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United States General Accounting Office
Washington, D.C. 20548

General Government Division

B-284348

February 23, 2000

The Honorable Byron Dorgan
United States Senate

The Honorable Tom Harkin
United States Senate

The Honorable Harry Reid
United States Senate

Subject: Responses to Questions Concerning Long-Term Capital Management and Related Events

This letter responds to your request that we answer 14 questions concerning Long-Term Capital Management (LTCM), its near failure, and its subsequent recapitalization in September 1998.¹ LTCM was a large and excessively leveraged hedge fund that lost over 90 percent of its capital between January and September 1998. Because of the size and scope of its positions, some believed the possibility of its imminent failure further threatened already unstable markets worldwide. With the likely failure of LTCM just days away, Federal Reserve Bank of New York (FRBNY) officials invited a group of LTCM's largest creditors and counterparties to discuss the situation and ultimately facilitated a recapitalization of LTCM.²

You asked us to respond to 14 questions, which primarily focused on the events leading to the recapitalization of LTCM and specifically, the role of the Federal Reserve. Your questions and our responses to them appear in the enclosure.

Results in Brief

Upon discovering the potential systemic implications LTCM's problems posed, FRBNY officials--acting as promoters of financial stability--brought together several LTCM creditors

¹Many of the issues these questions address and the events surrounding the near failure of LTCM were addressed in our report, Long-Term Capital Management: Regulators Need to Focus Greater Attention on Systemic Risk (GAO/GGD-00-3, Oct. 29, 1999).

²On September 23, 1998, 14 domestic and foreign banks and securities firms agreed to recapitalize LTCM through the creation of a consortium. On September 28, 1998, they contributed about \$3.6 billion, representing 90 percent of the net asset value of the fund on that date. The 14 firms were Chase Manhattan Corporation; Goldman Sachs Group, LP; Merrill Lynch & Co. Inc.; J.P. Morgan & Co. Incorporated; Morgan Stanley Dean Witter & Co.; Salomon Smith Barney (Travelers Group); Credit Suisse First Boston Company; Barclays PLC; Deutsche Bank AG; UBS AG; Bankers Trust Corporation; Société Generale; Paribas; and Lehman Brothers Holdings, Inc.

and counterparties to discuss LTCM's problems and possible solutions. According to FRBNY and industry officials familiar with the discussions, FRBNY's role was consistent with that of a central banker. They said it acted as an "honest broker" in facilitating a private-sector resolution of a market event with potential systemic implications. The group of LTCM creditors and counterparties considered various alternatives to avoid a rapid and potentially disruptive liquidation of LTCM and ultimately agreed to form a consortium and infuse \$3.6 billion into LTCM. FRBNY testified that although FRBNY officials were present at the meeting, they did not participate in discussions about the terms and conditions of the Consortium agreement.³ Although no federal money was committed to the recapitalization, FRBNY's intervention raised concerns among some market observers that it could create moral hazard⁴ by encouraging other large institutions to assume greater risks, in the belief that the Federal Reserve would intervene to avoid potential future market disruptions.

Background

In August 1998, following the announcement of the Russian debt moratorium, investors began to seek superior credit quality and higher liquidity; and credit spreads widened in markets around the world, creating losses for LTCM and other market participants. FRBNY officials said they became aware of LTCM's problems in early September 1998 through their routine market surveillance activities, which included discussions with industry officials about current market conditions and developments. On September 18, 1998, LTCM officials contacted FRBNY about its financial problems and invited a team to visit LTCM to discuss the situation. During the resulting September 20, 1998, visit, LTCM officials informed FRBNY and Department of the Treasury representatives of the extent of LTCM's problems and the size and scope of its positions in markets around the world.

Concerned about potential systemic implications if a rapid and potentially disruptive liquidation of LTCM should occur, FRBNY officials said they invited Goldman Sachs, Merrill Lynch, and J.P. Morgan—the three firms FRBNY felt had the greatest knowledge of the situation—to its office to discuss LTCM's situation and possible ways to resolve it. This core group of three was later expanded to include UBS AG. Ultimately, the discussions were expanded to include 12 of LTCM's other major creditor and counterparties. Although Bear Stearns and Credit Agricole were included in these discussions, they declined to participate in the Consortium.

