

Deutsche Bank: Why The Fed Can't Ignore Treasury Market Illiquidity

An attempt at measuring liquidity in the Treasury market

by Tracy Alloway - April 23, 2015 — 5:29 PM EDT

On October 15, Wall Street let out a collective gasp as yields on U.S. government bonds veered wildly. For minutes, sellers appeared to simply step away from the market - leaving the yield on the benchmark 10-year Treasury to plunge 33 basis points before rising to settle at 2.13 percent.

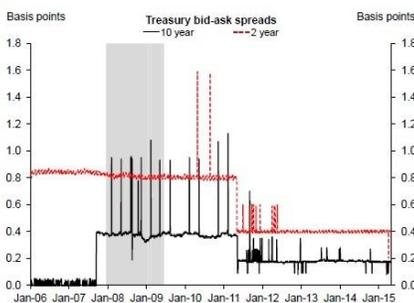
Concerns over liquidity in U.S. Treasuries have subsequently bubbled over with the International Monetary Fund, JPMorgan chief executive Jamie Dimon and plenty of others all sounding the alarm about the ability of the \$12 trillion market to withstand a sell-off.

The difficulty is that liquidity has never been an easy concept to define and it's become even more difficult to do so in recent years as investors have rarely chosen or needed to offload their securities. In one-way markets where demand for bonds has been nothing but good, it's been difficult to test whether dire warnings of liquidity are well-founded.

Deutsche Bank analysts - bless 'em - gave the challenge of quantifying the market's ease of trading one more go this week. In fact, in research led by economist Peter Hooper, they briefly attempt to go even further by quantifying the *effect* that a potential lack of liquidity in the US bond market *might* have on the country's economic activity.

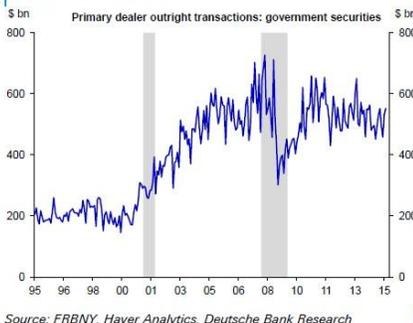
While there's plenty of anecdotal evidence that trading has become more difficult, conventional measures of liquidity such as bid-ask spreads and basic trading volume suggest there is little amiss in the market for US government debt.

Chart 3: Bid-ask spreads low and stable



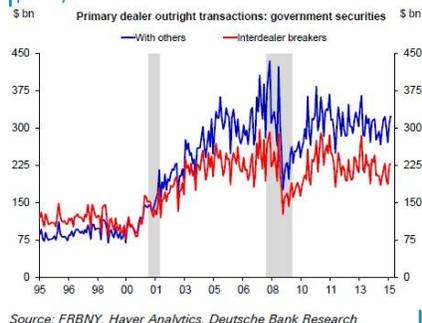
Source: Bloomberg Finance LP, Deutsche Bank Research

Chart 4: Primary dealer trading volumes stable...



