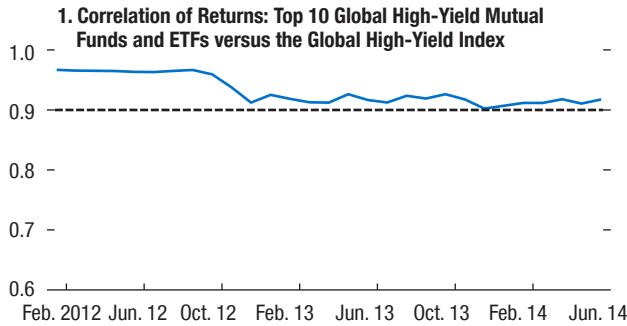


Figure 1.23. Liquidity Risk Amplifiers

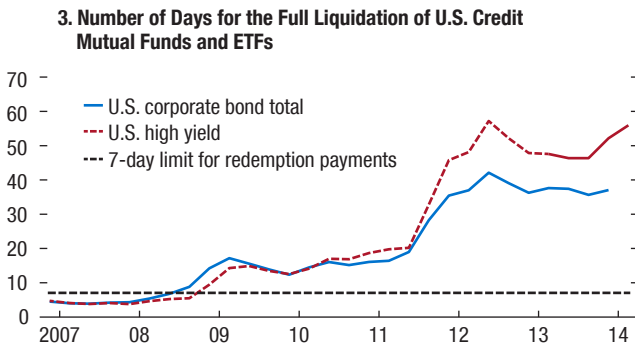
The benchmark-centric nature of mutual funds and ETFs fuels high correlations...



Sources: Bank of America Merrill Lynch; Bloomberg L.P.; EPFR Global; and IMF staff calculations.

Note: Twelve-month rolling correlation of the returns of the top 10 global high-yield mutual funds as measured by assets under management. ETF = exchange-traded fund. Dashed line shows a correlation of 0.9.

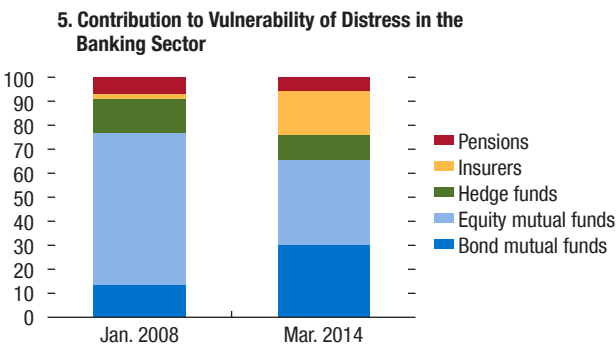
Liquidity mismatches are rising, as redemption-prone vehicles invest in less liquid assets...



Sources: EPFR Global; Federal Reserve; and IMF staff calculations.

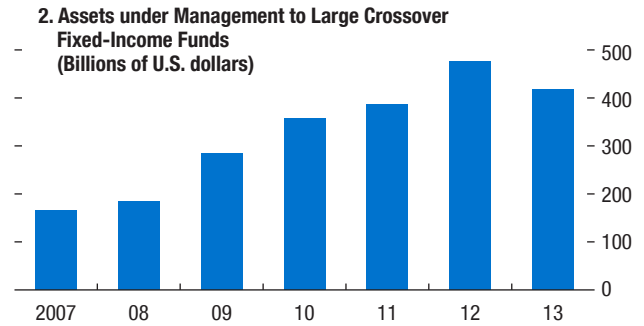
Note: The number of days to liquidate is the ratio of assets of mutual funds and ETFs (exchange-traded funds) per daily dealer inventories. Under the Investment Company Act of 1940, Section 22(e), U.S. open-end mutual funds may not postpone the payment of redemption proceeds for more than seven days following receipt of a redemption request. Because there are no data for U.S. high-yield bond dealer inventories before April 2013, the dashed red line assumes a constant ratio of this amount to total corporate bonds before this date.

Bond mutual funds are now more highly interconnected with the banking system...



Source: Segoviano and others (forthcoming).

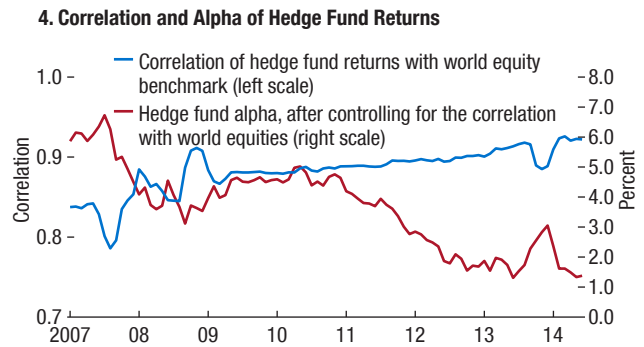
...which are amplified by the reported rise in synthetic leverage by large crossover mutual funds.



Sources: Bloomberg L.P.; EPFR Global; and IMF staff calculations.

Note: Sample of mutual funds with unconstrained mandates across fixed-income sectors and with assets under management exceeding \$5 billion.

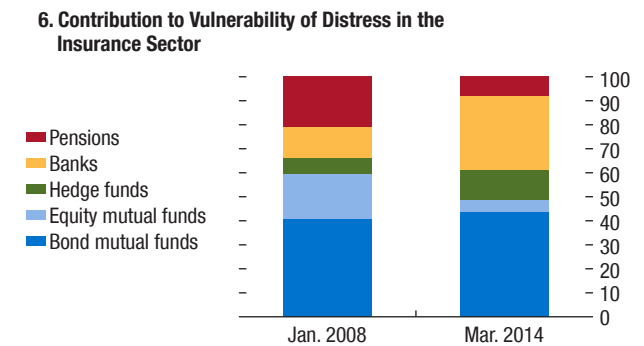
...with hedge funds less likely to take short positions and provide liquidity during stressed markets.



Sources: Bloomberg L.P.; Hedge Fund Research; and Morgan Stanley Capital International.

Note: Monthly returns measured over a rolling five-year observation window. Hedge fund returns are based on the Hedge Fund Research Fund-Weighted Composite Index.

...and with the insurance sector.



Source: Segoviano and others (forthcoming).