Invesco Fixed Income: Bond market liquidity – do low watermarks signal drought?

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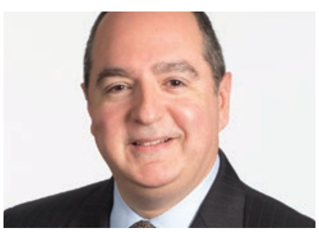
Tony Wong,
Head of Global Research

Mark Gilley,
Head of Investment Grade Municipal Research



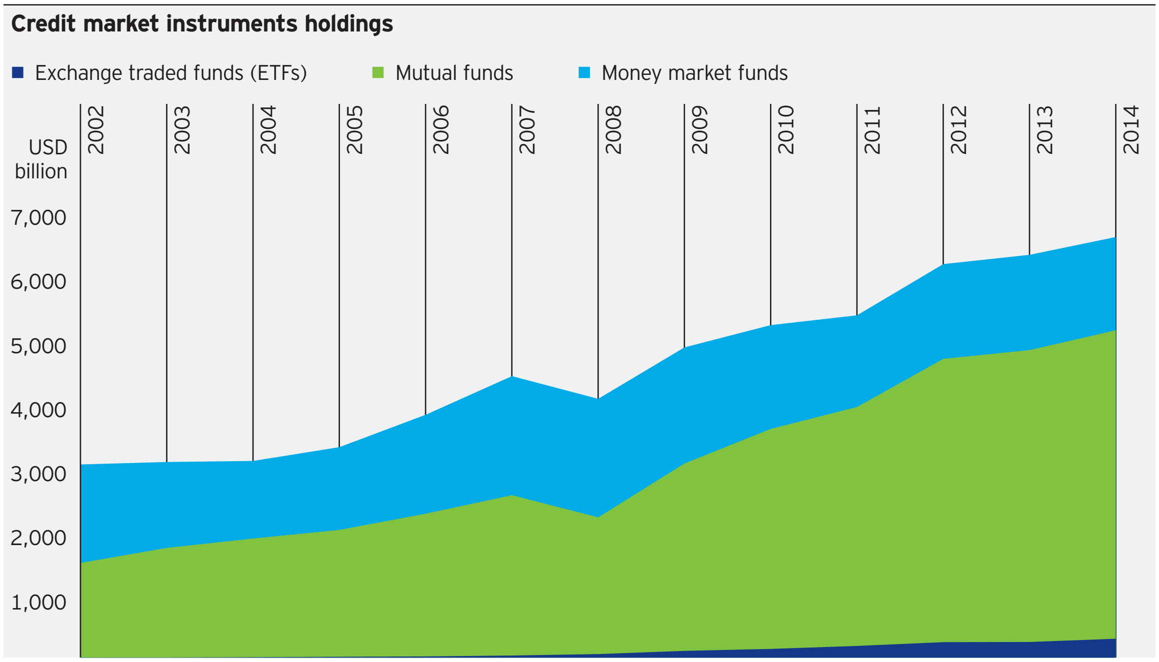
Justo Gonzalez,
Head of Global Liquidity Credit Research

Liquidity in fixed income markets has become a major focus of concern inside and outside of the investing community. Investors, asset managers, bank regulators and policymakers are worried that changes in the bond markets, post-financial crisis, have led to greatly reduced levels of bond market liquidity – meaning it may now be more difficult to transact smoothly in bond markets without price disruptions. Concerns are growing that, as the Federal Reserve (Fed) prepares to raise interest rates, we may be entering a "perfect storm" where fears of rising interest rates cause bond investors to simultaneously rush for the exits just when US brokerage firms, constrained by new regulations, are less able to act as potential buyers. The consensus view suggests that because US bond markets have grown dramatically and no longer enjoy the support of broker/dealers, they are much more susceptible to shocks. Herd behavior, it is feared, could lead to bond market turmoil with negative repercussions beyond financial markets to the real economy.