After reviewing various alternatives to address the LTCM situation, on September 23, 1998, the 14 firms agreed to create the Consortium and infuse about \$3.6 billion into LTCM. The term of the investment was to be 3 years. According to a Consortium press release, its objective was "to provide sufficient capital to permit Long-Term Capital to continue active management of its positions and over time, to reduce excessive risk exposures and leverage, return capital to the participants and ultimately realize the potential value of the portfolio."

³Testimony of William McDonough, President, Federal Reserve Bank of New York before Committee on Banking and Financial Services, House of Representatives, October 1, 1998.

⁴Moral hazard generally arises when someone can reap the rewards of their actions when things go well but does not suffer the full consequence when things go badly.

The Consortium formed an oversight committee, which consisted of representatives of six members (UBS, J.P. Morgan, Morgan Stanley, Goldman Sachs, Salomon Smith Barney, and Merrill Lynch). The representatives assumed the day-to-day oversight responsibility for LTCM, with authority over the investment strategy, capitalization structure, credit and market risk management, compensation policy, hiring and firing, and any other significant decisions.

Although LTCM is the term commonly used to describe this hedge fund, LTCM actually consists of several limited partnerships and limited liability companies. For example, LTCM, LP, the Management Company, is the investment manager for the various companies, but most significantly Long-Term Capital Portfolio, LP, the Portfolio Company, which is also referred to as the Fund. On December 16, 1999, LTCM returned the remaining balance of the Consortium's \$3.6 billion investment to the Consortium members.⁵ According to an LTCM official, the Management Company and the Portfolio Company are in the process of being liquidated and LTCM will cease to do business in 2000. However, several of LTCM's partners have formed a new fund (JWM Partners).

Scope and Methodology

To answer the questions posed, we interviewed FRBNY, the Federal Reserve Board, and LTCM officials and reviewed relevant testimonies. In addition, we submitted questions to Consortium members about the recapitalization and FRBNY's role in it. We also reviewed various agency documents, press articles, academic articles, and regulatory reports on LTCM. With the exception of updating the status of LTCM's operations, the work was conducted during our initial review of LTCM, which was issued in 1999.⁶

We requested comments on a draft of this report from the Chairman, the Board of Governors of the Federal Reserve System and the Associate General Counsel, LTCM, LP. Neither provided written comments; however, Pat Parkinson, Associate Director, Board of Governors of the Federal Reserve System, provided technical oral comments that were incorporated as appropriate. Similarly, LTCM provided technical written comments that were also incorporated. We did our work in Washington, D.C.; New York, NY; and Greenwich, CT between October 1998 and January 2000 in accordance with generally accepted government auditing standards.

As we agreed with your office, we plan no further distribution until 7 days from the date of this letter unless you publicly release its contents sooner. At that time, we will send copies of this letter to Senators Phil Gramm, Chairman, and Paul Sarbanes, Ranking Minority Member, Senate Committee on Banking, Housing, and Urban Affairs; Representatives Jim Leach, Chairman, and John LaFalce, Ranking Minority Member, House Committee Banking and Financial Services; Representatives Tom Bliley, Chairman, and John Dingell, Ranking Minority Member, House Committee on Commerce; Representative Edward Markey; and other interested members of Congress. We will also send copies of this report to the

⁵LTCM had previously returned capital to Consortium members in July 1999 and twice in September 1999.

⁶GAO/GGD-00-3.

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Honorable Alan Greenspan, Chairman, Federal Reserve Board of Governors of the Federal Reserve. We will make copies available to others upon request.

Please call me or Orice M. Williams, Assistant Director, at (202) 512-8678 if you or your staffs have any questions concerning this letter.

A handwritten signature in black ink, reading "Thomas J. McCool". The signature is written in a cursive style with a large, looping initial "T".

Thomas J. McCool
Director, Financial Institutions
and Markets Issues

Enclosure

Questions Concerning LTCM and Our Responses

1. Which of LTCM's partners and employees were previously employed by the Federal Reserve? When, and in what capacity (including consultancies)? Were current Federal Reserve employees involved with or employed by LTCM? When, and in what capacity (including consultancies)? If existing or former Federal Reserve employees were involved in decisions with LTCM that may have affected LTCM's portfolio, please identify them and the nature of the decisions.

