Good morning Mr. Chairman and members of the Committee. I am pleased to appear before you today to describe the Federal Reserve Bank of New York’s role in the events leading up to the recent private-sector recapitalization of Long-Term Capital Management and its fund, Long-Term Capital Portfolio.

I will cover four points. First, I will provide some background on Long-Term Capital's financial problems. Second, I will explain our judgment that an abrupt and disorderly close-out of Long-Term Capital's positions would have posed unacceptable risks to the American economy. Third, I will explain the limited role we played in facilitating the private-sector resolution to this private-sector problem. Fourth, I will identify some of the issues that should concern us as we begin to understand the lessons of this experience.

Background

Long-Term Capital is an investment partnership that was started in 1994. It has many of the characteristics of a "hedge fund" in that it borrows money to leverage its capital and is only available to wealthy investors. The strategy of Long-Term Capital was to use complex mathematical formulas to identify temporary price discrepancies between different interest rates. For example, the firm might notice that the yield on corporate bonds relative to Treasury yields was higher than the range observed in recent years. If Long-Term Capital believed the former relationship would reassert itself, it would buy corporate bonds and sell short Treasury bonds. If the spread narrowed as expected, the firm would profit. If, however, the spread continued to widen, the firm would incur losses. This basic strategy and many complex variations was followed across many interest rate products in the U.S. and many overseas markets as well. The firm was active both in traditional securities markets, and perhaps more importantly, in derivative product markets such as futures, swaps, and options. Anticipating that some positions would move in their favor and some would move against them, the firm relied on diversification across a large number of product and geographic markets. Long-Term Capital proved quite successful at this strategy, generating returns in excess of 40 percent in 1995 and 1996, though somewhat less in 1997.

Perhaps their success went to their heads. Long-Term Capital took on larger and larger positions. They also leveraged their investments at higher levels, returning capital to their investors but not, apparently, reducing risks. We now also know that they took on significant positions in equity markets, through both swap and options contracts. The reputations of the Long-Term Capital partners, as traders and economists, and their initial success, appear to have contributed to so many counterparties’ willingness to deal with them.

While hubris may have set them up for a fall, it was the extraordinary events of August in global markets that appears to have tripped them.

On August 17, the Russian government announced an effective devaluation of the ruble and declared a debt moratorium, shocking investor confidence all over the world. Over subsequent days and weeks, equity and debt markets the world over became increasingly volatile, with U.S. equity markets falling and the spreads between U.S. Treasury securities and higher-yielding debt instruments widening sharply. The correction of stock prices was not of exceptional size or concern and, indeed, had been anticipated by a number of astute market observers. However, the abrupt and simultaneous widening of credit spreads globally, for both corporate and emerging-market...
sovereign debt, was an extraordinary event beyond the expectations of investors and financial intermediaries.

The unusual widening of credit spreads also caused significant losses at Long-Term Capital. As markets around the world moved in the same direction at the same time, the diversification on which Long-Term had previously relied failed them utterly. Instead of offsetting positions, their losses were compounded. At the same time, the volatility in equity markets caused further losses. On September 2, the partners of Long-Term Capital sent their investors a letter acknowledging 52 percent losses on the year through August 31 and that they were seeking an injection of capital to sustain the firm. The existence of this letter became widely known and reported within a few days.

Because of this, during the first two weeks of September, concern about Long-Term Capital was a widespread topic of conversation in financial markets. It is a traditional and essential role for the President and senior officers of the New York Fed to be talking to, and receiving calls from, market participants regarding significant developments and potential dislocations. In fact, the partners at Long-Term Capital called me early in September to notify me of their difficulties and their discussion with investment houses about plans to raise new capital.

By Friday, September 18, with the efforts to raise new capital still unsuccessful -- and with an increasing number of people now aware of Long-Term's plight because of the efforts to bring in new investors -- events seemed to come to a head. With market conditions particularly unsettled that day, I made a series of calls to senior Wall Street officials to discuss overall market conditions. Let me take a moment to put those calls in context. One important objective of the Federal Reserve is to assure financial stability. Particularly in times of stress, it is essential that the Federal Reserve continue to take the pulse of the market. One way to do that is through candid and open communication with key market participants. Everyone I spoke to that day volunteered concern about the serious effect the deteriorating situation of Long-Term could have on world markets.

Also on the 18th, one of the firms that had been working with Long-Term to raise new capital asked the Long-Term Capital partners if the firm could share the information it had with us. The partners at Long-Term Capital responded that they would prefer to present the information themselves and called me to arrange such a presentation.

After conferring with Chairman Greenspan and Secretary Rubin, we agreed that a visit to Long-Term Capital's offices was needed. A team from the New York Fed, led by Peter Fisher, the head of our Markets Group, and joined by Treasury Assistant Secretary Gary Gensler, met with the Long-Term Capital partners at their offices on Sunday, September 20. During this meeting, we learned the broad outlines of Long-Term Capital's major positions in credit and equity markets, the difficulties they were having in trying to reduce these positions in thin market conditions, their deteriorating funding positions and an estimate of their largest counterparty exposures. The team also came to understand the impact which Long-Term Capital's positions were already having on markets around the world and that the size of these positions was much greater than market participants imagined.

