that an extension of settlement times could exacerbate rather than ameliorate funding difficulties for market participants by causing delayed receipt of funds; this could be particularly undesirable if the disruption creates a need among market participants to obtain funding as quickly as possible. Finally, while several institutions the Working Group surveyed represented they would be able to operationally accommodate a change to the settlement period, the ability of all institutions' systems to accommodate such change would need to be taken into account.

Limitations on Repo Collateral Substitutions. Given the intensive operational process involved in substituting collateral in term repo transactions, recommendations should be made to limit or eliminate such substitutions to free up operational resources and personnel.

Reduction or Suspension of Margin Payments. Given that margin payments in a transaction are made pursuant to both contractual rights between counterparties and certain regulatory constraints, the Working Group does not believe that a trading practice recommendation calling for the reduction or suspension of mark-to-market margin movements would be appropriate during a short-term disruption. However, financial institutions may wish to explore this possibility with their counterparties, given that settlement activity could be reduced by temporarily suspending or reducing margin-related transfers of securities or funds. In addition to the suspension of margin movements, institutions may wish to explore raising the thresholds for such movements, as well as accepting (to the extent possible under applicable securities regulations) non-affected securities as margin.

Consistent with this discussion, the Working Group recommends that, in order to alleviate pressures on the clearance and settlement system during a temporary reduction in clearing bank capacity, market participants should explore changes in the settlement period for new government securities trades and limitations on collateral substitutions in repo transactions.

Potential Actions by FICC

The FICC has a central function in the clearance and settlement of government securities for both the secondary market and Treasury auctions, and can play an essential role in alleviating the impact of a temporary disruption of the government securities markets. The importance of FICC assistance in minimizing the impact of such disruptions became evident post-September 11. The FICC (at the time called the Government Securities Clearing Corporation) took actions to mitigate the risks associated with the huge number of unsettled trades and also facilitated implementation of various recommendations by TBMA, including the extension of the settlement cycle for government securities transactions and the limitations on repo collateral substitutions.

In the event of a temporary reduction in clearing bank capacity, FICC would continue to compare, net, act as a central counterparty for settlement purposes, and manage the risk arising from government securities trading activity. As it has accounts with, and utilizes the services of, both clearing banks, FICC may determine it appropriate to move its activities to the surviving clearing bank, as a temporary measure to mitigate pressures on the settlement process.[6]

The Working Group recognizes that the multilateral netting of government securities transactions by FICC is an efficient and safe means of settling a large majority of them, without the need for actual movements of securities. Thus, the Working Group recommends that market participants ensure that FICC's existing netting and guaranteed settlement services are used as much as practical, both for domestic transactions and those conducted abroad.

Potential Actions by the Federal Reserve System

The Federal Reserve occupies a unique role in the government securities markets as the operator of the Fedwire Securities Service, a critical provider of liquidity through the discount window and open market operations, and a lender of government securities through its System Open Market Account ("SOMA") lending program. The importance of the Federal Reserve's role was evident in the wake of September 11, when, in order to address market disruptions, it extended the operating hours of Fedwire, injected an enormous amount of liquidity into the financial system, and liberalized the terms of the SOMA lending program. The aftermath of September 11 also demonstrated how communications by the Federal Reserve regarding steps its plans to take can provide reassurance to market participants during market disruptions.

Extension or Reduction of Fedwire Hours. In the days after September 11 the Federal Reserve often extended the operating hours of the Fedwire system. Providing additional time to settle government securities transactions could allow market participants to continue trading while alleviating pressure on the settlement system. It may have the additional benefit of allowing financial institutions to meet their liquidity needs late in the day.

However, instead of alleviating pressures on the system, it is possible that extension of the Fedwire operating hours would simply allow for additional settlement activity. This result would increase pressure on the settlement system, and potentially create backlogs of settlement activity at the end of the day. Indeed, based on feedback obtained by the Working Group from market participants and the clearing banks, it appears that the extension of Fedwire hours post-September 11 did not help resolve operational issues arising from the September 11 attacks. Instead, by extending settlement and trading activity, it added more pressure to the clearance and settlement system and prevented operations professionals from addressing other issues arising at the

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[6] FICC will need to establish a procedure for such migration that would ensure sufficient notice to its members and an orderly transition.

time. To be sure, this judgment benefits from some amount of hindsight; at the time, private sector participants encouraged the Federal Reserve to extend Fedwire hours.

It is also possible that the opposite approach -- limiting the amount of time market participants have to settle transactions -- may, by confining settlement activity to a defined window of time, free up operations professionals to address issues raised by the operational disruption at the clearing bank, such as contingency planning and end-of-day reconciliations. However, this option may raise disclosure issues for certain types of financial institutions, such as mutual funds. It is possible that such issues may be addressed through approval of reduced Fedwire hours by applicable regulatory agencies.

