SPEECH

Fisher: The Extraordinary Events in Credit Markets Over the Last Sixty Days

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Remarks by Executive Vice President Peter R. Fisher before the Robert Morris Association's Conference on Securities Lending When I accepted the invitation to address you, I looked forward to the opportunity to reflect upon the nearly 30 years of the Federal Reserve Bank of New York's involvement in the securities lending business. I thought it would be interesting and useful to address the changes in our securities lending business, the changes we are now planning for our lending operations, and the changes in securities markets over these decades that have made the securities lending business so important to the efficient functioning of our capital markets. However, given the excitement we have all recently been experiencing, I thought it might be somewhat more interesting if instead I focused my remarks more broadly on the extraordinary events in credit markets over the last 60 days and the lessons we are all learning -- once again.

First, we have learned again that markets depend on confidence, not just in the economic outlook of a firm or a country, but confidence in a core set of assumptions about how creditors and debtors will behave.

Second, we have learned another lesson about the "commoditization" of risk.

Third, we have learned again the importance of stress testing as a risk management discipline, of the importance of going beyond value-at-risk estimates based on recent historic data.

Fourth, we have learned once again that lending with no initial or minimum haircut -- no minimum excess collateral -- is not without risks.

And finally, we are learning right now about the difference between risk appetites and risk management.
In suggesting that we are learning these lessons over again, I don't think we should be too embarrassed. Everyone who works for me at the New York Fed knows that I am fond of passing along a saying that my Uncle Leonard picked up from one of his professors years ago that, "the secret of education is redundancy -- and you can say that again." My uncle also recently reminded me of the story of the man who was asked if he had learned from his mistakes. "Yes" he replied, "I have learned from my mistakes and now I can repeat them exactly."

Markets depend on confidence

Since the events of August 17th, when the Russian government effectively devalued the ruble and declared a debt moratorium, we have learned once again that markets depend on confidence in there being an accepted set of norms -- known rules of the game -- that guide the behavior of creditors and debtors, investors and issuers. This is different from the confidence investors and traders may or may not have in the outlook for a given firm or country, which ebb and flow with business prospects and cyclical conditions. Confidence in there being accepted norms of behavior for debtors and creditors is the basic building block -- the platform -- on which traders and underwriters can make individual judgments about how to price an asset to reflect cyclical conditions. The decisions taken by the Russian government, and by the Malaysian government, this past August, altered the assumptions held by global investors and financial intermediaries. With this confidence shaken -- some would say shattered -- we entered an extraordinary period of widening spreads and of volatility in credit markets. The abrupt shift in investor behavior itself served to intensify price movements and undermine confidence in accepted market dynamics.

We have been here before. In the late 1970s, there was a school of lending premised on the assumption that countries never default on their debt. In the early 1980s, we learned that, strictly speaking, this was not true: countries could default -- if not de jure, then certainly de facto. From time to time, countries and governments can and do change the rules of the game and this can be upsetting to markets and market participants, jarring loose the underpinnings on which their asset price judgments are based.

The "commoditization" of risk

We have also learned another lesson about what I call the commoditization of risk. As you and your firms improve your capacity to manage risk on a common basis across different lines of business, losses and gains experienced in one area will more and more quickly change behavior in other areas. This is a good thing, but one that we need to understand better. It is a good thing that firms can manage risk on a comparable basis, more accurately, and more quickly; good because it should strengthen individual firms. But we need to better understand the implications of this for both the theory and the practice of portfolio diversification.

During the Mexican crisis of 1994 and 1995, we heard about the "tequila" effect. As Mexican assets declined in value, assets in many other emerging markets promptly sold off in parallel. To some extent, this was a consequence of nervous investors searching the world for other countries that might be experiencing the same macro-economic stresses as Mexico. However, the more immediate cause of the parallel pressures in other markets was a portfolio effect. Mexican assets were held in emerging market portfolios. As losses in these portfolios mounted, in order to maintain a constant (or perhaps reduced) value-at-risk, portfolio managers needed to reduce risk exposures, leading them to sell not necessarily their riskiest assets but their most liquid ones, regardless of the country.

We have seen this again in 1998. This time, for example, Mexico has been on the receiving end of this portfolio effect; its markets -- deeper and more liquid than those of many emerging economies -- have sold off as portfolio managers sought to rebalance after the events in Russia and Malaysia.

What seems new to me, this time, is the extraordinary speed with which this portfolio rebalancing triggered a sell off in the corporate debt market here in the United States, raising the cost of capital for some American businesses. Initially, this can be seen as a logical extension of the portfolio effect we saw in 1994. Higher-yielding, higher-risk U.S. corporate debt is really just part of a spectrum of credit risk that balance sheets and portfolios are holding, part of a spectrum that included GKOs, Russian bank debt and Malaysian corporate debt. As losses mounted from these overseas exposures, the need to rebalance led to selling of other higher-yielding assets.

However, as this process has continued over recent weeks, it no longer appears to be a mere "rebalancing," motivated by a desire to adjust risk to prudent levels, but has become something of a rush away from risk altogether, a point I will come back to.

For the moment, let me note that the events of recent weeks should serve as a wake-up call for those of us resting easily in our assumptions about the inherent risk-reducing properties of portfolio diversification. What does it mean to be diversified, into different asset classes, if the behavior of portfolio managers is driven by risk management systems that reduce all asset classes to a common metric? If a principal reason to diversify investments is for protection in times of stress, we may need to think about diversification as something that does not only apply to asset types but also to portfolio strategies. Maybe I will only be effectively diversified if I hold a bundle of assets that is unlike the bundles of assets other people are holding.