The New York Fed's Judgments

Mr. Chairman, I would like now to turn to my second point, and focus explicitly on the question of our judgment that the abrupt and disorderly close-out of Long-Term Capital's positions would pose unacceptable risks to the American economy.

There are several ways that the problems of Long-Term Capital could have been transmitted to cause more widespread financial troubles. Had Long-Term Capital been suddenly put into default, its counterparties would have immediately "closed-out" their positions. If counterparties would have been able to close-out their positions at existing market prices, losses, if any, would have been minimal. However, if many firms had rushed to close-out hundreds of billions of dollars in transactions simultaneously, they would have been unable to liquidate collateral or establish offsetting positions at the previously-existing prices. Markets would have moved sharply and losses would have been exaggerated. Several billion dollars of losses might have been experienced by some of Long-Term Capital's more than 75 counterparties.

These direct effects on Long-Term Capital's counterparties were not our principal concern. While these losses would have been considerable, and would certainly have adversely affected the firms experiencing them, this was not, in itself, a sufficient reason for us to become involved.

Two factors influenced our involvement. First, in the rush of Long-Term Capital's counterparties to close-out their positions, other market participants -- investors who had no dealings with Long-Term Capital -- would have been affected as well. Second, as losses spread to other market participants and Long-Term Capital's counterparties, this would lead to tremendous uncertainty about how far prices would move. Under these circumstances, there was a likelihood that a number of credit and interest rate markets would experience extreme price moves and possibly cease to function for a period of one or more days and maybe longer. This would have caused a vicious cycle: a loss of investor confidence, leading to a rush out of private credits, leading to a further
widening of credit spreads, leading to further liquidations of positions, and so on. Most importantly, this would have led to further increases in the cost of capital to American businesses.

Let me be clear: had we not just experienced in August precisely this type of shock to our credit markets, had we not just seen a sudden, worldwide straining of investor confidence, had there not already been underway a flight of capital away from private credit and into Treasury securities, were much of the world not experiencing financial strain, then our judgments about the risks to the American economy of an abrupt and disorderly close-out of Long-Term Capital may well have been different. But, in the circumstances that did in fact exist, it was my judgment that the American people, whom we are pledged to serve, could have been seriously hurt if credit dried up in a general effort by banks and other intermediaries to avoid greater risk.

In light of these risks, the responsible public policy objective was to get together those with a direct financial interest in an orderly rescue of Long-Term Capital, to discuss its problems openly and objectively, to provide a sounding board for solutions, and if necessary, a calming influence. In my view, we achieved this objective.

What did the New York Fed do?

Because events were moving swiftly, and with my approval and support, my colleague Mr. Fisher invited representatives of the three firms, which we felt had the greatest knowledge of the situation at Long-Term Capital and a strong interest in seeking a solution, to an early morning meeting on September 22nd. The three firms were Goldman Sachs, Merrill Lynch, and J.P. Morgan.

Continuing discussions which commenced the day before, Mr. Fisher explained our interest in being aware of developments and in reducing the risk of an abrupt and chaotic close-out of Long-Term Capital. The firms present stated that they were not aware of any other initiatives then being actively pursued, to resolve Long-Term Capital's problems. They voiced their own concerns about the risks to the market of a close-out scenario. They discussed various approaches to stabilizing Long-Term Capital including the concept of a "collective industry" or consortium approach. However, they all agreed that work on a collective option should not preclude parallel efforts by anyone; indeed, that if any firm or group of firms wished to step forward and take Long-Term Capital itself or Long-Term Capital's positions on their balance sheets that this would be the most desirable outcome. In the absence of any other solutions, the firms dispatched two working groups to Long-Term Capital's offices in Connecticut to consider the feasibility of "lifting" the fixed-income and the equity positions out of Long-Term Capital. A third working group met at one of the firm's offices downtown to develop the idea of a consortium approach. By mutual agreement another firm, UBS, a Swiss bank, was added to this core group and to each of the three working groups. However, no one from the New York Fed participated in any of the working groups.

At no point in this early morning meeting, nor at any stage last week, was there discussion of the use of public monies -- Federal Reserve or otherwise. No Federal Reserve or government guarantees, actual or implied, were offered, discussed or solicited.

Later that afternoon, we participated in a conference call to review the progress of the working groups. Two of the working groups concluded that a "lifting" of the fixed income and equity positions was not feasible. The third group developed a consortium approach, which was deemed feasible. Every one agreed that the consortium approach should be "last ditch", and that parallel solutions should still be encouraged.