In any event, the Working Group believes that any decision to extend or to limit Fedwire hours should be exercised by the Federal Reserve, only after close consultation with the industry and with the U.S. Treasury.

Injection of Liquidity. The Federal Reserve assisted market participants in meeting their financial obligations after September 11 by injecting an enormous amount of liquidity into the financial system through various means, including through its discount window and open market operations. If a temporary disruption to the government securities clearance and settlement system were again to impair financial institutions' ability to meet their payment obligations, such actions by the Federal Reserve could again forestall widespread liquidity difficulties. Of course, in making decisions regarding the injection of liquidity the Federal Reserve would need to weigh the short-term costs of financial disruption against the long-term costs of any moral hazard that its actions might entail.

Liberalization of the SOMA Lending Program. Shortly after the September 11 attacks, the Federal Reserve Bank of New York liberalized the terms of its System Open Market Account ("SOMA") securities lending program in an effort to maintain liquidity in the government securities markets by mitigating the widespread occurrence of unsettled transactions. The Bank's actions included elimination of the per dealer and per issue limits and reduction of the penalties for failing to redeliver securities to the program. The use of the program increased significantly in the wake of September 11: borrowings increased from $100 million on September 10 to $8.9 billion on September 11, declining gradually thereafter.

Communication with the Industry. The Federal Reserve can play a critical role in minimizing the impact of a short-term disruption at a clearing bank merely by communicating to the industry, quickly and clearly, what steps it intends to take to address such disruption. Such communications can have a positive psychological impact by reassuring market participants, thereby preventing the potential worsening of a crisis situation, as was evident in the wake of the September 11 attacks.

Consistent with this discussion, the Working Group recommends that, in the event of a temporary reduction in clearing bank capacity, the Federal Reserve consider extending or reducing the operating hours of the Fedwire system, liberalizing the terms of

its government securities lending program, and injecting additional liquidity into the marketplace. Whatever steps it decides to take should be communicated clearly to market participants.

Potential Actions by the Official Sector

Because the majority of participants involved in the clearance and settlement of government securities are regulated financial institutions, there may be instances where certain extraordinary measures by the regulators of such institutions could be useful in helping to minimize the adverse consequences of a short-term disruption in the capacity of a clearing bank. In discussing the possibility of such measures, the Working Group is mindful of the important rationales that underlie the various types of regulations outlined below. However, the Working Group also notes that in certain extreme circumstances, the balance of costs and benefits associated with specific regulatory requirements may differ relative to the balance that exists in more normal circumstances. In particular, in the aftermath of September 11, the Working Group believes that regulatory actions were useful in several areas.

<u>Capital Treatment of Failed Transactions.</u> In the wake of September 11, a large number of transactions remained unsettled for some period of time. To the extent that unsettled transactions remain outstanding beyond a specified period of time, broker-dealers must take capital charges under the "net capital rule" (15c3-1 under the Exchange Act of 1934) or the Treasury capital rule for certain government securities brokers and dealers registered under Section 15C of the Exchange Act. In addition, banking institutions must risk-weight the exposure created by unsettled transactions.

Such regulations provide incentives for financial institutions to resolve unsettled (or "failed") transactions, while also seeking to protect against the risks associated with unsettled transactions. However, if financial institutions are unable to resolve unsettled securities transactions because of disruptions in the clearance and settlement system, the Working Group believes temporarily suspending the effect of such regulations could be beneficial, as it was after September 11. The Working Group believes that the suspensions of such rules by the SEC and the banking regulatory agencies in the wake of September 11 allowed financial institutions to focus on resolving their failed trades in an orderly manner, without adding to the considerable stress that such firms were already under.

It is likely that a temporary disruption at one of the clearing banks could again lead to a large number of failed transactions in the government securities markets even if the other clearing bank were unaffected. In such circumstances, the Working Group believes that the regulatory community should again consider the merits of temporarily suspending capital regulations related to failed transactions.

<u>Inter-affiliate Transfers of Funds.</u> Banking regulations restrict the ability of banking institutions to transfer funds and make extensions of credit on a cross-affiliate basis. Restrictions also apply to the ability of financial institutions to borrow from their

non-U.S. affiliates. Where a short-term disruption at a clearing bank threatens to adversely impact the ability of a financial institution to meet its obligations, the institution may need to utilize exceptional sources of funding. Therefore, the Working Group believes that banking regulators should consider the potential need to liberalize or suspend restrictions on inter-affiliate loans and transfers of funds on an interim basis to ensure that financial institutions can meet their liquidity needs.

