SPEECH

Fisher: Views on the Repo Market

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Peter R. Fisher, Manager of the System Open Market Account
and Executive Vice President

Remarks by Executive Vice President Peter R. Fisher before the PSA's Second Annual Repo and Securities Lending Conference I am pleased to have the opportunity to speak to you this afternoon on some of my views on the repo market and I would like to thank the PSA for inviting me.

Last October I delivered a speech on the specials market which received a fair amount of attention within the dealer community. I understand that a copy of this speech has been included in your conference materials, so I'm not going to repeat the details of what I said about the New York Fed's approach to monitoring the government securities market for signs of manipulation.

What I intend to do, and what I hope you find interesting -- or at least helpful -- is, first, to take a step back and give you a sense of the New York Fed's particular interests in the repo market as well as some of my own thoughts about the efficiency of the financing market and then, secondly, to answer some of the particular questions that have come up in response to my speech last October.

The market for repurchase agreements on U.S. government securities is of vital importance to the New York Fed, and the whole Federal Reserve System, because it is where virtually all of our monetary policy operations are conducted. The depth, liquidity and efficiency of this market matters to us, not just because we like efficient markets as a general public policy goal but because we operate in this market. The greater the depth and liquidity of the repo market, the greater is our flexibility in conducting operations on behalf of the Federal Open Market Committee.

In order to utilize better the depth of the repo market, at the start of this year we moved our normal operating time one hour earlier. Over recent years, and particularly following the introduction of daylight overdraft pricing by the Fed, activity in the repo market has been shifting to earlier in the morning. Our normal 11:30 to 11:45 a.m. operating window left us entering the market when many dealers had already completed their financing. I recognize that our new operating time of 10:30 to 10:45 a.m. is still after the deepest part of the day, but even this small step has roughly doubled the quantity of propositions we receive from the dealers. When the Fed's and the Treasury's accounting and information systems permit us to gather and analyze the overnight reserve data more efficiently, it's my hope we will be able to operate even earlier.

While the smooth functioning of the general collateral market is very important for the Fed's operations, the overall efficiency of the financing market for specific issues is of interest to us as well.

The repo market for specific issues plays a crucial role in the price discovery process in the cash market. Because of the growth of the specials market in terms of depth, liquidity and efficiency, it is heavily relied upon as a flexible means of managing short positions in the cash market. The specials market's ability to function smoothly is critical in supporting the depth and liquidity of the Treasury cash market as it affords participants the ability to be nimble with both short and long positions.

While we share with you a broad interest in the efficient functioning of the repo market, there is an important sense in which our interest in the efficiency of the market diverges from that of the individual repo trader. This is the sense in which traders prosper as a consequence of the *in*efficiency of a market, resulting from an inequality in the distribution of knowledge about current prices, demand and supply conditions, or other relevant news or information.

However, even from an individual trader's view point, but certainly at the level of the entire firm, there is something of a dynamic tension between short-run and long-run interests. While it is in your firms' interests for the market to be "inefficient enough" to provide sufficient profit opportunities, it is also in your interest that the market *not* be "*so* inefficient" as to keep out other participants and customers because of extreme inequalities in the distribution of information or market power.

Bluntly put: aggressive trading of the specials market occurs right at the cusp between the inefficiencies that draw intermediaries into the financing market and the inefficiencies that may repel end-users. This is what makes the issue of specials trading so difficult for all of us.

However, looked at another way, specials trading is not so different from the trading of any financial instrument.

Where risk-management systems have not been developed to map accurately the costs and risks of a position as well as its rewards, individual traders have excessive incentives to risk their firm's capital in pursuit of their own bonuses. In many instruments, firms have developed the capacity to track the opportunity costs and risks of traders' positions so that these can be managed within prudent limits and traders can be rewarded for the net benefits of their activities. It is my sense, however, that still -- at a number of firms -- this level of precision has not yet been applied to repo trading.

When a trader takes a large position in an issue trading deeply on special and finances this at general collateral rates away from the specials market, in the hope of driving the issue further on special in order to be able to extract a greater profit on a subsequent day, at what level of the firm's management is the added cost of financing the position observed? To whom is this cost charged, in the first instance? Is this cost deducted from any subsequently-earned profits in assessing the trader's performance? Does the cash desk or the financing desk carry this cost of financing in its daily P & L? Which desk has the incentive to finance at the lowest cost and which has the incentive to profit from any subsequent movement in the issue's cash price?

If management only applies the general collateral rate as the benchmark in assessing the performance of repo traders and financing desk activity, without regard to the specific specials rate at which securities held are trading, traders will have *in*sufficient incentives to minimize their firm's financing costs. They will tend to withhold collateral from the specials market when providing it might have been rational from the firm's perspective -- passing up the sure thing of lower financing costs today for

the possibility of a better rate on a subsequent day.

It is at this point that "aggressive" trading of the specials market becomes problematic. Normally, we think of any trading as being efficiency enhancing, in the sense that active arbitrage removes pre-existing inefficiencies. However, where aggressive positioning and trading in the specials market creates or sustains scarcity values that would have otherwise been arbitraged away, we then have the situation where the trading activity itself is detrimental to the market's efficient functioning.

I don't want for a minute to suggest that we, in the official sector, can or should tell you what are the correct positions to take or the right amount of risk to incur. But we can remind you of the importance of good risk-management systems and that is why I have focused our efforts over the last several months on encouraging firms to take a second look at how their risk-management systems are applied to repo market activity.

