

# Quantitative Portfolio Strategy

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## CORRELATION OF SWAP SPREADS AND CREDIT SPREADS—AN UPDATE

The emerging market crisis of 1998 dramatically increased the liquidity premium commanded by U.S. Treasuries. Further complicating matters was the Treasury's buyback announcement in 2000. As a result, the behavior of Treasury prices became very idiosyncratic, which, in turn, made credit spreads to Treasuries much more volatile than they had ever been.

The increased volatility of spreads to Treasuries encouraged traders and investors to start hedging their credit exposures with interest rate swaps rather than Treasuries. In addition, spreads to swaps became a relative value indicator. A widening of credit spreads to swaps got to be viewed as a cheapening signal encouraging buying interest which would tend to offset the initial spread widening. This change brought participants in the credit markets and swap markets closer together. Not surprisingly, swap spreads and credit spreads became much more correlated than before.

Figure 1 illustrates this increase in the correlation of swap spreads and credit spreads. Swap spreads are measured as the average of the 5- and 7-year swap spreads to the off-the-run Treasury par curve. The credit spreads are represented by the average OAS over Treasuries of the 5- to 10-year credit index (bullets only). The correlation coefficient plotted in the figure is the trailing three-year correlation of the monthly changes in the difference between swap and credit spreads.

As the graph shows, the correlation of swap and credit spreads increased sharply after mid-1998, rising from approximately 40% to roughly 70%. The correlation has remained at this higher level until recently when it fell back down to the level that prevailed before the crisis of 1998. Perhaps the reduced fear of a future shortage of Treasuries, combined with the market's earlier adjustment to an envisaged world without Treasuries, have caused the swaps and credit markets to de-couple, as traders and investors have returned to the Treasury market as a hedging and relative value tool.

Figure 1. **Correlation of Swap Spreads and Credit Spreads**  
3-year Trailing Correlation, June 1992-September 2001