Buy-In Rules. The U.S. Treasury Department has established regulations that govern the circumstances in which "buy-ins" of failed transactions are required. However, these rules may become unworkable in situations where there is a generalized fails problem. Therefore, the Working Group believes that the Treasury Department should consider the potential need to suspend such regulations in the event of a disruption to one of the clearing bank's processing capabilities.

General Regulatory Flexibility. The Working Group notes that the preceding discussion of potential areas of regulatory flexibility may not be exhaustive and that there may be other areas of potential flexibility that could be important in certain circumstances. For example, regulations that require broker-dealers to obtain margin on financing transactions on a timely basis could also become relevant depending on the nature of a temporary disruption. Another example would be the net long position reporting requirement under the U.S. Treasury's auction rules, where auction participants were allowed to use good-faith estimates in the period following September 11 if communications disruptions prevented them from determining precise positions.

The Working Group recognizes that market participants should not plan on or rely on the possibility that important regulatory requirements will be suspended during a temporary disruption. Importantly, such decisions should be taken by the regulatory community based on their assessment of the costs and benefits associated with a particular set of circumstances, and that a presumption of relaxation could introduce unwanted consequences into market practices.

Nonetheless, the Working Group recommends that regulators should themselves undertake a review of their regulations with the perspective of a temporary disruption in mind. Such a review is a prudent element of contingency planning and should help prepare the regulators to better assess the costs and benefits of any temporary suspensions at the time of such disruption. As part of such a review, the Working Group believes that regulators should also consider whether they have the legal authority that may be required to temporarily liberalize or suspend the various relevant regulations. In the absence of such legal authority to suspend various regulations, it is obviously moot to consider the practical costs and benefits of doing so.

Bank Holiday. Another set of measures that the regulatory community might explore is the declaration of a bank holiday or other mechanism for suspending trading or settlement activity. In general, the Working Group felt that such measures would be extreme, and could have adverse consequences such as preventing financial institutions from adequately fulfilling their funding needs, especially if they were mandatory in

nature. Nevertheless, the Working Group acknowledged the possibility that such measures might remain useful in certain remote circumstances. The Working Group recommends that the regulatory community maintain a strong understanding of the various legal authorities that exist in this regard, how they interact and relate to one another, whether they affect trading or settlement activity or both, and whether they are voluntary or mandatory in nature. In addition, the Working Group believes that such decisions should be made and communicated by the applicable agencies in as transparent a manner as possible.

Enhancing Lines of Communication

It is critical that key participants in the over-the-counter government securities markets, and the key infrastructure providers to this market, be able to identify and facilitate a coordinated response to a temporary disruption affecting a clearing bank, and to do so as quickly as possible. Achieving this objective requires that the key participants be able to communicate with each other promptly in the event of a temporary disruption, including disruptions that may have a significant operational component. In this regard, important lessons from September 11 include the need to maintain continuously updated contact listings, including reach numbers for contingency sites, and to test modes of communication periodically.

Therefore, the Working Group believes that it is useful to plan in advance lines of communication that market participants would use in the event of a temporary disruption to a clearing bank. In this respect, the Working Group supports the steps that TBMA has already taken in this direction. In particular, TBMA plans to facilitate the creation of, and provide logistical support for, a government securities market emergency subcommittee ("Emergency Subcommittee") of the TBMA Calendar Committee. TBMA plans to provide resources and staff to this initiative to ensure that the Emergency Subcommittee meets regularly, develops effective working relationships among its members, and maintains the robust contact information necessary to ensure that lines of communication will be available promptly in a temporary disruption.

The Working Group believes that advance arrangements such as an Emergency Subcommittee have the potential to play a significant constructive role in the event of a temporary disruption affecting one of the clearing banks. In this regard, the Working Group believes that such advance arrangements should ensure that all market segments coordinate their efforts so that unnecessary duplication and confusion in the aftermath of a disruption event does not occur.

The Working Group also believes that the value of the input of groups such as the Emergency Subcommittee will depend significantly on the nature of their membership, in particular whether it is sufficiently broad-based. The Working Group notes that TBMA intends to extend membership in the Emergency Subcommittee beyond TBMA's core membership to include representation from money market mutual funds and securities lenders in addition to primary dealers, inter-dealer brokers, the clearing banks, and FICC.

The members of groups such as the Emergency Subcommittee should be senior enough to be able to speak on behalf of their firms.