Gauging the problem

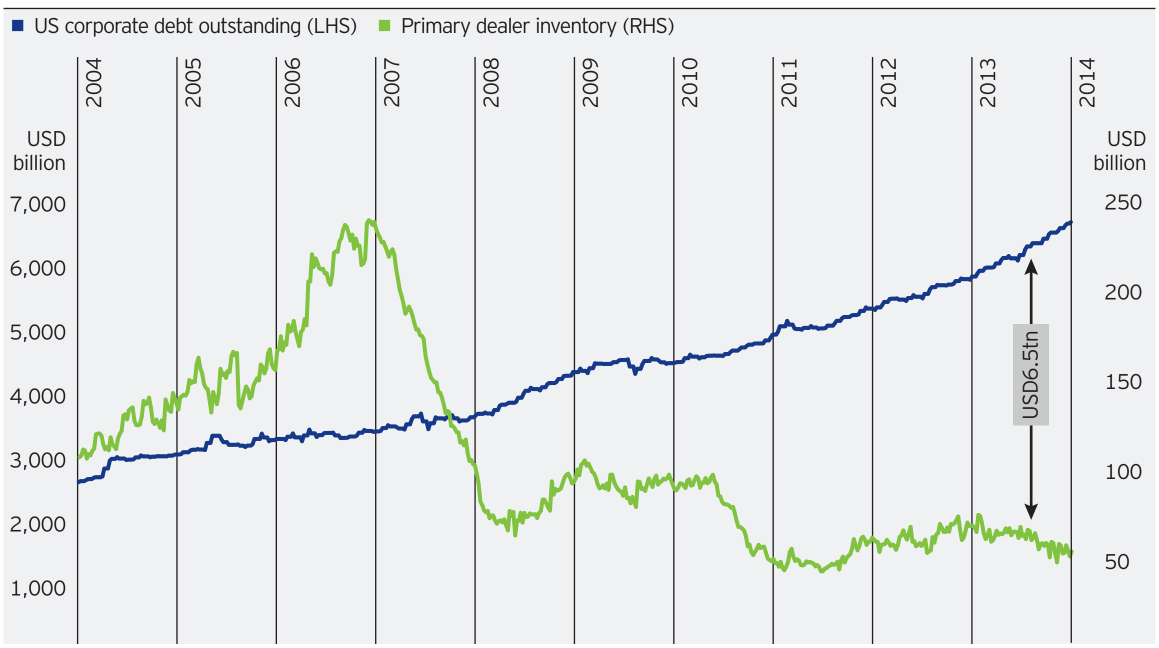
Gauging bond market liquidity and its implications is a complex topic without easy answers. The regulatory and central bank policies undertaken following the financial crisis have contributed to the current paradigm in market liquidity. Like "pushing on a balloon," financial regulators have made the core of the financial system safer (i.e. banks) but pushed out the potential vulnerabilities to other market participants, such as asset owners, asset managers and debt issuers. Aggressive monetary easing has fueled the enormous growth in demand for risk assets – especially among retail investors – as investors have sought yield. On the supply side, companies have issued record amounts of debt to take advantage of attractive financing. The US credit market is now multiple times larger than it was in 2005.[1] At the same time, US financial regulation aimed at improving the safety of US banks has significantly reduced US broker/dealers' involvement in proprietary trading and curtailed their ability to hold securities in inventory. Today, the combined size of US primary dealer balance sheets is 80% below pre-crisis levels.[2]

Rapid growth of US bond holdings



Source: US Federal Reserve, ICI, as of Mar. 31, 2015. MarketAxess, as of June 2015. All data refer to strategies domiciled in the US.

US dealer inventory has shrunk, leaving USD6.5 trillion "liquidity gap"



Source: US Federal Reserve, ICI, as of Mar. 31, 2015. MarketAxess, as of June 2015. All data refer to strategies domiciled in the US.

The growth in the sheer volume of US holdings of fixed income assets and the decline in bond market intermediation may indeed lead to conditions where investment losses are exacerbated in a bond market sell-off. However, we believe it is important to distinguish between the potential for investment losses due to shifts in supply and demand and a systemic breakdown. While volatility may rise as markets anticipate a tighter Fed (or other global developments), we believe several mitigating factors suggest that a systemic crisis caused by a lack of bond market liquidity is not in the making.

The principle of liquidity

The term "liquidity" can be used in various ways. Liquidity can refer to how easily an asset can be bought or sold in the marketplace without materially affecting the asset's price. It can also refer to a mutual fund's liquidity – the level of cash on hand to handle redemptions. The two are related: Mutual fund managers must sometimes sell securities when the redemptions they face exceed the cash they keep on hand. If several mutual fund managers find themselves selling in an already illiquid market, bond prices could suffer sharp declines. Policy makers worry that if this happens on a large scale, a resulting sharp drop in bond prices and rise in bond yields (bond yields move in the opposite direction of prices) could choke off access to financing for firms and individuals and/or cause a drop in investor confidence that could create damaging ripple effects through the real economy.

