Short-Term Cash Liquidity: What You Need To Know

Part 5 in the series: Yielding to a New Regulatory Reality-A Shifting Banking System and Its Impact on Cash Markets

December 2015

Liquidity... The scariest word in bond markets is also the least understood.

(Source: Bloomberg Business, 5/22/15)

The previous paper in this series, "Pillar III of Post-Crisis Banking Regulations: Resolution Planning," summed up the net effects the new regulations enacted under these pillars are likely to have on the short-term fixed-income markets. They include low yields on money market securities and the funds that hold them; potential opportunities in non-government debt; greater competition for retail and small business deposits; reduced market liquidity, with an accompanying rise in transaction costs; and the likely development of new, innovative cash products that may contain unappreciated risks.

The new regulatory regime also has changed the very meaning of liquidity in the short-term markets. There was a time when "liquidity" essentially meant the same thing to all market participants. It referred to the ease and quickness of issuing (from the suppliers' perspective) or selling (from the buyers' side) a particular instrument. Today, that is no longer the case. Regulators seeking to forestall a recurrence of the global financial crisis have imposed new restrictions and requirements throughout the system, with the goal of ensuring liquidity in any market environment. As we explained in part three of this series, regulators are acting a bit like a water authority. They have constructed a series of liquidity dams between the headwaters of the money markets to their end users. The dams serve to restrict the flow of liquidity when it is running high, while ensuring it during droughts. The system as a whole is undeniably safer as a result, but — regardless of where you interact with markets today — the flow can look very different than it once did.

1.) From the perspective of Money Market Managers
Liquidity = Maturity Profile

Money market portfolio managers now think of liquidity in terms of their maturity profile. They primarily focus on using maturing bonds to provide readily available cash to meet shareholder redemptions. The 10 largest money market funds illustrate this point: They have seven-day liquidity on more than 40 percent of assets, on average. Note that this represents significant "excess" liquidity — it is 10 percent higher than the SEC's mandatory liquidity requirement (Figure 1).

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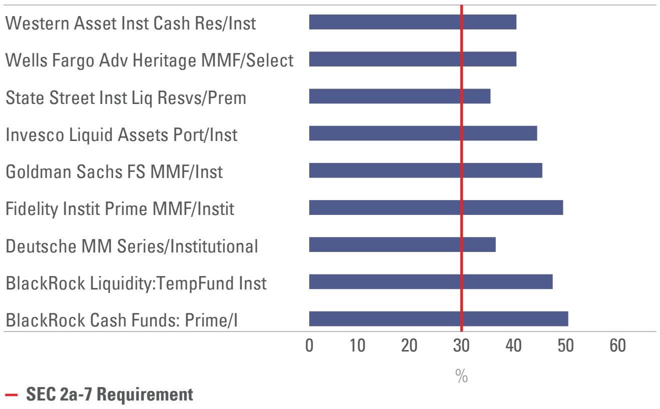
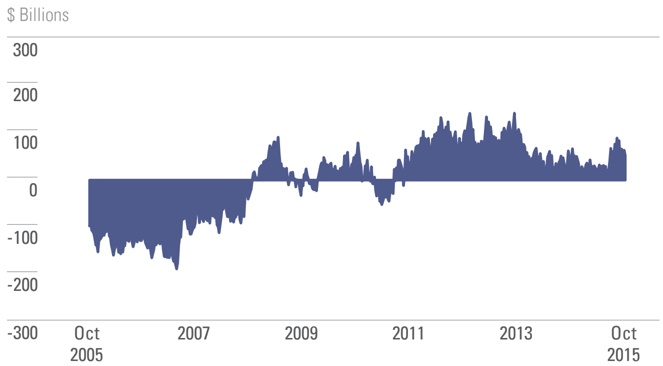
Figure 1: 10 Largest MMF 7 Day Liquidity



Source: Federal Reserve, Bloomberg, JPMorgan as of October 31st 2015.

Figure 2: Primary Dealers Have Ramped Up Holdings of High Quality Liquid Assets (HQLA), Including Government Securities



Source: Federal Reserve as of October 31st 2015.