Consistent with this discussion, the Working Group recommends that market participants and regulators support efforts by market participants, such as the TBMA's Emergency Subcommittee, that would provide real-time information on the functioning of the government securities clearance and settlement system and offer a potential sounding board for actions being contemplated by market participants, the Federal Reserve, the SEC, the U.S. Treasury, or other regulators.

6. NewBank

Introduction

This section provides a detailed description of the Working Group's discussions of the NewBank concept, which would effectively provide a contingency plan for the involuntary exit of one of the two existing clearing banks as a result of financial or legal difficulties. The discussion covers the following key aspects of NewBank: charter, ownership, operations, risk management, and transition arrangements. This section concludes with a summary of the Working Group's overall perspective on the NewBank concept.

As discussed in section 4, the Working Group sees its exploration of the NewBank concept as a contingency planning effort that would only be utilized in the absence of other practical alternatives. In particular, NewBank would be relevant only in those circumstances where one of the clearing banks has lost the confidence of investors in the tri-party repo market, for example due to legal or financial difficulties, and sale of its clearing business to another well-qualified bank is not immediately possible. As noted earlier, the Working Group assumes that despite the clearing bank's difficulties, the staff, systems, and data of the affected clearing bank would remain intact.

The Working Group is mindful of the fact that the circumstances that could trigger an involuntary exit of the clearing bank could be serious enough to threaten its continued existence either immediately or within a short period of time. In those serious circumstances it may be likely that the Federal Deposit Insurance Corporation ("FDIC") would be required to intervene as a conservator or receiver to resolve the institution through the formation of a bridge bank, a merger or purchase and assumption transaction with another institution, or a liquidation. The Working Group was not asked to consider a failure scenario and has premised its work on an assumption that the exiting clearing bank is able to continue operating in some capacity. However, the Working Group recognizes that in light of a situation which is likely to be dynamic, the FDIC would have a strong interest in the nature of any private-sector remedy to deal with the exiting clearing bank.

Charter

The Working Group spent considerable time discussing how the NewBank entity might be legally authorized. The Working Group believes that it is essential for NewBank to be able to maintain funds and securities accounts on the books of the Federal Reserve. In addition, it would need to have access to intraday credit from the Federal Reserve and potentially would need the flexibility to access the Federal Reserve's discount window as well. For these reasons, NewBank would need to be chartered as a bank.

Representatives of the Working Group met with staff of the New York State Banking Department ("NYSBD") to discuss the concept of NewBank and the issues associated with granting a state bank charter to such an entity. Both of the existing clearing banks hold bank charters granted by the NYSBD. Discussions with NYSBD staff indicated that there is no obstacle in principle to granting NewBank a charter prior to any need to actually utilize NewBank, and that NewBank could remain dormant until such time as a separate request was made to the NYSBD to permit its coming into active operation. Of course, significant further steps beyond those taken by the Working Group would need to be undertaken to fully prepare an appropriate NYSBD charter application for NewBank.

The Working Group believes that NewBank should be chartered as a limited-purpose entity, such that it would be prohibited from engaging in a wider range of financial activities than those necessary to accomplish its objectives in taking over the clearing bank activities that are the subject of this report. Given the wholesale nature of the activities contemplated for NewBank, the Working Group did not believe it would be necessary for NewBank to obtain FDIC insurance. It does believe that NewBank should be subject to supervision by the Federal Reserve as well as the NYSBD, and therefore should apply to become a member bank of the Federal Reserve Bank of New York. As the chartering authority, the NYSBD would need to exempt NewBank from any requirement to obtain FDIC insurance.

Ownership Structure

Beyond the legal form of the entity, the Working Group considered the potential ownership structure of NewBank. Because NewBank would be chartered as a bank, it would be highly desirable for NewBank to have broad ownership, so that no individual firm would need to own more than five percent of the equity of NewBank. This would eliminate the possibility of certain unintended consequences for non-bank dealers in relation to provisions of the Bank Holding Company Act. In this regard, the Working Group considered the related questions of whether the ownership structure would need to be determined prior to the chartering and activation of NewBank and whether customers of both clearing banks would participate as owners of NewBank.

It will almost certainly be necessary for NewBank to have a clear plan for its ownership in place in order to obtain a charter (i.e., in advance of activation). The

Working Group believes that potential candidates for ownership of NewBank include the dealers that make use of tri-party repo financing, particularly the largest such firms (i.e., primary dealers), and possibly other significant market participants, such as the large custodian banks. The Working Group believes that dealer customers of both clearing banks (not just customers of the exiting clearing bank) should participate as owners of NewBank, because all dealers would benefit directly or indirectly from a contingency plan for avoiding potential disruptions to settlement systems and financing mechanisms. The Working Group believes that, should activation of NewBank become necessary, its owners collectively would contribute sufficient capital to meet NewBank's needs. (NewBank's need for capital will be discussed below in the subsection on risk management.) In addition, it may be appropriate for the exiting clearing bank to hold an equity stake in NewBank.