Source: FRBNY, Haver Analytics, Deutsche Bank Research

Chart 5: ...also stable by counter-party



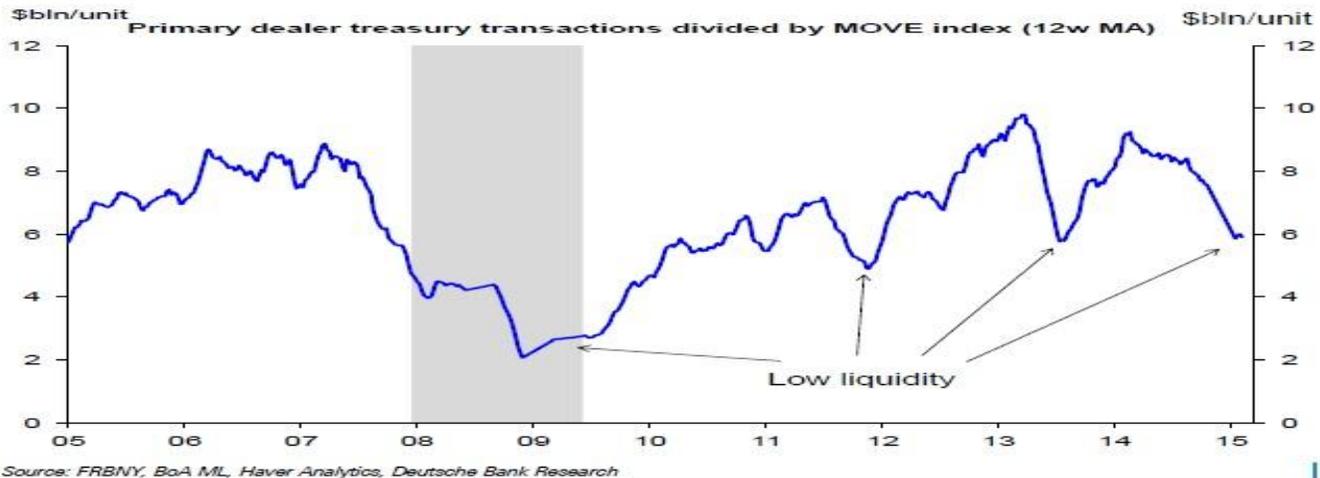
Source: FRBNY, Haver Analytics, Deutsche Bank Research

Deutsche Bank charts

There is, however, some data showing that liquidity has become more of an issue when investors trade bonds in larger sizes. Here's the Deutsche chart showing primary dealer trading volume divided by the MOVE index of Treasury volatility. As the line goes lower there is a *smaller* amount of bonds being traded against *more* market volatility.

While the Deutsche Bank analysts caution that it's difficult to untangle cause and effect here, there is a trend:

Chart 12: It has become more difficult to transact in size – primary dealer trading volume has fallen relative to the MOVE index



We emphasize, however, that it is unclear the direction of causality in this metric. Is it that lower liquidity is causing volatility to be higher for any given amount of trading activity? Or is it the case that spikes in volatility cause reductions in trading volume? Regardless, **the fact that this metric has fallen into the lower range of readings over the past ten years - outside of the very low readings during the crisis - suggest that recent movements in volatility have come amid relatively subdued trading volumes.**

As for the economic impact of a *potential* dearth of liquidity, it's not exactly clear:

We have made some preliminary attempts to quantify the impact of market Treasury market illiquidity on the real economy. Specifically, we modeled the statistical interaction between our measure of Treasury market liquidity with other financial and real variables such as the S&P 500, industrial production and employment growth in a vector autoregression. **This approach did not uncover a statistically significant effect on the real economy from declines in our market liquidity measures. Interestingly, this also appears to be an understudied question in the academic and policy literature, at least according to our reading of the literature, with little direct evidence available linking fixed income market illiquidity to changes in the real economy. The lack of evidence for this link should not be taken as evidence that market liquidity does not matter for the real economy or the Fed. Indeed, if market illiquidity amplifies the market response to shocks and raises volatility, then there should be some impact on the real economy.**

While there is growing evidence of illiquidity in these markets, so far at least, this has not translated into broad market impairment. But liquid markets could quickly turn illiquid in response to a shift in Fed policy or some other shock, which could amplify any adverse market response, as occurred during the taper tantrum. As such, we do not think the Fed can ignore potential issues with market illiquidity simply because they are difficult to quantify. But (we admit that) it is difficult to re-calibrate a policy response to acknowledge a factor whose impact on the real economy is unknown. Therefore, **just as the Fed has resisted some calls to include financial stability considerations more directly in their reaction functions, we expect they will similarly resist factoring concerns about market liquidity directly into their policy decisions.**

Add uncertainty over the true state of market liquidity to the rather long list of potential pitfalls that the US central bank faces as it prepares to raise rates for the first time almost a decade.