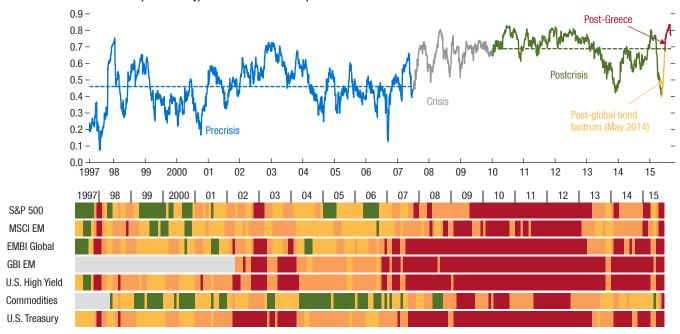
Figure 1.17. Potential Amplifiers of Market Stress

Asset correlations have increased in the postcrisis era, reflecting a rise across most major asset classes.



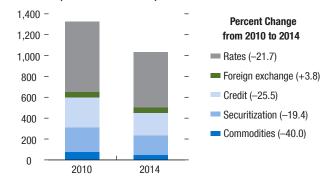


Sources: Bank of America Merrill Lynch; Bloomberg, L.P.; and IMF staff estimates.

Note: The correlation index summarizes the median daily cross-asset correlations of Sharpe ratios across all of the following asset classes: U.S. Standard & Poor's 500, MSCI Emerging Markets, U.S. Treasuries, EMBI Global Bond Index, GBI Emerging Markets Bond Index (local currency), U.S. High Yield, and Commodities. The heat map displays the underlying median correlation for each of the seven asset classes against the remaining six asset classes. The correlation of U.S. Treasuries, being a "risk-free" asset, is expressed in absolute terms, as it is typically negative vis-à-vis risk. Correlation key: green 0.00–0.30; yellow 0.31–0.50; orange 0.51–0.65; and red 0.66–1.00.

Liquidity has declined as broker-dealers have retreated from market-making activities...

2. Fixed-Income Trading Assets for Top U.S. Banks (Billions of U.S. dollars)

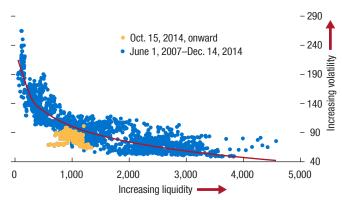


Source: Goldman Sachs.

Note: Data for 2014 are average of first three quarters.

...while volatility appears to rise as market depth declines.

## 3. U.S. Treasury Market Depth and Volatility



Sources: Bloomberg, L.P.; BrokerTec; JPMorgan Chase & Co; and IMF staff calculations.

Note: Volatility is proxied by the Merrill Lynch Option Volatility Estimate (MOVE) index, which is a yield-curve-weighted index of normalized implied volatility on three-month Treasury options. Market depth, defined as the sum of the three bids and offers in on-the-run two-year Treasuries (average between 8:30 a.m. and 10:30 a.m. each day), is measured in millions of U.S. dollars.