Operations

The next set of issues considered by the Working Group concerned the practical ability of NewBank to take on the government securities clearance and tri-party repo business of the exiting clearing bank. As noted, NewBank would have no prior operational capabilities of its own. When activated, it would purchase these existing business functions from the exiting clearing bank, but it would not purchase all of the underlying operational infrastructure. NewBank would obtain operational services by purchasing some of the associated infrastructure from the exiting clearing bank and for the remainder would enter into a service agreement with the exiting clearing bank to continue providing NewBank and its customers the relevant services. The full set of critical operational services that NewBank would need to acquire either via purchase or service agreement are described in more detail in section 3 above, and include basic clearance and settlement; collateral management; risk management; links to depositories, internal processing systems, including DDA, and others; data file exchange; and tri-party repurchase agreements. Obviously, the possibility of a service agreement assumes that the exiting clearing bank would continue to operate, even in the face of problems severe enough that it would no longer be viewed as a viable counterparty in the context of government securities clearance and tri-party repo. The Working Group believes that even in the worst case, where the bank's problems would be so severe as to cause it to enter FDIC receivership, allowing the clearing bank to continue providing operational services to NewBank should be seen as consistent with the least cost resolution provisions of the FDI Act.

From an operational perspective, NewBank should function largely identically to the clearing bank whose business it is taking over. Importantly, however, customers' accounts would now be on the books of NewBank rather than on the books of the exiting clearing bank. In addition, external funds and securities transfers would flow through NewBank's accounts at the Federal Reserve instead of through the exiting clearing bank's accounts at the Federal Reserve. In other words, via the combination of purchase and service agreement, NewBank would employ the identical processing systems as are used currently, but would substitute itself as the legal counterparty in the place of the exiting clearing bank. It is anticipated that the exiting clearing bank would provide the

managers for the functions it would provide to NewBank. However, it is expected that the investors providing NewBank's capital would draw the senior NewBank executives, including CEO/COO, CFO, and Risk Management Executive, from the ranks of senior management of their firms.

Risk Management

The Working Group discussed extensively the need for NewBank to be perceived as financially sound and capable of addressing the key risks to which it would be exposed. These discussions also encompassed the issues of how much capital NewBank would need as well as NewBank's need for intraday liquidity. On the one hand, the Working Group acknowledged that if NewBank were not perceived as having sufficient financial and risk management capabilities, there would be a risk that it would not be seen as a viable replacement for the exiting clearing bank. On the other hand, the Working Group also was mindful that NewBank is itself a contingency plan for a remote set of circumstances, and that it might only be needed for an interim period of time. Thus, the desire for "failsafe" operation, which could address a complete set of unlikely threats, may need to be balanced against the desire to move ahead with some form of contingency arrangement.

The Working Group assessed that the risks to which NewBank would be exposed can be broadly grouped into three categories: (1) overnight unsecured extensions of credit, (2) overnight secured extensions of credit, and (3) intraday secured extensions of credit.[7] Data provided by the clearing banks to the Federal Reserve allowed for an assessment of the general magnitudes of the relative amounts of each category of exposure.

The first category of exposure -- overnight unsecured extensions of credit -- does not appear to be a material part of the core business functions that NewBank would take on. Although NewBank might need to make some extensions of credit of this type, the Working Group does not believe that such extensions of credit would be sufficiently large that they would materially affect the conclusions that would otherwise be drawn based on the two other categories of credit extension described below.

The second category of exposure -- overnight secured extensions of credit -- would make up the great bulk of NewBank's overnight balance sheet. These exposures arise in the normal course of business when dealers are unable to place the entirety of their securities inventories with tri-party investors. Therefore, the clearing banks today provide a certain amount of residual financing for their dealer customers. It is important to recognize that this residual financing is secured by the underlying securities and that both clearing banks apply haircuts to the current market prices of the securities to ensure that there is a margin between the amount of the credit extension they provide and the

[7] Although it is possible that intraday movements of securities prices relative to overdraft amounts could effectively introduce some amount of intraday unsecured exposure, the Working Group did not perceive that the intentional granting of intraday unsecured credit in material amounts would be a necessary part of NewBank's activities.

current market value of the securities. The Working Group believes that it would be desirable for NewBank to continue to be able to provide this residual financing as part of its activities.

The third category of exposure – intraday secured extensions of credit – is in many ways the most significant risk exposure that NewBank would face. In the aggregate, were NewBank to successfully take on the entirety of the activities of the exiting clearing bank, such exposures could equate to approximately half of the existing aggregate tri-party market, a figure in the vicinity of $500 billion.