Prior to 2008, money market fund (MMF) managers determined themselves the amount of liquidity required to meet shareholder redemptions. Typically, a retail money market fund would hold five to ten percent in one-day (overnight) maturities, and would not pay much attention to seven-day liquidity. Today, the SEC's rule 2a-7 mandates 10 percent one-day liquidity and 30 percent seven-day liquidity for all funds. As a result, fund managers now use this level as a floor and hold an additional buffer to ensure they meet requirements.

2.) From the perspective of Primary Dealers

Liquidity = Lengthening Liabilities and Holding High Quality Liquid Assets (HQLA)

The mindset also has changed for the large broker-dealing banking institutions that issue the bulk of the non-governmental short-term debt comprising today's money markets. These institutions are more cognizant of the unpredictable nature of lenders (the investors purchasing the debt they issue). During the crisis, debt-issuing banks saw what they thought was stable funding disappear within a matter of weeks or days. Debt-issuing banks now know that they may not be able to simply extend or "roll" their debt to a new maturity date when principal liabilities to bondholders come due. The large broker/dealer banks today manage their balance sheets with the expectation that they won't have any future access to debt markets, and won't be able to issue more debt on any given day — and new regulations strongly reinforce this approach. They prepare for the worst by holding a higher percentage of their assets in high-quality liquid assets (Figure 2) and by borrowing money at longer maturities. Essentially, with the urging of the regulators, they are hoarding liquidity for themselves and providing less of it to those downstream.

3.) From the perspective of Regulators

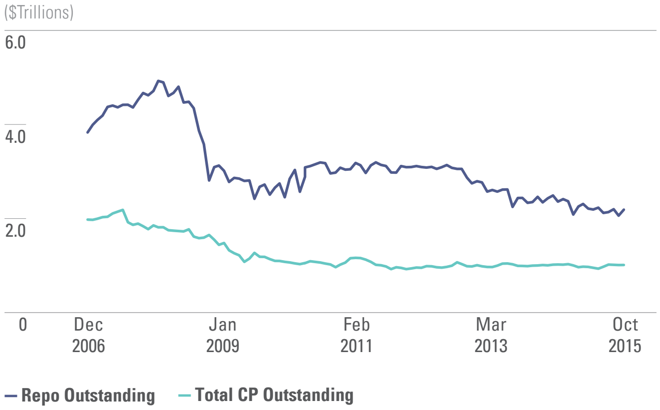
Liquidity = Know Your Counterparty

Regulators have expanded their stable of liquidity risk measurements. In 2007, when the first ruptures in the funding market appeared, central banks and regulatory bodies globally began expanding the required reporting of liquidity risk measures for banks and broker dealers. Specifically, new regulations demanded more detailed reporting on repurchase agreements (repos), including term structures, collateral type and counterparty risk (who is lending the money in the repo trade). Regulators also asked similar questions regarding wholesale funding. The financial community on the whole is being asked to provide a much more detailed view of their asset liability structure and risk management. These days, it would be commonplace for a regulator to call a bank or primary dealer and ask questions about a specific lender or liability.

A Look Back on Liquidity and How We Got Here

Two opposite extremes of liquidity emerged over the past ten years. The early to mid-2000s saw a huge buildup of leverage in the bond market. Primary dealer balance sheets grew to unprecedented levels. Commercial paper (CP) and repo investments provided an ample supply of short-term investments for MMF portfolio managers (Figure 3). CP outstanding balances peaked at more than $2.2 trillion, while repo balances grew to almost $5.0 trillion. Broker/dealers used repo agreements, both bi-party and tri-party, to fund a large majority of the assets on their balance sheets.

Figure 3: Repo and Commercial Paper Outstanding Balances



Source: Federal Reserve, Bloomberg, JPMorgan as of October 31st 2015.

Meanwhile, secondary market liquidity was robust. MMF portfolio managers commonly sold "blocks" (greater than $250 million) of short-term bonds at or above the price they initially paid. A dealer that bought the bond and could not immediately resell it would inventory it and receive the carried interest — the excess interest between their cost of funding and the interest received on the bond. Generating carried interest was not a difficult hurdle to cross because the funding was so inexpensive.

However, the size and quality of the assets on dealers' balance sheets ultimately came into question. The short-term funding model began to break down and the global financial crisis (GFC) began.