Measuring liquidity is difficult, however. There is no best metric for gauging the level of market liquidity. The volume of trading activity, the average size of transactions and the cost of transactions (bid-ask spreads) are all common measures of liquidity. While measuring liquidity is not an exact science, there is broad acceptance that these underpinnings of market liquidity have weakened. In recent years, this weakness has been masked by an environment of zero interest rates and massive Fed asset purchases that fueled private sector demand for risk assets and corporate bond issuance on a grand scale. As monetary policy reverses, longstanding market conditions may be tested, leading to fears of sudden outflows.

Regardless of how it is defined, market liquidity is transient. It can depend on such factors as market sentiment or the size of a particular transaction – it can be just as hard to buy a security one day as it can be to sell the same security another day. A confluence of buying or selling at once can be particularly pronounced during times of market stress – a source of concern to regulators from a systemic risk perspective.

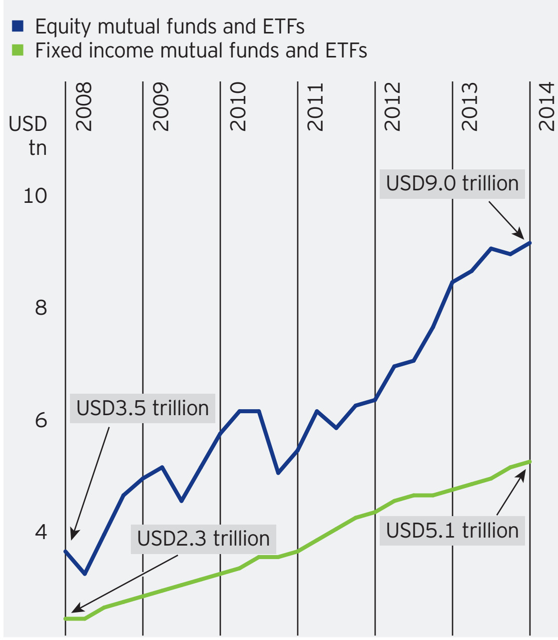
Our view: Dire predictions appear unwarranted

Reduced bond market liquidity means that sudden outflows from bond mutual funds are a growing source of risk. However, we believe four factors challenge the more dire predictions of a systemic crisis:

1. **Fixed income growth in line with equities:** Both US fixed income and equity mutual fund holdings have grown, leaving their relative composition largely unchanged. Bond exchange traded funds (ETFs), which can be traded more frequently and are therefore viewed as potentially more destabilizing, have also grown, but remain a small fraction of total US bond fund holdings.

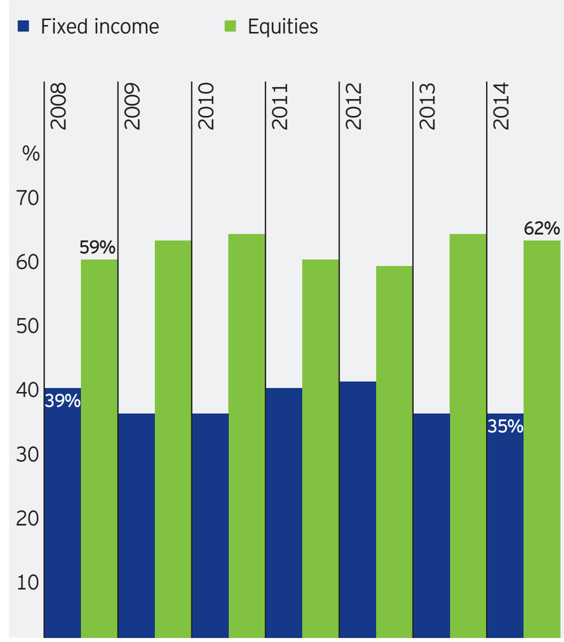
Equity and bond holdings higher, but market composition remains stable