The primary risk associated with these intraday extensions of credit is the possibility that a dealer customer defaults during the day, after the tri-party financing transactions from the previous night have been unwound. Although tri-party transactions typically unwind early in the day (e.g., 8:30 am), the clearing banks have the authority to defer or to refuse to unwind the transactions, for example if they have concerns about the financial condition of a dealer. Therefore, the clearing banks, and presumably NewBank, would mainly be exposed to the risk of an unanticipated default during the period between the morning unwind (assuming the clearing bank has allowed the unwind to take place) and the settlement of that day's tri-party transactions in the early evening.

Moreover, the intraday credit exposures that NewBank would have to its dealer customers would be collateralized by the securities inventories of those customers. The value of the securities collateral would typically exceed the value of the intraday credit extensions, although the levels of margin at the time of unwind would be determined by the haircut requirements of the tri-party investors, which in some cases could be less than what the clearing banks themselves would require.

In the event of an unanticipated intraday default by a dealer customer, NewBank would need to liquidate the securities inventory of that customer. It is possible that in so doing, the amount recovered (even taking into account the extent of margin) would be less than the amount of the credit extension, thus imposing a loss on NewBank. To help assess the magnitude of this risk, one of the clearing banks undertook a value-at-risk analysis based on the composition of the tri-party portfolio of its largest customer and calculated the degree to which the amount of loss on this portfolio under liquidation could exceed the available margin. The results of this analysis were shared with and discussed by the Working Group. The Working Group noted that assessing the ability of NewBank to withstand the potential default of its largest customer was broadly consistent with an approach commonly taken in assessing the soundness of clearance and settlement organizations.

Based on the results of this value-at-risk analysis, as well as the amounts of contemplated overnight residual financing provided by NewBank, the Working Group believes that it should be possible for NewBank to be considered financially sound with an initial capital contribution measured in the hundreds of millions of dollars, perhaps in

the vicinity of $500 million.[8] Based on the amounts of overnight financing likely to be provided by NewBank, such an amount also would be sufficient to ensure that NewBank complies with applicable bank capital adequacy regulations. Given the potential for broad ownership of NewBank, the Working Group believes that raising amounts of equity capital in this general range would be feasible upon the activation of NewBank in the circumstances in which it would be needed.

Importantly, the Working Group believes that it is critical that further detailed work be done to elaborate on and deepen the analysis of the risks that NewBank would face. Such work would aim to further refine an assessment of the amount of capital that NewBank would need upon activation. In addition, this analysis would help identify the full range of risk management measures that NewBank might need to employ to be perceived as financially robust. For example, during its initial operations, NewBank might need to require additional margin from its dealer customers in order to provide the very high level of assurance that could be needed to persuade tri-party investors to make use of NewBank. In general, the Working Group felt that, if necessary, imposing higher margin requirements would be preferable to requiring NewBank to maintain higher levels of equity capital or to the use of loss-sharing agreements. This is because higher margin requirements would more directly place the potential cost of higher risk exposures on the dealers that are creating the risk exposures for NewBank in the first place.

An additional important issue related to the risk management of NewBank is the fact that a portion of the secured intraday credit provided by NewBank to its dealer customers would be mirrored by intraday secured extensions of credit by the Federal Reserve to NewBank. Currently, the level of Fedwire overdrafts associated with tri-party activity is substantially mitigated by the fact that dealers provide tri-party investors with incentives to keep their funds in accounts at the clearing banks during the day, so that the dealers can avoid the pass-through of Federal Reserve daylight overdraft charges by the clearing banks. Nevertheless, the amount of Fedwire overdrafts associated with these activities is significant and could be more so with NewBank if tri-party investors are reluctant to keep their funds in an account at NewBank intraday. At the limit, NewBank's Fedwire overdrafts could theoretically approach the levels of tri-party repo activity itself (i.e., hundreds of billions of dollars) if not otherwise limited.

While it is unlikely that the Federal Reserve would allow NewBank to have overdrafts that approach the theoretical level of tri-party repo itself (i.e. $500 billion) the Working Group believes that, for NewBank to function effectively, the Federal Reserve would need to consider how to interpret its Payment System Risk Policy to allow NewBank larger levels of secured Fedwire overdrafts relative to capital than it currently allows either of the existing clearing banks, which have much more capital than NewBank would have.

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[8] This figure is based on an analysis of what would be needed for a bank engaged solely in these activities. The amount of capital that a more diversified bank might need to devote to such risks could be different. In addition, this analysis assumes margin amounts identical to those currently required by repo investors. If a clearing bank or NewBank requires higher margins, the capital required would be lower.