Again, let me be clear: I am in favor of improvements in risk management systems that allow firms to manage financial risk consistently across business lines. I am not sure that we have yet thought through how this will feed back on the asset selection process.

The importance of stress testing

A third lesson that we are learning over again is the importance of going beyond value-at-risk estimates, based on recent historic data, to "stress test" portfolios against the risks of outsized movements in asset prices.

If, on August first of this year, one had looked back at five years of historic data on fixed-income market yields and spreads, one would not have anticipated either the size or the correlation of the movements in credit spreads that, in fact, subsequently occurred in August and September. The past is always an imperfect prologue, especially when we rely on it too narrowly. The lesson that fixed-income markets are now learning over again is that markets that have not previously been correlated can suddenly become correlated; that trends that have been underway for several years eventually come to an end; and that spreads that have been consistently narrowing for years can suddenly widen. For all these reasons, portfolio managers need to expect the unexpected, and stress test their portfolios against the risks of sudden jumps in asset prices and in the relationships among asset prices.

Stress testing alone, however, -- if it is only a theoretical, number-crunching exercise divorced from the messy reality of trading and settlements -- may create its own problems. I am sure most portfolio managers know the potential impact of one- or two-standard-deviation moves in their asset values and of simultaneous one- or two-standard-deviation moves in previously-uncorrelated assets. Some portfolio managers may have contemplated the potential impact of three- and four-standard-deviation moves on their assets. But even if one had run stress tests of the impact of three-, four-, or five-standard-deviation moves, what assumptions were made about the bid-ask spreads that would exist in markets after they have experienced such outsized shocks? We know that the bid-ask spreads will not be "normal" and in the last few weeks we have some experience that the thinning out of markets will lead to further movements in the asset prices themselves.

This is really just a fancy way of saying that we are learning again the lesson that markets are subject to liquidity illusions; that <u>each</u> trader may be able to exit a position when he or she wants, but that <u>all</u> traders cannot exit their positions at the same time.

As a practical matter, no one can be expected to manage a portfolio on the assumption that a Russia will default once a month. As Chairman Greenspan recently noted, returning to the 30-percent-plus capital ratios of the 19th century might make financial institutions stronger, but it would also have consequences on rates of growth and standards of living that we might find less agreeable.

But we all probably need to study the distribution of outcomes a little more carefully to understand the structure of the tails--whether fat or thin. A common assumption is that thin tails should not worry us; but perhaps, for example, a thin tail may tell us that a six-standard deviation move is as likely as a three-standard deviation move. This is something that should give us pause.

My main point, however, is that the discipline of stress testing needs to encompass both the outlandish and the practical: outlandish in pushing the bounds of the unexpected and practical in relating "what if" scenarios back into the real world of trading and bid-ask spreads.

Initial and minimum haircuts are a good idea

A fourth lesson we have learned again is that lending cash with no initial or minimum haircut on the collateral is risky. For securities lenders like yourselves, re-investment of cash collateral may involve such risks. Relying solely on daily variation margin has a certain elegance: the relationship is reciprocal and so are the cash flows. However, this elegance is more elusive in times of stress. There is the small problem that margin calls occur the day after the marking of the asset. So receipt of the needed collateral is always a day or two behind market movements. When the good times roll, and asset values are rising, it may seem ungentlemanly to worry over trifles such as these. After all, in this case, the added delay generates "float" in the cash lenders' favor. However, when asset values fall for persistent periods, lenders are suddenly reminded that the sum of several days' price movements can be greater than those of a single day.

Conventional initial and minimum haircuts, of course, reflect only the crudest value-at-risk estimates and stress testing. They should be based on a firm's estimate of its potential exposure to a one-, two- or three-day move in the asset's value -- whatever the horizon over which they need to protect against the counterparty's default.

In a sense, this fourth lesson is just an example of the third: that we need to make sure that risk management, in general, and stress testing, in particular, are brought down into the real world of both trading <u>and</u> settlement. However, given what I perceive as the <u>folly</u> of lending with no initial or minimum haircut, I thought this one deserved its own place among the mistakes we are learning to "repeat exactly."

Sustainable risk management practices

Finally, in these past few weeks we are learning, yet again, that there is a big difference between risk appetites -- whether rising or falling -- and prudent risk management.

The gorging on risks that characterized some market participants' behavior over recent years has given way to a sudden aversion to risk, as risk appetites disappear. However, clearly during a period of indigestion, doctors may recommend moderate intake, but they rarely recommend starvation diets. Indeed, it seems we confront something a good bit riskier than a simple case of indigestion. With a pell mell rush to avoid risk altogether, to swear off ever lending on such generous terms again, I detect at least some of the symptoms of bulimia. As a consequence, we face the prospects not just of a few days indigestion but of ulcers and of some strain to the whole system.

During your meetings here at the conference, and when you return to your firms, I urge you to focus your efforts on what I would call "sustainable prudence" in your risk appetites and in your risk management practices. If your firm's credit management policies have not been ones that you are sufficiently proud of to have the rest of us read about them on the front page of the business press, then perhaps you ought to develop new ones that meet that test. But I would hope that your new credit practices -- and any other changes in your risk management policies -- will be sustainable, reflecting levels of prudence appropriate for a full range of market conditions. I hope that you would be proud to have us read about such practices on the front page both a week from now, and also a year from now.

I also hope that you would include procedures that force you to reflect continuously on the lessons we are all learning, over and over again, in the rolling experiment of our capital markets. Maybe then we will all be able to move on to some new mistakes. If we can do that, we will have really accomplished something.