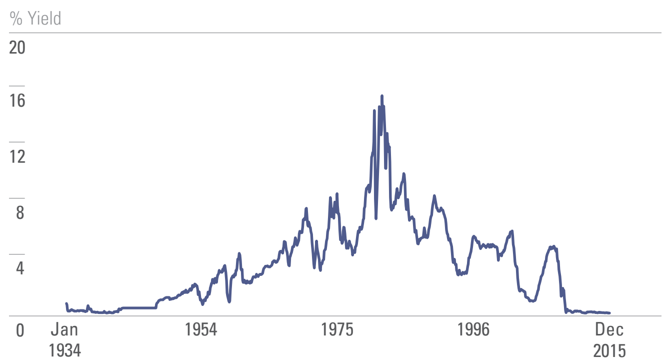
Our series on the Pillars of Post-Crisis Bank Regulation details the broad, far-reaching changes to global regulations that came in response to the crisis. Regulators of short-term fixed income markets focused intensely on primary dealer liability management and money fund liquidity management. Debt-issuing broker-dealer banks, they concluded, relied too heavily on short-term funding while money market funds did not hold enough short term debt.

These opposing incentives for dealers and money market funds led to the situation we see today: MMFs and primary dealers covet what each defines as liquidity; MMFs need more short-term debt, in particular securities with maturities within one or seven days; and dealers are hoarding HQLA and shifting issuance to longer-maturity bonds.

The regulations appear to be succeeding at making the financial markets healthier. Yet they result in a severe mismatch between supply and demand. Money funds want and need more short-term assets. Yet banks are forced by regulations to issue less of their own short-term debt — including the reverse repurchase agreements that made up much of the overnight market — and to hoard government paper. The drop-off in supply pushes down yields on government and many kinds of corporate debt, making it difficult for investors to generate income from their cash. Investors looking to secure higher yields have to accept somewhat higher volatility or lower liquidity than they have been accustomed to from cash holdings.

Meanwhile, Treasury bills are trading at historic lows. In fact, we have not seen Treasury bill yields trade this low since the 1930's (Figure 4) — which happens to be the last time we had a financial crisis requiring massive regulatory reform. Bills are trading at such low levels in part because of the Fed's zero interest rate policy (ZIRP), but also because regulatory reform creates significant additional demand for Treasury bills while supply is low.

Figure 4: 3-Month Treasury Bill Yields Remain at Historic Lows

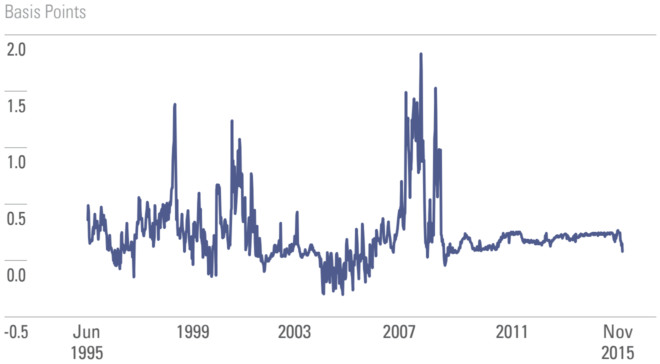


Source: Federal Reserve and United States Treasury, as of December, 2015. Past performance is not a guarantee of future results.

The Ballast of ZIRP

The other challenge with today's hefty demand for HQLA is that with ZIRP in place, in essence, we have a price control mechanism in the market. Real money investors tend to not buy Treasury bills at zero or negative yields; instead, they choose to leave cash un-invested. Today, we see a much narrower spread between 3-month Treasury bill yields and the Federal Funds target rate than in the years prior to the Fed's ZIRP (Figure 5). The range has narrowed because of the reluctance of investors to buy bills with zero or negative yields.

Figure 5: Spread Between T-Bills and Fed Funds Target Rate



Source: Bloomberg, Federal Reserve, as of November 30, 2015.

