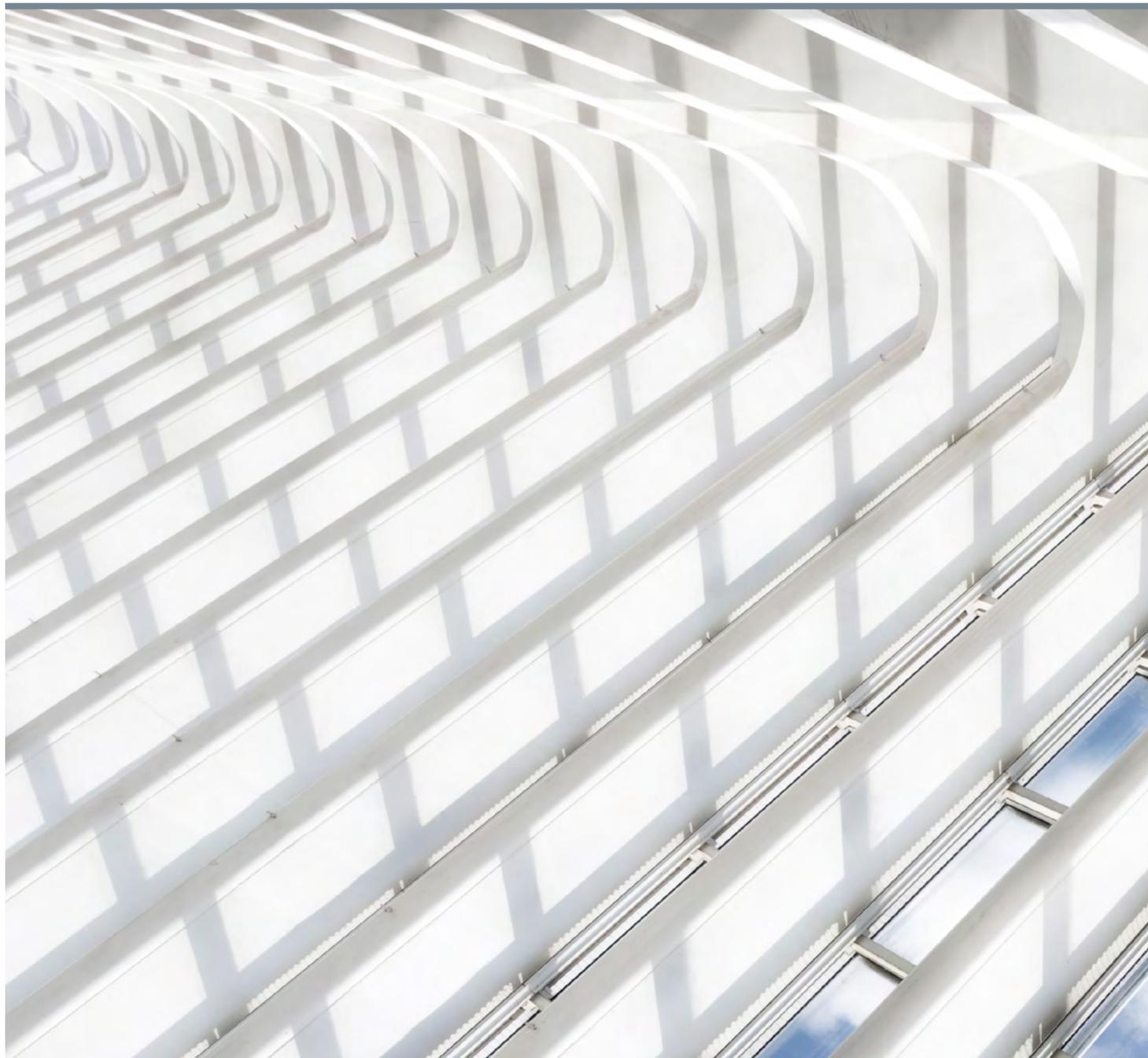


# Global. Liquidity. Management.

The New Liquidity Paradigm: Market Liquidity Deterioration



Global Asset  
Management

# The New Liquidity Paradigm

## Market Liquidity Deterioration

In the years following the financial crisis, Wall Street began adjusting to new regulations aimed at reducing risk within financial institutions. These regulations promised to make banks safer and to reduce the probability of another financial crisis. But there are consequences. Some regulations imposed higher capital requirements, changing the attractiveness of entire business lines. Pullbacks in fixed income markets caused fundamental changes in the way these markets operated. The result has been lower liquidity. This change in the market is highlighted by incidents like the “flash crash” and the recent turmoil of high-yield funds. All investors are impacted by the new realities of liquidity. Understanding the issues and shortcomings of the new market structure is critical in trying to avoid the new liquidity pitfalls.