One of LTCM's 16 principal investors (principals), David Mullins, was formerly employed by the Federal Reserve System. In addition, two other principals had some association with the Federal Reserve System prior to the creation of the Fund;¹ one, Robert Merton, spent 1 week at the Federal Reserve as a visiting scholar and the other, Myron Scholes, participated in a Federal Reserve conference. Mr. Mullins joined the Federal Reserve Board of Governors in May 1990 and became a Vice Chairman in July 1991. Among other things, he was involved in decisions regarding monetary policy, banking policy, and financial markets. He left the Federal Reserve in February 1994 and joined LTCM. According to Federal Reserve officials, Mr. Merton was a visiting scholar at the Federal Reserve sometime before 1994. Mr. Scholes had participated in a Federal Reserve conference sometime before the Fund was created in 1994. According to Federal Reserve officials, they were aware of no other current or former Federal Reserve employees employed by LTCM. Further, the Federal Reserve and LTCM said they were unaware of any other LTCM employees or principals that had been employed or held consultancies with the Federal Reserve.

Messrs. Mullins, Merton, and Scholes, in their capacities as principals of LTCM, were involved in decisions that affected LTCM's portfolio, including investment decisions and investment strategies. However, their relationships with the Federal Reserve predated the establishment of LTCM's portfolio, which did not begin active trading until 1994.

2. Please identify the investors and creditors of LTCM and describe the size and nature of their investments and relationships with LTCM. Did these considerations influence the Federal Reserve's decision to spearhead the rescue of LTCM?

¹LTCM consists of a combination of limited partnerships and limited liability companies that are collectively known as LTCM. One of its limited partnerships was Long-Term Capital Portfolio, which was managed by Long-Term Capital Management, LP, an investment management company. The Management Company was established in 1993, but the Portfolio Company was not invested until 1994.

At the time of its near-failure, LTCM had over 100 equity investors, including individuals, universities, corporations, trusts, and partnerships. Collectively, these investors owned about two-thirds of the Portfolio Company, commonly referred to as the Fund. LTCM's 16 principals owned the remaining one-third of the Fund. According to Federal Reserve Bank of New York (FRBNY) testimony and the President's Working Group on Financial Markets 1999 report on hedge funds,² LTCM did business with over 75 creditors and counterparties. Among LTCM's largest creditors and counterparties were the 14 Consortium members that recapitalized the Fund,³ Bear Stearns, and Credit Agricole.

LTCM's relationships with its creditors and counterparties were multifaceted. For example, investment and commercial banks provided LTCM credit and were counterparties to LTCM on derivatives transactions, repurchase agreements, and stock borrowings. Bear Stearns was LTCM's prime broker.⁴ Bear Stearns and Merrill Lynch were also clearing firms for LTCM's U.S. exchange-traded futures and for trades on foreign futures exchanges, respectively. In addition, some bank officials were also included among LTCM's equity investors.

FRBNY testified that although LTCM told them that firms doing business with LTCM might have experienced several billion dollars in losses if LTCM had failed, this was not a principal consideration in FRBNY's decision to bring the creditors together. In addition, FRBNY testified that none of the firms were threatened with failure had those losses been realized. Rather, FRBNY said it was concerned about the potential for secondary (indirect) losses by firms and individuals not associated with LTCM and the potential threat to already volatile markets worldwide.

3. What knowledge did the Federal Reserve have of the deteriorating financial situation at LTCM? Did Federal Reserve officials rely on written and/or oral representations about the

² Hedge Funds, Leverage, and the Lessons of Long-Term Capital Management, Report of The President's Working Group on Financial Markets, Apr. 28, 1999.

³ The Consortium included Bankers Trust Corporation; Barclays PLC; the Chase Manhattan Corporation; Credit Suisse First Boston Corporation; Deutsche Bank AG; the Goldman Sachs Group, LP; Lehman Brothers Holdings Inc.; Merrill Lynch & Co., Inc.; J.P. Morgan & Co. Incorporated; Morgan Stanley Dean Witter & Co; Paribas; Société Generale; Salomon Smith Barney (Travelers Group); and UBS AG.