US fixed income and equity assets in long-term mutual funds and ETFs



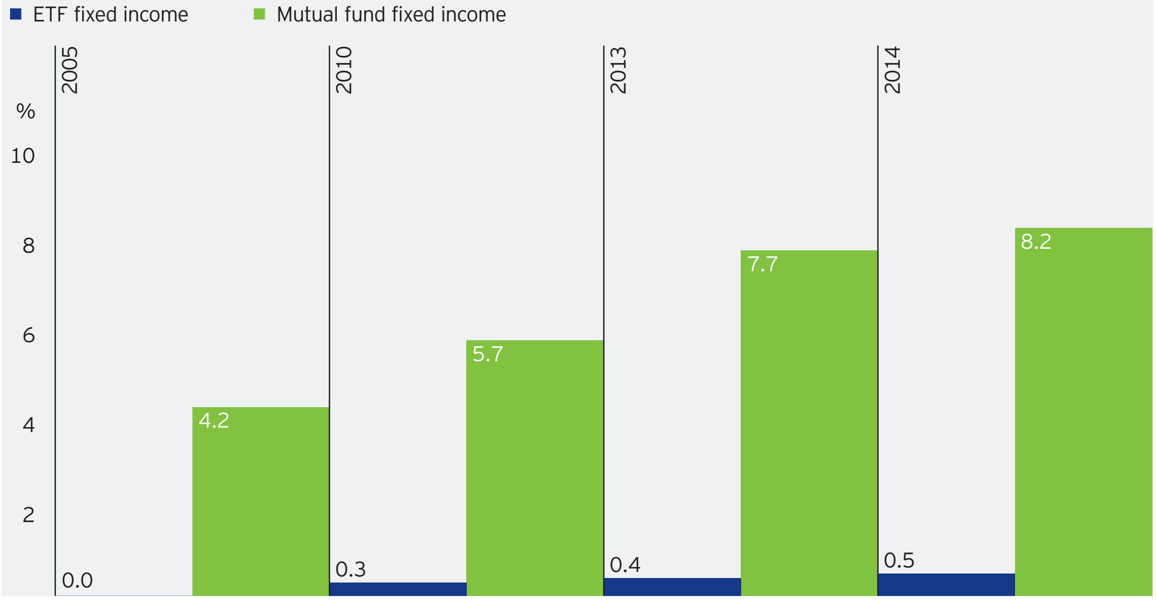
Source: US Federal Reserve, as of Dec. 31, 2014. All data refer to strategies domiciled in the US.

US long-term mutual fund and ETF composition (as % of combined mutual fund and ETF assets)



Source: US Federal Reserve, as of Dec. 31, 2014. All data refer to strategies domiciled in the US.

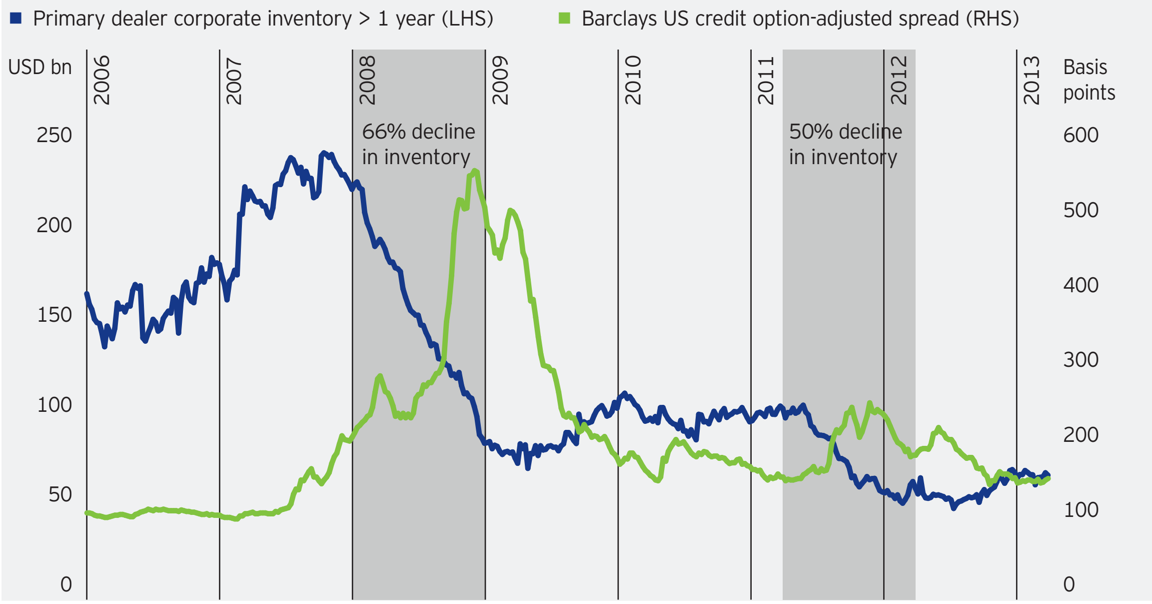
US mutual fund and ETF ownership of fixed income assets



Source: US Federal Reserve, as of Dec. 31, 2014. All data refer to strategies domiciled in the US.