Transition Arrangements

There are a number of issues associated with the transition of activity from one of the existing clearing banks to NewBank. It is helpful to consider this transition from the perspective of each of the major participants in the tri-party repo market.

First is the perspective of the existing clearing banks. Clearing banks have at least two significant concerns that have not yet been discussed. First is the concern that NewBank not be activated precipitously and that the clearing bank itself have a voice in the decision to activate NewBank. In practice, it is hard to envision a complete set of criteria that could be used to mechanically determine when and under what circumstances NewBank would be activated. Rather, such a decision is likely to emerge as a consensus among a core set of concerned policy-makers and market participants. Importantly, such a decision would presumably only come after it was determined that a sale of the business could not be accomplished, or at least not in the necessary period of time to avoid more severe market disruptions.

The second understandable concern of the existing clearing banks is the financial terms of the purchase agreement and service agreement required to activate NewBank. Again, it is highly unlikely that such terms could be worked out satisfactorily far in advance. But it would also not be desirable for the activation of NewBank to be materially delayed by negotiations over these terms. Therefore, the Working Group believes that further detailed work on the NewBank concept should consider the possibility of designing in advance a model purchase agreement and service agreement that would envision the use of ex post third-party arbitration. Such a mechanism would help expedite the activation of NewBank, while seeking to ensure that neither party to the negotiations would be forced to accept unfair terms.

One possibility that the Working Group discussed would be for the exiting clearing bank to retain the primary equity in NewBank, with the additional equity contributions from the broker-dealers and other market participants essentially serving as a layer of additional credit support during the period of NewBank's existence. Assuming that NewBank would eventually be sold, the proceeds from the sale would flow back to the exiting clearing bank, after repayment of the market participants' capital contributions. An important consideration in such an arrangement would be the need for regulators, especially the FDIC should it be involved, to have confidence that the creation of NewBank and the associated compensation mechanism would be fair and would preserve to the extent possible the value of the clearing business to the exiting clearing bank. Discussions within the Working Group emphasized the need for follow-up work on the NewBank concept to focus carefully on these issues. For this reason, the Working Group believes that the FDIC should be involved in such work.

The dealer perspective on the transition to NewBank would clearly emphasize the importance of moving promptly to activate NewBank once the troubled clearing bank lost the confidence of tri-party repo investors. Indeed, the Working Group believes that the dealers cannot afford a significant delay between this loss of confidence and the

activation of NewBank. If tri-party investors are no longer willing to use the services of a clearing bank, its dealer customers could be confronted with significantly unattractive alternatives. As has been noted earlier, dealers rely heavily on the tri-party repo financing mechanism to provide overnight financing for a large portion of their securities inventories. The aggregate amount of tri-party repo financing exceeds $1 trillion.

Therefore, if a buyer for the government securities clearance and tri-party repo business of the troubled clearing bank could not be located promptly, the dealer customers of that clearing bank would be faced with the prospect of either locating an alternative mechanism for financing their securities inventories or of liquidating that inventory. The Working Group is strongly of the view that the attempted liquidation of such inventories by the dealer customers of either clearing bank would be highly disruptive to the marketplace generally and to those individual dealers in particular. The Working Group believes that it is desirable to avoid such a scenario at practically all costs.

The difficulty with locating an alternative mechanism for financing such securities inventories at short notice is the fact that there is no entity in which both the holders of the securities (the dealers) and the providers of the overnight financing (the money market mutual funds) maintain common account relationships, other than the two clearing banks themselves. While a certain amount of tri-party repo could be converted to DVP repo, using the repo investors' custodial banks to receive securities, this is impractical for repos of MBS securities that involve many pieces of collateral.

Perhaps the most important set of issues concerning the transition to NewBank concerns the perspective of tri-party cash investors, predominantly money market mutual funds. These funds typically seek to minimize the risks that they face, and could be expected to have some concerns about placing large amounts of funds on deposit with a de novo entity during a time of significant turmoil in the financial markets. Based on discussions between members of the Working Group and representatives of a number of money market mutual funds, the Working Group believes that it will be important for such funds to consider in advance their willingness to make use of NewBank in these circumstances. It is clear that this set of investors will not accept the possibility of "automatic assignment" of their tri-party contracts from the exiting clearing bank to NewBank. Rather, each fund would need to discuss and seek the approval of their board of directors at the time of NewBank's activation.