⁴ A prime broker is a broker-dealer that provides various services for its clients, including hedge funds. These services generally include providing intraday credit to facilitate foreign exchange payments and securities transactions; providing margin credit to finance purchases of equity securities; and borrowing securities from investment fund managers on behalf of hedge funds to support the hedge funds' short positions.

LTCM's financial condition? If so, please describe them. Did the Federal Reserve have access to any of LTCM's books and records? At what point, if any, did the Federal Reserve understand the full scope of the financial picture at LTCM? When did the Federal Reserve learn (a) that LTCM's difficulties were so severe as to threaten its collapse and (b) that its failure might result in widespread disturbances in the global financial system?

FRBNY officials said that they became aware of LTCM's problems in early September 1998 through their normal market surveillance activities, which include regular communication with commercial and investment banks. In addition, they said LTCM officials contacted FRBNY in early September 1998 to (1) inform officials about their financial difficulties and (2) assure FRBNY officials that LTCM planned to raise additional capital. LTCM officials contacted FRBNY again later on September 18, 1998, to inform FRBNY officials that efforts to raise additional capital had been unsuccessful and invited the FRBNY officials to LTCM for a briefing on LTCM's positions and the severity of the situation.

On September 20, 1998, FRBNY and Treasury officials received an oral presentation on LTCM's positions worldwide and the scope of its problems. According to FRBNY officials, although various industry officials had told them about the problems at LTCM, it was during this presentation that federal officials became aware of the enormity of LTCM's positions, its difficulty in trying to reduce those positions, and its largest counterparty exposures. Because the Federal Reserve had no authority or jurisdiction over LTCM and its operations, FRBNY officials said that they did not perform an independent analysis of the information presented by LTCM nor did they have access to or examine LTCM's books and records. The Commodity Futures Trading Commission, the only agency with jurisdiction, sent auditors to LTCM several days later.⁵

4. When did the Federal Reserve first intervene in this matter? What was the statutory authority that the Federal Reserve believes permitted its intervention? Was the Federal Reserve's intervention consistent with that authority? Are there any real or potential conflicts of interest created by the Federal Reserve's intervention because of its different roles as banking regulator, monetary policymaker, and promoter of financial stability?

⁵The Commodity Futures Trading Commission (CFTC) had authority to audit LTCM's records because LTCM was registered with CFTC as a commodity pool operator.

Following the visit to LTCM on Sunday, September 20, 1998, FRBNY officials said they invited representatives of Goldman Sachs, Merrill Lynch, and J.P. Morgan-- the three firms FRBNY felt had the greatest knowledge of the situation at LTCM and a strong interest in seeking a solution to its problems--to FRBNY to discuss LTCM's problems and possible solutions. FRBNY officials said that they acted under 12 U.S.C. § 225a ". . . to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates." Pursuant to its broad statutory authority, the Federal Reserve has very broad authority to act.

The Federal Reserve's various roles, including promoter of financial stability, regulator, and monetary policymaker, are related and require that the Federal Reserve balance potentially competing interests. For example, some market observers were concerned that because of the Federal Reserve's regulatory role and monetary policymaker role, it could exert undue pressure on certain Consortium members to participate in the recapitalization. Although organizationally, the Federal Reserve's roles are managed separately, all three functions responded to the LTCM problem or the related market turmoil. For example, officials from FRBNY's Markets Group described their concern about LTCM as primarily a concern about financial market stability. However, FRBNY is also the regulator for Bankers Trust, Chase Manhattan, and JP Morgan--three of the Consortium members--and FRBNY's Bank Supervision Group conducted special reviews following LTCM's near failure to ensure their safe and sound operation. Further, in its role as a monetary policymaker, the Federal Reserve Board lowered interest rates at the end of September and again in October 1998 to help stabilize turbulent financial markets.

5. Please provide a detailed description of the final LTCM rescue plan, including how the assets and liabilities are divided between its creditors and equity holders. What role did the Federal Reserve play in determining and/or approving the form of this rescue plan? What other financial regulators played a role in defining or implementing the plan?