The four firms met at the Federal Reserve at 7:00 p.m. A draft term sheet was reviewed which provided detail with respect to the consortium approach. The terms and conditions were debated, altered in some places, and ultimately refined so that the four firms could present it to a wider group. Although Federal Reserve officials were present at the meeting, we did not participate in the discussion about terms and conditions.

At about 8:30 p.m., a meeting of a wider group involving 13 firms began. Meanwhile, some representatives of the Core Group called Long-Term Capital to discuss the terms and conditions of the consortium approach. Federal Reserve officials did not participate in any conversations with Long-Term Capital regarding the terms and conditions. In the meeting with the wider group, Peter Fisher explained the importance of avoiding a disorderly close-out of Long-Term Capital's positions. He also underscored the desirability of parallel efforts to resolve the problem. It was agreed that the group would reconvene at 10:00 a.m. the following morning. It was clear to everyone that time was of the essence.

I returned to New York from London around midnight. During the early morning hours, I called various foreign central bank officials to inform them of the situation. At about 9:30 a.m. my colleagues and I met with the Core Group to review the status of the situation. A few minutes before the start of the scheduled 10:00 a.m. meeting, one of the Core Group firms told me that an investor group would make an offer to acquire the Long-Term portfolio. I called one of the representatives of the investor group to confirm this development. The offer was subsequently conveyed to Long-Term Capital by that investor group and a response was requested by 12:30
After a brief consultation with the Core Group, I decided that the effort to proceed with the consortium approach needed to be suspended for a short time until the alternative offer could be considered. As noted earlier, the consortium approach was seen as a "last resort". Consequently, the meeting about the consortium approach was adjourned at about 10:50 a.m., to reconvene at 1:00 p.m.

At 12:30 p.m., I learned that the alternative offer had not been accepted and would not be extended. Shortly after 1:00 p.m., the meeting about the consortium approach resumed. This was now the only solution being pursued. During the next five hours, the private sector participants discussed every aspect of the terms and conditions. At the end of that discussion, 14 banks and securities firms agreed to participate in the recapitalization, with three firms contributing smaller amounts than the other eleven. Two firms declined to participate.

I want to emphasize a few points. First, this was a private sector solution to a private-sector problem, involving an investment of new equity by Long-Term Capital's creditors and counterparties. Second, although some have characterized this as a "bailout", control of the Long-Term Portfolio passed over to this 14 firm creditor group and the original equity holders have taken a severe hit. Finally, no Federal Reserve official pressured anyone, and no promises were made. Not one penny of public money was spent or committed.

**Issues that should concern us**

It is far too early to state categorically the lessons to be learned from Long-Term Capital. What I can say is that we are focused on three specific issues, all relating to leverage and how we are able to observe it through the eyes of our bank examiners. Let me emphasize, yet again, that the Federal Reserve has no regulatory authority over hedge funds and no regulatory authority over Long-Term Capital.

The first issue relates to credit analysis. Our supervisory guidance generally, and with respect to hedge funds specifically, stresses the importance of knowing the borrower and the business purpose of the borrower's transactions. In 1994, the Federal Reserve issued a supervisory letter emphasizing the importance of financial analysis of counterparties, including hedge funds, which can quickly adjust their risk profile. There is a question whether adequate credit analysis was performed by creditors of Long-Term Capital, which needs to be examined carefully during the next few weeks. If credit analysis was deficient, we need to learn how and why before we can make pronouncements that will avoid repetition of our Long-Term Capital experience.

The second issue relates to derivatives activities and a concept called future potential exposure, which is a measure of the likely price movements based on recent years experience. With respect to derivatives, the current market value is captured by financial statements prepared in accordance with generally accepted accounting principles, but not the potential future exposure. To fully understand the degree and effect of leverage in Long-Term Capital's derivatives-related strategies, it would have been necessary to measure the potential future exposure in a rigorous and conservative manner. Whether sufficient information was made available to Long-Term Capital's counterparties, including its banks, and adequately analyzed by those counterparties, remains to be seen.

A third question concerns stress testing in the credit analysis of hedge funds and the structuring of margin agreements. Stress testing simulates the effects on a portfolio if many asset relationships simultaneously move adversely far beyond historical observation. We recognize that stress testing is a developing discipline, but it is clear that adequate testing was not done with respect to the financial conditions that precipitated Long-Term Capital's problems. In a recent supervisory letter on credit underwriting generally, we emphasized the importance of stress testing. Effective risk management in a financial institution requires not only modeling, but models that can test the full range of financial transactions across all kinds of adverse market developments. Whether such models existed and, if so, whether they were effective, are issues that we need to address.

In the aftermath of Long-Term Capital, we need to pursue these leverage-related issues, and others, in conjunction with our colleagues at the Federal Financial Institutions Examinations Council. The insights that we gain should be of value to bank supervisors, and for the study of the Long-Term Capital matter that is to be done by the President's Working Group on Financial Markets, announced by Secretary Rubin last Friday.

I thank you for the opportunity to appear before you this morning.