To facilitate this process, the Working Group believes that an information package should be prepared that would describe NewBank's charter and business, its pro forma balance sheet, its ownership and capitalization, its management and governance and its contracts with the existing bank. In addition, the Working Group believes that it may be feasible to obtain a credit rating for NewBank in advance of its activation. This would provide further comfort to the mutual funds. The Working Group believes that some entity, possibly a securities industry association or utility, should be charged with keeping this information package up to date. In addition, a standard form for consent assignment should be developed. Again, the Working Group believes that more detailed

work on the NewBank concept should consider carefully the type of advance work that might make it more likely that money market mutual funds would be able to evaluate promptly the decision to use NewBank if necessary. Similarly, the Working Group believes it is important to consider whether there are any specific contractual impediments to the use of NewBank that should be addressed by market participants.

The Working Group is aware that some funds have expressed reservations about using NewBank, because they perceive that any cash they deposit with NewBank might be at risk. Several money market mutual funds advocated to the Working Group that the Federal Reserve fully indemnify all customers of NewBank as a means of inducing their participation. The Working Group, however, is not recommending such an approach. The Working Group believes that further discussions with mutual fund management would help achieve a better understanding of their concerns and potential ways of mitigating those concerns.

Overall Perspective on NewBank

The Working Group spent a considerable portion of its working time discussing various aspects of the NewBank concept. The Working Group believes that it is one of the very few possibilities – if not the only plausible possibility – for developing a true private-sector contingency plan for the circumstance in which one of the existing clearing banks ceases to be a viable counterparty for its government securities clearance and tri-party repo customers, and in which a well-qualified buyer for those businesses cannot be located promptly.

Nevertheless, having completed its initial efforts to flesh out the NewBank concept, the Working Group acknowledges that there remain significant challenges to implementing it. The more detailed efforts that the Working Group is recommending be undertaken to further elaborate and develop the NewBank concept should help meet these challenges. An important consideration in recommending that such steps be taken is their relatively low cost. That is, they mainly entail further discussions among market participants and policy-makers and the drawing up of various relevant documents and plans, as opposed to something that would require significant physical or financial investment in the short-term.

Surrounding many of the Working Group's discussions of NewBank was the question of whether it is necessary for the private-sector to develop a contingency plan adequate to address the remote set of circumstances in which NewBank would be activated. The Working Group noted that it almost certainly would not be discussing such a proposal in the absence of official encouragement to do so. In this vein, Working Group discussions several times touched upon the question of whether there were certain scenarios in which the official sector -- in particular the Federal Reserve -- should simply accept the responsibility for a broad lender of last resort function. Although the Working Group believes that such questions may be worth considering by policy-makers, the Working Group does not believe that they fall, strictly speaking, within its mandate, which called for it to develop private-sector contingency plans.

In conclusion, the Working Group believes that the NewBank concept is, relative to other possibilities, the most promising approach for meeting the regulators' request that it develop a private-sector contingency plan for the sudden involuntary exit of one of the two clearing banks for non-operational reasons. Therefore, the Working Group believes that additional detailed work is appropriate to flesh out the NewBank concept and address the issues identified in this report. The Working Group recommends that this additional work be undertaken. The successful completion of the additional work would lead to actualization of the NewBank concept through the chartering of NewBank as a dormant entity, ready for activation in the event that it is needed.

7. Conclusion

In response to public comments on the White Paper published by the Federal Reserve Board and the SEC discussing possible structural changes to the clearance and settlement of U.S. Government securities, the Federal Reserve Board established this private-sector Working Group. The mandate of the Working Group was to develop recommendations to mitigate risks to the financial system from an interruption or termination of the services of either of the two clearing banks by exploring whether it was possible for the two clearing banks to substitute for each other. After careful study of this issue, the Working Group determined that implementation of such a plan was neither practical nor desirable and that there were other steps that can and should be taken to reduce the risks arising from either operational or non-operational problems at a clearing bank. The Working Group refined its mandate to focus on a future temporary operational disruption of a clearing bank's services or an involuntary exit of a clearing bank as a result of financial or legal problems.

The Working Group believes it has successfully completed its mandate. It has highlighted the importance of the clearing banks' efforts to enhance their resiliency. It has developed a list of recommended steps that market participants, regulators, and the official sector could consider taking to ameliorate the effects of a temporary reduction in processing capacity arising out of a temporary operational disruption. To address an involuntary clearing bank exit, the Working Group has identified the NewBank concept as the most promising approach for addressing such a scenario. The Working Group believes that the likelihood of an involuntary exit is very small and, should such an event occur, the most desirable and most likely outcome would be the contemporaneous sale of the exiting bank's clearing business to another existing well-qualified bank. Nonetheless, the Working Group recommends that further work be undertaken to flesh out the NewBank concept and address the challenges to implementing it.

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