On September 28, 1988, LTCM's 16 principals and representatives of the 14 Consortium members and LTCM signed the rescue plan (agreement) to recapitalize LTCM. The 14-member Consortium included affiliates of the following institutions: Bankers Trust Corporation; Barclays PLC; the Chase Manhattan Corporation; Credit Suisse First Boston Corporation; Deutsche Bank AG; the Goldman Sachs Group, LP; Lehman Brothers Holdings Inc.; Merrill Lynch & Co., Inc.; J.P. Morgan & Co. Incorporated; Morgan Stanley Dean Witter & Co; Paribas; Société Generale; Salomon Smith Barney

(Travelers Group Inc.); and UBS AG. These firms contributed a total of about \$3.6 billion into the Fund. With the exception of Société Generale, which contributed about \$125 million, and Paribas and Lehman Brothers Holdings, Inc., which contributed about \$100 million each, all others contributed about \$300 million each through a new investment vehicle. The agreement also created a new General Partner (Oversight Partner I) to oversee the operations of LTCM. As of September 30, 1998, the net asset value of the Fund was about \$3.8 billion (including the \$3.6 billion capital infusion, which represented 90 percent of the Fund's net asset value). Oversight Partner I was granted general authority over the management and operations of the Fund. The agreement reduced the authority of the preexisting general partner of the Fund affiliated with the Management Company. In addition, the Management Company entered into an investment management agreement with Oversight Partner I to provide investment management services for a 1 percent per annum management fee plus a 15 percent incentive for increases in net asset value over a required rate of return or hurdle rate.

The Consortium's investment was also subject to several conditions, including an option to purchase 50 percent interest in the Management Company and its affiliates for a nominal amount. The Consortium was also given the option to purchase 100 percent of the ultimate parent of the Management Company for a nominal amount. The Consortium was generally indemnified against claims related to activities of the Fund on or before September 28, 1998. In return, the principals and the Management Company affiliates were granted similar indemnification rights by the preexisting Investment Vehicles. In addition, previously deferred incentive fees owed to the Management Company and its affiliates from the preexisting Investment Vehicles were paid to the Management Company. The Management Company used the proceeds to repay existing indebtedness to the Fund, to repay third-party lenders, and to pay certain employees and former employees amounts owing on the termination of employee deferred compensation plans. Initially, Oversight Partner I operated through its 14-person board and through a 6-person onsite Oversight Committee. Each Consortium member had a member on the Board and the six-member Oversight Committee included representatives from the Goldman Sachs, J.P. Morgan, Morgan Stanley Dean Witter, Merrill Lynch, Salomon Smith Barney, and UBS AG. The six designees were relieved of their duties at their respective firms to work onsite at LTCM but continued to be compensated by their employers, not LTCM.

No assets and liabilities had to be divided because LTCM was recapitalized and expected to continue as an ongoing concern. In June 1999, LTCM

returned \$1 billion to the Consortium and about \$300 million that original investors had in LTCM. An additional \$1.6 billion was returned in September 1999, and another \$925 million was returned in December 1999. As of December 31, 1999, there were no Oversight Committee members onsite daily at LTCM.

FRBNY's President testified in a congressional hearing that FRBNY acted as a facilitator to the recapitalization process and did not participate in the discussion of the terms and conditions of the recapitalization agreement. FRBNY's President testified that officials were not involved in discussions dealing with the specifics of the agreement, and they had no role in approving the agreement or its terms. Consortium members described FRBNY's role as that of an "honest broker"—bringing together private parties to resolve a problem that had potential systemic implications. They added that FRBNY officials solicited views from various members on alternatives for dealing with LTCM. Although a Securities and Exchange Commission official attended the September 23, 1998, Consortium meeting, the official had no involvement in the meeting other than as a silent observer.

6. Did the Federal Reserve exert pressure on LTCM's creditors to participate in the rescue plan? If so, what kind of pressure? Did any of the private sector rescue plan participants have pending or future business—such as merger applications or examinations—with the Federal Reserve?