2. **Broker/dealer support overestimated:** It is a misconception that US broker/dealers have been a source of support in times of market stress. Rather, broker/dealers have often themselves been sellers. History shows that, even when broker/dealers' capacity to take on risk was elevated, they were heavy sellers of inventory during market downturns, as shown in the graph below. That said, because leverage among key US financial players, such as broker/dealers and hedge funds, is widely acknowledged to be sharply lower, post-financial crisis, we believe there is less risk of "forced" selling today, which bodes well for improved bond market functioning in times of stress.

Broker/dealers were sellers during market downturns

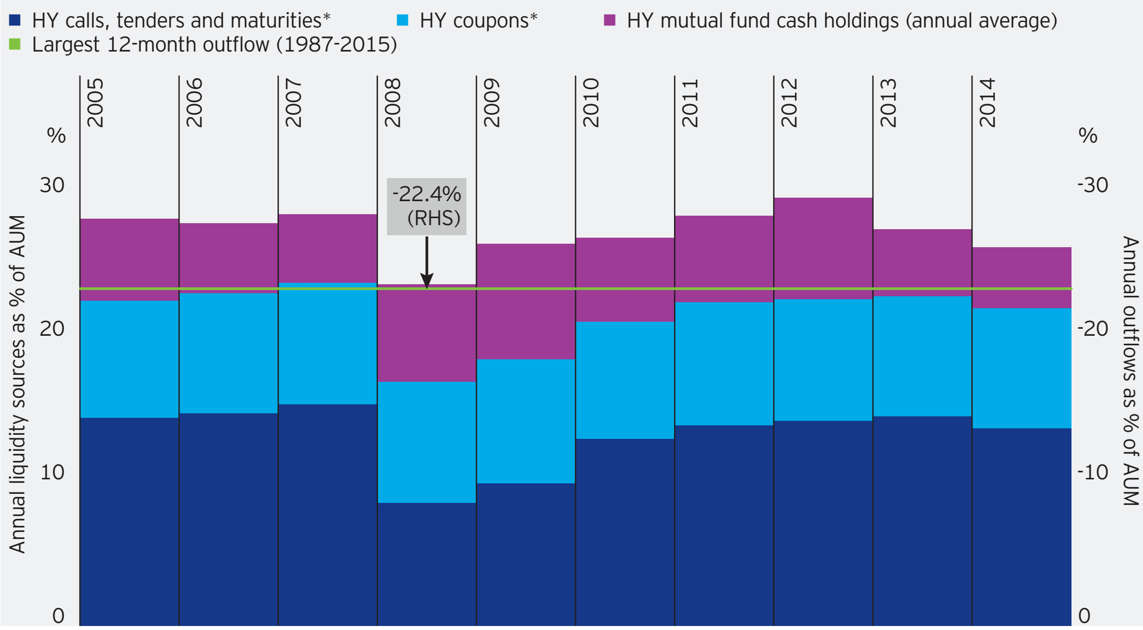


Source: Barclays, US Federal Reserve, Bloomberg L.P., as of Mar. 27, 2013.

3. **Fixed income generates cash flows:** Bond mutual funds generate liquidity naturally from maturities, coupons, calls and tenders — without trading. Combined with portfolio cash holdings, this level of "intrinsic liquidity" in US mutual funds has historically been sufficient to cover the worst redemptions, as seen in the charts below.

