available, the notional principal outstanding for OTC derivatives instruments was about U.S. $5.3 trillion.[5] By comparison, at the end of 1993, all bonds, notes and other debt securities of all public and private sector borrowers in domestic and international securities markets (excluding any derivative products) amounted to $19.3 trillion.[6]

So why is it that derivatives receive so much (mostly negative) attention? It is a combination of the size and rapid growth of the market, the possibility of using derivatives with a great deal of leverage[7], the idea that they are largely unregulated (at least in OTC markets), the fact that they can be made exceedingly complex and the fact that there are only a few firms that dominate the market. With these considerations in mind, we return to the concerns of volatility and systemic risk.

The First Concern: Excess Financial Market Volatility
What, If Anything, Should Be Done?

The Tobin Tax

An old idea that is receiving renewed attention in terms of reducing excess volatility in financial markets, and particularly foreign exchange markets, is that of a transactions tax, or what has come to be known the Tobin tax.[8] It is argued that a small tax on each financial market transaction -- including the exchange of derivatives -- would reduce speculation, thereby reducing volatility and improving the efficiency of financial markets.

The credit risk is only a small fraction of the notional amount.

[5] See Bank for International Settlements, *op.cit.*, p. 112.

[6] See Bank for International Settlements, *op.cit.*, p. 111.

[7] A simple example illustrates the leverage possible with derivatives. Rather than purchasing an asset, an investor can purchase a call option on an asset that he/she believes will increase in price. A call option allows the holder to purchase a fixed quantity of an asset at a fixed price on or before a specified expiration date. The price of the option is a fraction of the asset price, but, if the asset price rises, the holder of the option is able to accrue profits as if he/she actually held the asset.

[8] For discussions of transaction taxes, see C.S. Hakkio, "Should We Throw Sand in the Gears of Financial Markets?", in *Economic Review,* Vol. 79, No.2, Federal Reserve Bank of Kansas City, Kansas City MO, Second Quarter 1994, pp. 17-30; V.G. France, L. Kodres and J.T. Moser, "A Review of Regulatory Mechanisms to Control the Volatility of Prices", in *Economic Perspectives*, Vol. 18, No. 6, Federal Reserve Bank of Chicago, Chicago IL, November/December 1994, pp. 15-25; B. Eichengreen, J. Tobin, and C. Wyplosz, "Two Cases for Sand in the Wheels of International Finance", in *The Economic Journal,* No. 105, Blackwell Publishers, Oxford U.K., January 1995, pp. 162-72; and P. Garger and M.P. Taylor, "Sand in the Wheels of Foreign Exchange Markets: A Sceptical Note", in *The Economic Journal,* No. 105, Blackwell Publishers, Oxford U.K., January 1995, pp. 173-80.