According to FRBNY testimony, they used moral suasion to get LTCM's major creditors to discuss a private-sector rescue of LTCM. Aside from inviting LTCM's core creditors to discuss its deteriorating condition, we found no evidence that FRBNY exerted direct pressure on LTCM's creditors to rescue LTCM. However, being contacted by FRBNY officials may have created indirect pressure on these creditors because of its supervisory responsibility and role in financial markets. When we asked Consortium members about their rationale for participating in the Consortium, some said that they were concerned about potential adverse consequences that might have arisen if bankruptcy or liquidation had occurred. Others were concerned about their credit exposure and potential losses. Most said that an LTCM failure could have adversely affected many markets and market participants, which could have exacerbated problems in financial markets.

Three of LTCM's creditors, Bankers Trust, J.P. Morgan, and Chase Manhattan, are regulated by the Federal Reserve and, therefore, are

subject to Federal Reserve examinations. Following the LTCM crisis, the Federal Reserve performed targeted reviews on all three creditors. In addition, at the time of the near failure, all Consortium members except one, were primary dealers in the U.S. government securities market, and all except two were foreign exchange counterparties with FRBNY. At least 10 of the 14 Consortium members had existing or subsequent business applications pending Federal Reserve approval, including merger applications. Two of LTCM's creditors declined to participate in the consortium, Bear Stearns and Credit Agricole. Bear Stearns was also a primary dealer in the U.S. government securities market.

7. Did the reputations of LTCM's strategists and traders cause banks to relax normal credit standards? Did federal banking regulators—including the Federal Reserve—relax in any way their scrutiny of LTCM's creditor banks for the same reason?

Regulators have reported that LTCM benefited from a “halo effect” in its dealing with counterparties and creditors premised on the credentials of its principals, which included two Nobel Prize laureates and a former Federal Reserve vice chairman. In our 1999 LTCM report,⁶ we found that LTCM was able to negotiate zero initial margin,⁷ two-way collateral requirements,⁸ high-loss thresholds, and rehypothecation rights.⁹ These favorable credit terms are usually indicators of high creditworthiness. In addition, we found that most of LTCM's creditors relied heavily on posted collateral rather than exercising judgment and performing due diligence reviews of LTCM's operations and investment strategy.

As discussed in detail in our 1999 LTCM report,¹⁰ we found that regulators did not detect the lapses in risk management that allowed LTCM to become large and excessively leveraged until after the crisis. The primary reason these lapses were not detected was because regulators limited their

⁶Long-Term Capital Management: Regulators Need to Focus Greater Attention on Systemic Risk (GAO/GGD-00-3, Oct. 29, 1999).

⁷Initial margin is the amount of cash or eligible securities required to be deposited with a counterparty before parties engage in a transaction.

⁸Two-way collateral means that both parties to a contract are required to post collateral, depending on the direction of the credit exposure.

⁹Hypothecation means offering assets owned by a party other than the borrower (e.g., collateral held by the borrower from another transaction, such as a derivatives contract) as collateral for a loan without transferring the title. Rehypothecation is the reuse of posted collateral.

¹⁰GAO/GGD-00-3.

focus to problems involving the largest credit exposures of the firms they regulated. LTCM was not among the largest exposures at any of these firms. The Office of the Comptroller of the Currency and the Federal Reserve were aware of the dangers of declining credit standards and had cautioned banks about the dangers of declining credit standards. The Federal Reserve recognized the risks hedge funds may pose, and in 1997 and 1998, it conducted a survey of bank relationships with hedge funds to update its previous work on hedge funds and identified no problems. However, Federal Reserve examiners did not verify the banks' credit practices at the time of the survey but were instructed to focus special attention on bank relationships with hedge funds given their "special" risk profile. In the months following the near-collapse of LTCM, regulators found that credit standards for other large hedge funds and some other counterparties had also been relaxed. They also found an over reliance on posted collateral and failure to adequately consider potential future losses in managing risk exposure.

8. What knowledge did the Federal Reserve have of any foreign government agency involvement in LTCM? Did this knowledge influence its decision to become involved in the rescue plan?

According to FRBNY officials, they had no knowledge of the identity of any individual investors. They said that they knew that LTCM had large positions but did not know the details of those positions before the September 20, 1998, visit to LTCM headquarters.

9. What did Federal Reserve officials know about the details of Warren Buffet's offer to acquire LTCM? How extensively did the Federal Reserve participate in the evaluation of this proposal?