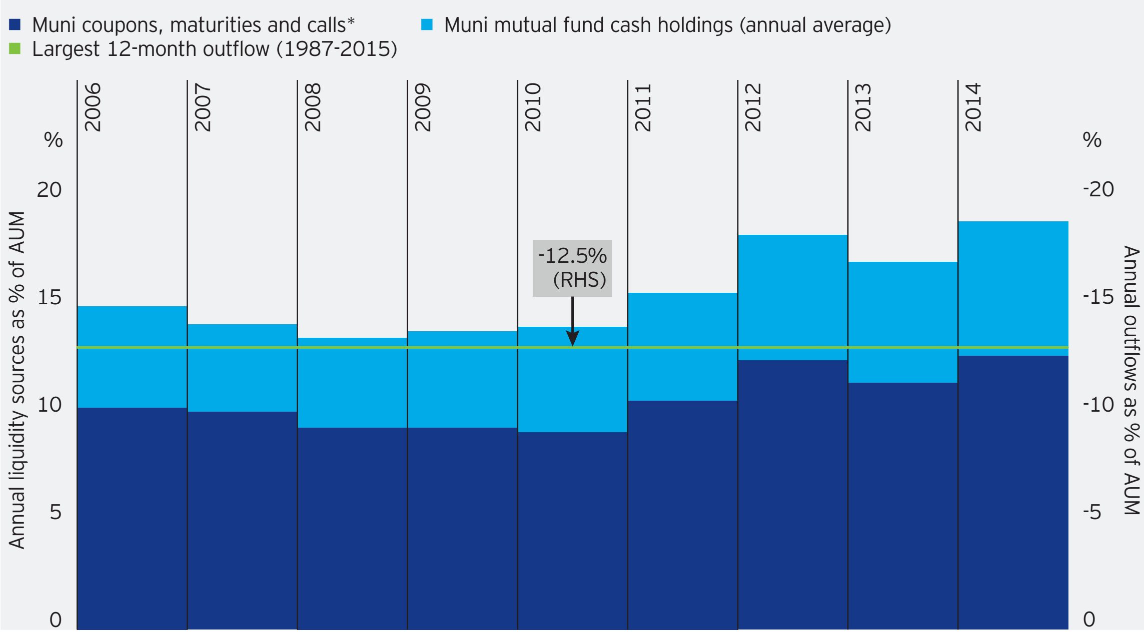
Annual sources of cash exceed record outflow events

US high yield (HY) bond mutual funds



Source: ICI, J.P. Morgan, as of Mar. 31, 2015. All data refer to strategies domiciled in the US. Green line represents the largest 12-month high yield mutual fund outflow as a percent of high yield mutual fund assets under management (AUM), (1987-2015). 12-month period shown is Jan. 1990 to Dec. 1990.
*As percent of HY bonds outstanding

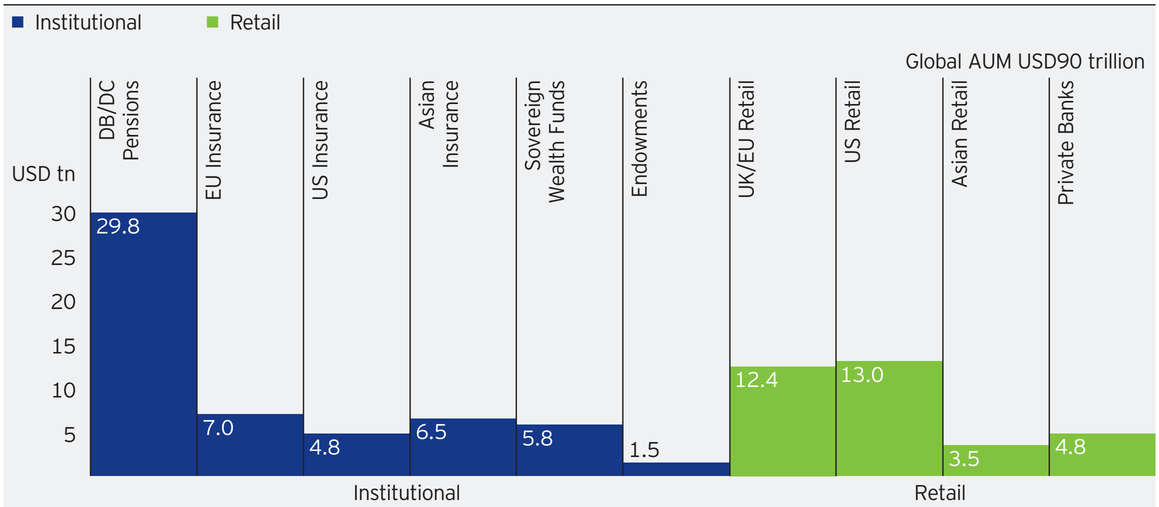
US municipal bond mutual funds



Source: ICI, Siebert Brandford Shank & Co., LLC, as of Apr. 30, 2015. All data refer to strategies domiciled in the US. Green line represents the largest 12-month municipal mutual fund outflow as a percent of municipal mutual fund assets under management (AUM), (1987-2015). 12-month period shown is Mar. 2013 to Feb. 2014.
*As percent of municipal bonds outstanding