Let me turn, more specifically now, to some of the questions that have come up in response to the framework I spelled out last fall. As I mentioned then, based on both our experience in monitoring the government securities market and our review of the economic literature, we identified three parameters which, taken together, can be used as an early warning sign to assess whether a firm MAY BE inappropriately using its position in a particular security.

Position size we define, in terms of an overall long position, as the sum of the firm's cash and net term repurchase agreement positions, as a share of the outstanding amount of the public's share of an issue.

Transaction volume we measure in terms of a firm's turnover in the specific issue, and we also focus on some qualitative issues such as how, when and with whom transactions are conducted.

The specials rate for a specific issue is the interest rate at which that security trades in the financing market, which we assess relative to the normal pattern or cycle for that issue or issues of similar maturity.

These are the factors we look at in monitoring the market on behalf of the Federal Reserve System, the Treasury, the CFTC and the SEC. Taken together, different patterns of values for each of these factors can indicate the possibility that someone may be trying to use his or her position in a particular security to manipulate the market.

When I spelled these out last fall, I did not mean to announce a new jurisprudence of antitrust law as applied to fixed-income markets. Nor was I leaking new market enforcement regs.

Rather, having thought long and hard about the problem of how to identify POSSIBLE manipulative behavior, it seemed to me that it would be helpful to state publicly what it is that we think we are looking for. If I want to encourage institutional participants in the government securities market to avoid behavior that we think is detrimental to the market as a whole, it seemed like something of a minimum requirement to at least suggest what that behavior might be.

What I said last fall, and want to say again very clearly, is that, in using these three factors in our market surveillance efforts, we will *begin to focus our attention* when, in issues that are trading *deeply and persistently on special*, we see *persistently-maintained* large positions. However, our *concerns will become most acute* when, in issues that are trading *deeply and persistently on special*, we see *persistent patterns of large position size and high shares of turnover.*

Many of the questions we have received about our approach have focused on just one or another of the three factors and have reflected a concern that, by itself, an elevated value would not indicate anything about an attempt to manipulate the market. That's exactly right. One needs to look at all of these variables at the same time to find patterns that may be suggestive of an attempt to manipulate the market.

Let me suggest that, in tracking your own or your firm's behavior, you can think of the factors we have spelled out as falling into a two-step analysis.

First: Is a particular CUSIP trading *deeply and persistently on special?* That is, over a number of days, is a security consistently trading at levels approaching the fails rate when one would otherwise not have expected such a scarcity value for that security?

Second: Is there a *persistent pattern,* over a number of days, of the trader's or firm's *position size, type of financing arrangements,* and *share of turnover* which could maintain the security's scarcity value -- at levels not reflective of overall supply and demand conditions -- and ultimately extract that value from other market participants?

A large, long position, by itself, may not be a matter for concern if there does not appear to be any impediment to active trading in the issue by other firms. Thus, a security could be trading deeply on special, and a given trader might have a considerable, long position, but if there are a number of other market participants actively trading the issue, the fact of a large, long position does not indicate whether the holder of that long position is doing anything untoward.

One source of concern is when a large, long position holder withholds its position. One has to ask oneself: why isn't the trader putting his or her position out into the specials market? Wouldn't that lower his or her financing costs? Maybe there's a good reason, and maybe there's not.

If there's not a good reason -- that is, if the trader is trying to withhold collateral only to drive up the scarcity value of the security and drive down the specials rate -- we would then know that he or she is attempting to manipulate the market but we still don't know yet whether the strategy is successful. If turnover is fairly evenly distributed among a number of firms, then the market may still be functioning well.

In order to be able to extract the scarcity value which the trader has sought to create, at some point the trader's activity will have to become a significant share of turnover in the issue. From our experience, and consistent with the economic literature, active trading is a necessary component of exercising market power and unless a trader or firm is capable of maintaining a significant share of transaction volume, it is unlikely to be able to extract the scarcity value from other market participants.

A decline in the transaction volume of other market participants in a specific issue is likely also to be a sign of unwillingness on their part to trade in that issue, as a consequence of the concentrated control of the available supply. This is the point at which we become most concerned.

While I clearly hope that trading management, compliance efforts and risk-management systems can focus on the potential abuses that can result from large, long positions, at the same time I think more attention could also be addressed to the management of short positions.

Those holding or building short positions in specific issues also have some responsibility to promote the efficient functioning of the repo market. Holders of short

positions should, to the extent possible, make prior arrangements to secure collateral when conditions appear congested. They also can use term financing to help ensure that deliveries can be made. Just as management could better monitor the extension of long positions, so too could management limit the extension of short positions into problematic territory.

The market will function most efficiently when there is a healthy competitive dynamic between the risks of holding long and the risks of holding short positions, between the risks of withholding collateral and the risks of failing to deliver.

In publicly spelling out the factors we look at in monitoring the risk of manipulative behavior in the financing market, I have hoped to engage you -- the market participants -- in the process of helping to maintain this competitive dynamic. Our interest in preserving the efficiency of the financing market seems to me to be entirely consistent with good business practice on your part in avoiding trading behavior which may be problematic. In an area where there is very little legal guidance or scholarship, we all share the burden of minimizing the risks that possibly-manipulative behavior may subsequently be found to be illegal rather than merely detrimental to market efficiency.

While we think that we have identified the key factors that need to be considered, we recognize that there are no simple formulas or limits that can be applied to tell us exactly where the appropriate competitive balance will be for a particular security on any particular day. That's your job.