### Understanding Liquidity

Liquidity is the ability to convert securities into cash, and vice versa. While investors typically focus on the cost of, and time required to convert to cash, liquidity can be broken down into four primary aspects: tightness, depth, immediacy and resiliency (Exhibit 1).

**Exhibit 1**  
Aspects of Liquidity

<b>Tightness</b>	Cost of transacting; often referred to as bid/ask spread
<b>Depth</b>	Size of transaction that can be absorbed without affecting prices
<b>Immediacy</b>	Speed at which orders/trades can be executed
<b>Resiliency</b>	Ease with which prices return to ‘normal levels’

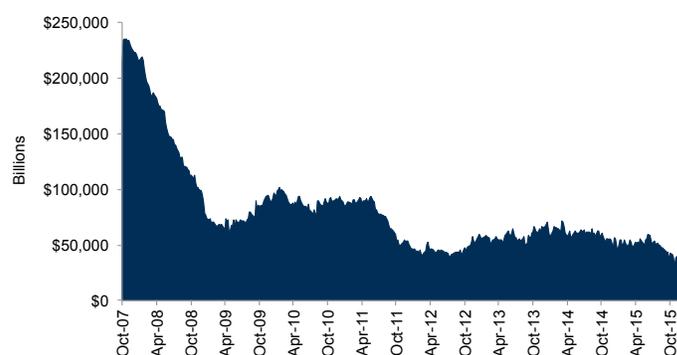
Fixed income transactions occur over-the-counter and not on an exchange. Exchanges require a limited number of homogenous securities and have designated market makers. The fixed income market has millions of unique securities requiring negotiated transactions. Through market making, warehousing (inventory) and matching buyers and sellers, broker-dealers historically dictated all four primary aspects of liquidity.

### The Effect of Regulation on Liquidity

Liquidity has been most affected by the Volcker Rule, and Basel III’s liquidity and capital rules. Repurchase transactions are also in decline due to stricter capital requirements. All of these regulations have reduced the amount of capital that normally provided a seamless trading flow to the fixed income markets. The reduction of dealer balance sheets and disappearance of proprietary trading desks has removed the marginal buyer in times of stress. These desks would typically act as an accordion in volatile markets, absorbing supply and buffering prices. Lower inventories and fewer participants have increased price volatility in times of stress and made transacting more difficult.

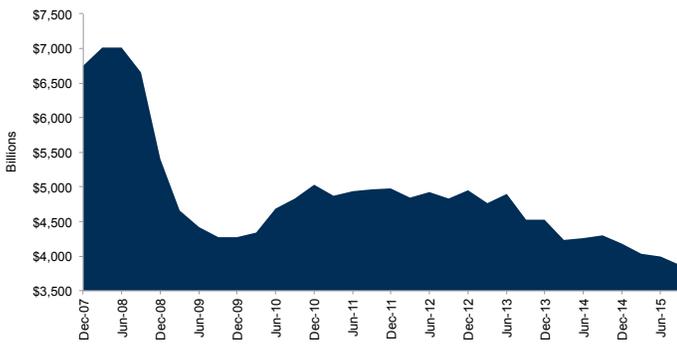
<b>Volcker Rule</b>	The Volcker Rule, a provision within the Dodd-Frank legislation, prohibits banks and dealers from proprietary trading (i.e., trading for their own account). Dealers now act solely as facilitators between buyers and sellers. Dealer inventory levels have fallen from a peak of over \$200 billion in 2007 to around \$50 billion today. (Exhibit 2)
<b>Basel III</b>	Basel III requires banks to hold additional capital and liquidity. Capital requirements and liquidity treatment of non-government securities have increased substantially. The banks have responded by shrinking low-return, capital intensive areas of the business such as dealer market making, dramatically reducing market depth.
<b>Repurchase Agreements (Repo)</b>	Repo transactions are in decline due to stricter capital rules (Supplementary Leverage Ratio). The repo market is used by investors and dealers to warehouse, finance or leverage their positions. Repo balances have fallen steadily, down 40% since 2007. As repo balances fall, investor and dealer positions decline, thus further reducing depth. (Exhibit 3)