According to testimony by FRBNY's president on October 1, 1998, before the House Committee on Banking and Financial Services, one of the Consortium members informed him on September 23, 1998, that an investor group was about to make an offer to acquire LTCM's portfolio.¹¹ FRBNY's president confirmed this information with one of the members of the investor group. He said he then conferred with J.P. Morgan, Goldman Sachs, Merrill Lynch, and UBS (the Core Group) and decided to suspend consortium activities until the alternative arrangement could be considered by LTCM.

¹¹The offer is commonly referred to as the "Buffett offer" because Warren Buffett owns Berkshire Hathaway.

On September 23, 1998, around 11:30 a.m., LTCM received a \$250 million offer for its assets that was to expire within an hour, at 12:30 p.m. The purchaser was to be a limited partnership comprising Berkshire Hathaway, American International Group, and Goldman Sachs.¹² According to the terms of the offer, management of the assets would have been under the “sole control” of the newly created partnership. According to LTCM officials, the Fund could not be sold without stockholder approval and the approvals could not be obtained in an hour. The offer was subsequently withdrawn because Berkshire Hathaway representatives were unable to alter the terms of the original agreement.

According to Federal Reserve officials, the Federal Reserve did not participate in the evaluation of the deal. FRBNY’s president testified that he informed an LTCM official that “There is no guarantee whatsoever that this consortium approach is ever going to come together.” At some point, the official telephoned FRBNY to inform it of potential legal issues concerning the offer. FRBNY’s president testified that he informed the LTCM official that he had only one offer to consider, the Berkshire Hathaway offer, and that “a bird in the hand is worth two in the bush.” FRBNY’s president added that this type of involvement is “as close to the edge as any central banker should ever go, and [it] may be right at the edge of getting involved in a situation and encouraging an outcome.... We can’t get involved and say this has to be the outcome.” Later in his testimony, FRBNY’s president said that he was informed that the deal did not work and that the offer was off the table.

10. Were any other plans to rescue LTCM considered? If so, please provide a detailed description of these alternatives. Did Federal Reserve officials object to any of the alternative plans? If so, what was the nature of their objections? Did Federal Reserve officials express a preference for any of the rescue plans? Did Federal Reserve officials indicate approval for the final plan—the provision of new capital by a consortium of financial institutions—over bids by other private investors to acquire LTCM outright?

According to Federal Reserve and industry officials, LTCM’s major creditors focused on three alternatives for dealing with LTCM’s problems—(1) bankruptcy and liquidation of LTCM, (2) finding a buyer for the Fund, and (3) recapitalization of LTCM by a consortium. According to the members of the Consortium that was ultimately formed, on September

¹²The investors in the limited partnership would be Berkshire Hathaway for \$3 billion, American International Group for \$700 million, and Goldman Sachs for \$300 million.

23, 1998, they determined that the first alternative (bankruptcy) was not acceptable because it would not accomplish the primary goals of restoring market stability and confidence. In addition, they concluded that the second alternative (finding a buyer) was not feasible in the short time frame available for action. The third alternative resulted in the creation of the Consortium of 14 creditors that ultimately infused about \$3.6 billion into LTCM.

As discussed in question 5, according to FRBNY and Consortium officials, FRBNY performed the traditional role of a central banker acting as an “honest broker” bringing together private parties to resolve a problem that had the potential for systemic impact. FRBNY officials said that the agreement was drawn up without any input from the FRBNY. Consortium members also confirmed that FRBNY did not sponsor the recapitalization. In his testimony before the House Committee on Banking and Financial Services, FRBNY’s president testified that he was aware of the general terms of the alternatives being considered by LTCM’s creditors.

11. Did the Federal Reserve’s intervention create new incentives for other large financial institutions to take huge financial market risks in the future?

Any type of intervention creates the potential for increased moral hazard; however, the long-term implications of FRBNY’s involvement in the recapitalization are unknown. Although the FRBNY stressed that its actions were dictated by the state of worldwide financial markets at that time, its actions raised concerns among some industry officials about moral hazard. Some industry officials said that FRBNY’s involvement in the rescue, however benign, would encourage large financial institutions to assume more risk, in the belief that the Federal Reserve would intervene on their behalf. According to FRBNY officials, it is unlikely LTCM’s creditors would have been able to work together to avoid the rapid liquidation of the Fund if FRBNY officials had not intervened. Thus, FRBNY’s intervention probably affected the outcome in this case and, over time, such actions could increase moral hazard and potentially undermine the effectiveness of market discipline.