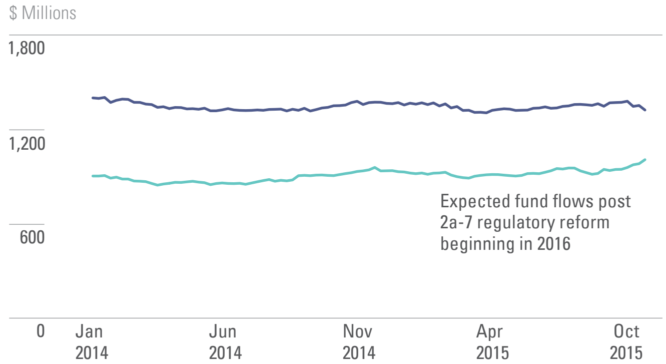
Treasury bill trading volume remains robust and above the pre-crisis average. Moreover, dealer inventory of Treasury bills continues to be higher than pre-crisis, although it's unclear whether some of this "inventory" is actually available for sale, or simply being held to meet regulations such as margin requirements or liquidity coverage ratio.

As a result of the ballast of ZIRP on Treasury bill prices, counterintuitively, Treasury bills will be more liquid when the Fed moves away from ZIRP. When the Fed moves the target federal funds range higher, we anticipate that Treasury bill yields will be released from the current tight trading range and will fluctuate, with higher highs and lower lows in pricing. When the Fed raises its target range to 25–50 basis points or higher, Treasury bill yields should rise, just as we saw in the last hike cycle. But similar to that cycle, demand will pressure yields lower during times of stress or during certain liquidity-starved periods, such as calendar- quarter end. Unlike today's environment, market makers will be able to make markets on Treasury bills at lower or higher prices rather than being restricted to prices just above zero.

Floating NAV

Institutional investors are widely anticipated to shift out of money market prime funds and into money market government funds during 2016 (Figure 6). A widening of the spread between the prime and government money market fund yields will follow as the reduced demand for credit debt causes those yields to rise. This will provide a good opportunity for prime money market fund managers, who will now have the chance to be more choosy and to push back on offerings that look too expensive. We have had many conversations with our clients

Figure 6: Expecting a Shift in Money Market Funds
Source: ICI as of October 31st 2015.



— ICI Institutional Money Market Funds Prime Total Net Assets
— ICI Institutional Money Market Funds Government Total Net Assets

that lead us to believe that, for some, there will be a spread that will entice them to stay in an institutional prime fund and accept the variable NAV and potential for redemption gates and liquidity fees imposed by money market fund reform.

Repo and Its Changing Role in the Short Term Cash Market

Prior to the GFC, dealers had sizable balance sheets with much of the assets funded by repo agreements. Dealers would borrow money from short-term investors, primarily money market funds. Repo was a very cheap form of funding for the dealers and there was plenty of supply and demand. The size of the repo market has shrunk as regulatory changes have unfolded. Now volumes are typically scooped up. What used to be the easiest type of asset to find and the most abundant to offer is quickly becoming a coveted treasure, hard to find and heavily guarded.

Today investors with an appetite for longer-term repo structures are beginning to approve new counterparties that are in need of funding. Some of these counterparties are not the traditional primary dealers or banks. Further, the Federal Reserve, which has launched its own repo program, has provided significant funding for MMFs over the past few years. In fact, 80 percent of the Fed's repo program is used by MMFs. The Fed has also indicated that it will use its repo funding program to help push short-term rates higher when the time comes. The interaction between the traditional repo providers, the new repo counterparties and the Fed will make for an unpredictable mix since each provider may have a different goal in mind.

Implications for Liquidity and Cash Markets

Many changes will come to the short-term fixed income market over the near term. Because portfolio managers now equate liquidity with maturity, money market funds will continue to hold more very-short-term securities than they have historically. If the 30 percent weekly fund liquidity requirement is the new minimum, then portfolio managers are likely to run money market funds with significant liquidity buffers above that level. Broker/dealers will continue to extend maturities and re-shape the face of short-term investing by making today's compressed issuance and decreased inventory the new standard. And regulators will maintain their focus on all participants in the short end of the curve, continuing to drill down on risk measures and introducing new measures as the market evolves.

But as history has shown, the market and its participants will evolve to find new solutions and products to work in the new world of cash. We are already seeing new investment options and fund structures. Clients remain open to ideas to solve their investment needs, while portfolio managers are eager to explore new opportunities and structures to find ways to best serve their clients' objectives.

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