**Exhibit 2**  
Dealer Security Holdings



Source: SIFMA and Market Axess as of May, 2015

### Exhibit 3 Average Daily Repo for Primary Dealers



Source: SIFMA as of December, 2015

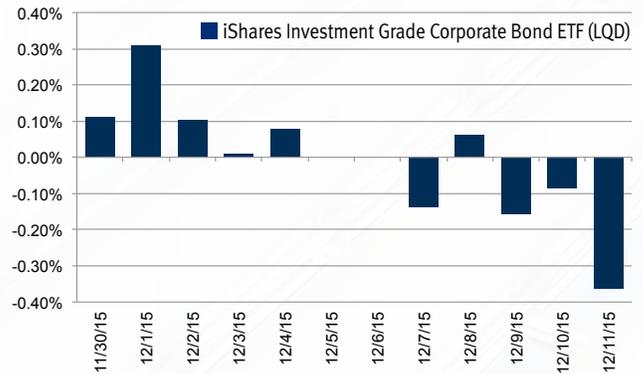
### Proposed Solutions Fall Short

The problem of decreased liquidity is widely acknowledged and market participants have suggested a handful of solutions. Electronic trading platforms are one example. These have existed for several years and they continue to take market share from direct trading, which has historically been the primary means of trading. While more users are embracing electronic trading, it represents a change in communication but not the number of participants or volume of trades. Electronic trading requires a broker-dealer and has no effect on liquidity.

Peer-to-peer, or buy-side-to-buy-side, platforms (similar to dark pool trading systems for equities), have begun to emerge in fixed income markets. Advocates contend that this new method of trading will increase liquidity as investment managers can bypass the broker-dealer community when executing trades. However, the buy-side is not in the business of creating two-sided markets. In peer-to-peer markets, the dealers are removed, eliminating the largest natural buyer of these assets. Peer-to-peer platforms function well in normal markets, but do not enhance overall market liquidity—especially in times of stress.

Commingled vehicles, such as exchange traded funds (ETFs), have been suggested as a way for institutional investors to gain liquidity. ETFs net investor flows, requiring less trading on a given day, and investors are guaranteed liquidity via the exchange on which they are traded. When there is heavy investor selling during times of stress, even those not needing liquidity can suffer losses as the ETF's net asset value (NAV) drops, potentially below fair value. (Exhibit 4) By providing liquidity to short-term investors, the remaining investors absorb all the volatility. While ETFs can be easily converted to cash, the underlying assets are traded in negotiated markets and thus suffer from the same drawbacks when liquidity is poor.

### Exhibit 4 Deviation of Daily Price versus NAV



Source: Vanguard as of December, 2015

### What Are the Ramifications for Investors?

The role of broker-dealers has changed, reducing their ability to facilitate trading in fixed income markets. The reduction in balance sheets has resulted in the transfer of liquidity risk from dealers to investors. During calm markets liquidity appears normal. However liquidity can deteriorate rapidly during periods of market turbulence due to lack of depth.

Evidence of lower liquidity manifests itself in stressed markets. A good example is the “flash crash” of October 15, 2014. On that day, the 10-year U.S. Treasury yield plunged 34 basis points in a matter of minutes for no apparent reason. There is still disagreement regarding what caused the plunge and subsequent recovery. However, decreased liquidity played a role as banks and other market participants retrenched during the crash, some pulling the plugs on their market-making machines entirely.

Another example of decreased liquidity is the halt of redemptions and closure of a high-yield corporate fund in December 2015. As high-yield spreads widened, the fund barred redemptions, stating poor market conditions made it impossible to raise cash without resorting to fire sales. Investors may not receive all their money back for months, if not more. This highlights issues with both market liquidity under the new market structure and how liquidity in commingled vehicles can quickly disappear.

## The Ultimate Solution: Liquidity Must be Part of the Investment Strategy

As we have described, the trends for liquidity and associated costs are getting worse for fixed income investors. Investors who do not have a plan for their liquidity needs are the most at risk of paying for the lack of liquidity, often when it is needed most. Certain types of commingled vehicles and other products where liquidity is less transparent or controllable should be thought about in the context of the ability to own securities outright and control the timing, selection and cost of turning investments into cash. Thinking about liquidity as a fundamental part of an investment strategy has never been more important. In the end, we recommend investors work with their investment committees, advisors and portfolio managers to define and prioritize the role that liquidity plays in their investment strategy. Doing so can position investors to provide liquidity in the new paradigm. A thoughtful liquidity strategy could ultimately be a way to improve investment results rather than impair them.

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