12. Did the Federal Reserve’s intervention in the rescue of LTCM create unacceptable risks to the federal deposit insurance system or expose American taxpayers to a threat of future hedge fund bailouts?

Although no federal dollars were involved in the recapitalization of LTCM, the Federal Reserve's involvement has raised concerns among some that the "too big to fail" doctrine has been expanded to include hedge funds. Federal Reserve officials have testified that its facilitation of the recapitalization of LTCM was not an expansion of "too big to fail"¹³ and had the private-sector recapitalization not come together, LTCM would have been allowed to fail. However, if companies believe that the federal safety net has been expanded, it may encourage more risky business practices. Based on the LTCM experience, if problems surface during periods of market turmoil, regulators may decide that some form of federal intervention, albeit nonfinancial, may once again be necessary.

13. How many other hedge funds of comparable size and/or leverage to LTCM exist? Should they be more directly regulated?

Because no statutory definition of a "hedge fund" exists, figures vary on the number of funds. According to the President's Working Group on Financial Markets 1999 report on hedge funds,¹⁴ between 2,500 and 3,500 funds exist. Most hedge funds are substantially smaller than LTCM and use much less leverage. According to industry researchers, 70 percent of hedge funds use leverage, most with a simple leverage ratio of less than 2 to 1 (a ratio of assets to equity capital). Of the hedge funds that were registered with CFTC as commodity pool operators (CPO)¹⁵ as of September 1998, LTCM's leverage ratio was among the 10 highest. LTCM was also among the largest hedge funds in total assets. For hedge funds that were registered as CPOs, the 10 largest families of hedge funds had assets of between \$15 billion and \$122 billion as of September 30, 1998, with an average size of \$36 billion. For the 10 most highly leveraged families of hedge funds, the leverage ratios ranged from 7 to 32 as of September 30, 1998. In our report on LTCM, rather than direct regulation, we focused our attention on the creditors of hedge funds, because it is unlikely that hedge funds can become excessively leveraged if credit-underwriting standards are maintained. See question 14 for our response to the question of whether more direct regulation is required.

¹³The "too big to fail" doctrine says that certain institutions are so large that their activities make up a significant portion of a country's payments system, credit-granting process, or other key financial roles. Any substantial disruption in these institutions' operations would likely have a serious effect on a country's financial markets, either preventing the markets from operating properly or raising questions about their integrity. As a result, the policy implies that these institutions should not be allowed to fail.

¹⁴Hedge Funds, Leverage, and the Lessons of Long-Term Capital Management, The Report of The President's Working Group on Financial Markets, Apr. 28, 1999.

¹⁵A CPO is the manager of a commodity pool, which is a collective investment vehicle that trades futures contracts.

14. Could more careful supervision by federal bank examiners, including the Federal Reserve, have prevented the LTCM crisis? Should the various financial regulators, using their separate powers in cooperation, develop and employ a system of market surveillance that would provide early warning of future situations similar to LTCM? Or, is new supervisory authority or direct regulation over hedge funds needed?

Federal examiners conduct risk-based examinations of banks. Thus, they focus on bank activities that are most likely to pose the greatest risk to the safety and soundness of individual institutions. In general, hedge fund activity did not constitute a large percentage of banks' credit exposure. The President's Working Group on Financial Markets reported that as of September 30, 1998, aggregate bank direct lending exposure to hedge funds was estimated at less than \$4.3 billion at the 12 banks identified to have hedge fund relationships. U.S. commercial bank direct investments in hedge funds were estimated to be less than \$1.7 billion, excluding their share of the Consortium's investment in LTCM. These compare with total assets of \$2.6 trillion. Although it is unlikely that regulators could identify and prevent every crisis, we recommended in our LTCM report that the federal financial regulators work together to develop ways to enhance their ability to assess risks that cross traditional industry boundaries. This enhanced oversight, should not, however, be focused exclusively on hedge funds because the issues raised by LTCM were not unique to hedge funds.

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