

A paradox has emerged in the financial markets of the advanced economies since the 2008 global financial crisis. Unconventional monetary policies have created a massive overhang of liquidity. But a series of recent shocks suggests that macro liquidity has become linked with severe market illiquidity.

Policy interest rates are near zero (and sometimes below it) in most advanced economies, and the monetary base (money created by central banks in the form of cash and liquid commercial-bank reserves) has soared – doubling, tripling, and, in the United States, quadrupling relative to the pre-crisis period. This has kept short- and long-term interest rates low (and even negative in some cases, such as Europe and Japan), reduced the volatility of bond markets, and lifted many asset prices (including equities, real estate, and fixed-income private- and public-sector bonds).

And yet investors have reason to be concerned. Their fears started with the “flash crash” of May 2010, when, in a matter of 30 minutes, major US stock indices fell by almost 10%, before recovering rapidly. Then came the “taper tantrum” in the spring of 2013, when US long-term interest rates shot up by 100 basis points after then-Fed Chairman Ben Bernanke hinted at an end to the Fed’s monthly purchases of long-term securities.

Likewise, in October 2014, US Treasury yields plummeted by almost 40 basis points in minutes, which statisticians argue should occur only once in three billion years. The latest episode came just last month, when, in the space of a few days, ten-year German bond yields went from five basis points to almost 80.

These events have fueled fears that, even very deep and liquid markets – such as US stocks and government bonds in the US and Germany – may not be liquid enough. So what accounts for the combination of macro liquidity and market illiquidity?

For starters, in equity markets, high-frequency traders (HFTs), who use algorithmic computer programs to follow market trends, account for a larger share of transactions. This creates, no surprise, herding behavior. Indeed, trading in the US nowadays is concentrated at the beginning and the last hour of the trading day, when HFTs are most active; for the rest of the day, markets are illiquid, with few transactions.

A second cause lies in the fact that fixed-income assets – such as government, corporate, and emerging-market bonds – are not traded in more liquid exchanges, as stocks are. Instead, they are traded mostly over the counter in illiquid markets.

Third, not only is fixed income more illiquid, but now most of these instruments – which have grown enormously in number, owing to the mushrooming issuance of private and public debts before and after the financial crisis – are held in open-ended funds that allow investors to exit overnight. Imagine a bank that invests in illiquid assets but allows depositors to redeem their cash overnight: if a run on these funds occurs, the need to sell the illiquid assets can push their price very low very fast, in what is effectively a fire sale.

Fourth, before the 2008 crisis, banks were market makers in fixed-income instruments. They held large inventories of these assets, thus providing liquidity and smoothing excess price volatility. But, with new regulations punishing such trading (via higher capital charges), banks and other financial institutions have reduced their market-making activity. So, in times of surprise that move bond prices and yields, the banks are not present to act as stabilizers.

In short, though central banks' creation of macro liquidity may keep bond yields low and reduce volatility, it has also led to crowded trades (herding on market trends, exacerbated by HFTs) and more investment in illiquid bond funds, while tighter regulation means that market makers are missing in action.

As a result, when surprises occur – for example, the Fed signals an earlier-than-expected exit from zero interest rates, oil prices spike, or eurozone growth starts to pick up – the re-rating of stocks and especially bonds can be abrupt and dramatic: everyone caught in the same crowded trades needs to get out fast. Herding in the opposite direction occurs, but, because many investments are in illiquid funds and the traditional market makers who smoothed volatility are nowhere to be found, the sellers are forced into fire sales.

This combination of macro liquidity and market illiquidity is a time bomb. So far, it has led only to volatile flash crashes and sudden changes in bond yields and stock prices. But, over time, the longer central banks create liquidity to suppress short-run volatility, the more they will feed price bubbles in equity, bond, and other asset markets. As more investors pile into overvalued, increasingly illiquid assets – such as bonds – the risk of a long-term crash increases.

This is the paradoxical result of the policy response to the financial crisis. Macro liquidity is feeding booms and bubbles; but market illiquidity will eventually trigger a bust and collapse.