4. **Structural support:** The global fixed income asset class benefits from the structural support of long-term investors. Institutional holders dominate the fixed income investor base, led by pension funds which tend to favor longer duration assets. On the retail side, investors are likely to continue to seek income, capital preservation and lower volatility, which points to continued demand for fixed income products. For these reasons, we believe the global bond investor base tends to have strong hands, which would likely be further strengthened in a higher yield environment. In any case, a sell-off in bonds would drive yields higher, likely attracting additional buyers seeking yield.

Global fixed income dominated by institutional holders



Source: Morgan Stanley, as of June 30, 2015. AUM is assets under management.

Implications for bond investors

As the Fed transitions toward "normal" monetary policy and interest rates return to levels above zero, we certainly do expect to see greater bond market volatility. We believe such volatility argues for active management and presents opportunities for prepared asset managers with careful processes in place to manage portfolio liquidity and take advantage of market fluctuations. Below, we answer frequently asked questions about the steps Invesco Fixed Income (IFI) is taking to address the challenges associated with reduced bond market liquidity.

FAQs

1. **Q: How does IFI manage liquidity in its portfolios?**

   A: Liquidity management is and always has been an integral part of IFI's portfolio management function. We use portfolio management systems to monitor liquidity needs across our portfolios and collaborate with our specialized risk teams to help calibrate the liquidity profiles of the securities that we hold. As part of our routine portfolio oversight process, we constantly analyze market liquidity conditions based on a variety of indicators such as prevailing bid-ask spreads, volatility conditions and trading conditions.

2. **Q: Is IFI taking steps to increase its liquidity levels?**

   A: We are not currently doing anything differently than we have always done to ensure appropriate levels of liquidity in portfolios. However, we are currently more sensitive to monitoring changes in the bond markets that could impact portfolios.

3. **Q: Are different asset classes addressed differently?**

   A: We apply the same liquidity management process across asset classes, but we keep in mind that portfolio liquidity must be managed according to differences in market liquidity among various asset classes. For example, cash levels related to liquidity management may be higher within the high yield asset class compared to government bond portfolios.

4. **Q: Can derivatives play a role in managing liquidity?**

   A: Yes, derivatives can be a helpful tool in liquidity management. Some derivative instruments may be more efficiently transacted than underlying cash securities and may allow portfolio managers to hold more cash for a given level of market exposure, providing portfolio managers flexibility to address investor cash flows.

5. **Q: How are money market funds affected by liquidity concerns?**

   A: In the US, important money market reforms established in 2010 have strengthened liquidity requirements for US money market funds. According to these 2010 rules, 10% of US money market fund holdings must mature every day and 30% must mature every week.[3] In Europe, currently, there are no specific liquidity requirements. However, in September 2013, the European Commission set out a framework for ensuring European money market funds would be more resilient to future financial crises and recommended minimum liquidity thresholds of 10% and 20% for daily and weekly maturing assets, respectively. IFI, like many investment managers, typically maintains a higher buffer than needed, and makes efforts to diversify counterparty relationships in order to facilitate trading.

The way forward: policy prescriptions

In general, there appears to be little consensus about how to resolve issues around liquidity at the market level. Regulators face a number of competing goals: limiting the interdependence of banks, ensuring adequate levels of liquidity among asset managers and preserving the flexibility of issuers to issue debt opportunistically. The current focus appears to be centered on asset managers—the US Securities and Exchange Commission is currently exploring several new liquidity risk management rules for some mutual funds and ETFs.

We believe additional solutions could be constructive:

1. Creation of electronic and open trading venues, allowing direct client-to-client transactions versus client-to-dealer only.
2. Standardization of bond issuance to reduce fragmentation in the bond market by creating fewer unique securities.

Such approaches would require significant changes in the way investors and issuers currently think about and operate in bond markets. Moreover, these changes would not necessarily resolve the fundamental issue of preventing market shocks. However, in our view, they could significantly improve prevailing liquidity conditions in stable markets.

1 Source: MarketAxess, Invesco, Oct. 31, 2015.
2 Source: MarketAxess, June 30, 2015.
3 Source: US Securities and Exchange Commission, Jan. 27, 2010.

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