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INSIGHT

VIEWPOINT

Money Market Reform

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Mr. Pak is a Senior Vice President in the U.S. Fixed Income group where he trades Money Markets, Treasuries, and Agencies. Prior to joining TCW in 2015, he was a Fixed Income Portfolio Manager at Columbia Threadneedle where he managed institutional separate accounts and mutual funds with a focus on the Investment Grade Credit and Rates sectors. Previously, he was a generalist Portfolio Manager at Western Asset focused on short duration strategies. Prior to Western Asset, he worked on the cash desk at PIMCO and the investment department at Teledyne, Inc. Mr. Pak holds a BA in Economics from UCLA and an MBA from the Marshall School of Business at USC. He is a CFA charterholder.

Introduction

As the mandatory compliance date with the SEC's 2a-7 (Money Market) Reform approaches, we think it is worthwhile for investors to review the reform measures and assess the impact they have recently had on the money market industry and short-term markets. These reform measures could fundamentally change the way investors view and manage their cash allocations in the future and have broader implications across fixed-income markets.

Background

At the onset of the financial crisis in 2008, the failure of the country's original and oldest money market fund ignited tremendous volatility in what was previously viewed as a relatively stable asset class. Up to that point, the sector had been considered high-quality, liquid, and transparent with a stable \$1 net asset value (NAV). However, the fund's positions in certain credits caused its NAV to deteriorate and ultimately "break the buck" and fall under \$1. In a span of just five days, panicked investors indiscriminately redeemed an estimated \$370 billion from prime money market funds and fled to the safety of Treasury or government-only funds.

The failure of the aforementioned fund and the subsequent flight to quality led to severe dislocations across all short-term credit markets. Banks were forced to draw down dollar reserves and witnessed their short-term funding costs spike to historically wide levels.

TED Spread



Source: Bloomberg

Although the bulk of the redemptions were initially from those funds deemed to be the riskiest, contagion fear quickly spread across the entire sector and redemptions accelerated. Solvency fears forced numerous funds to be back-stopped and guaranteed by their parent companies and the commercial paper market effectively shut down.

Shortly thereafter, the U.S. Treasury took numerous actions to stem redemptions and restore confidence in this sector. They established a temporary program guaranteeing shareholders of all money market funds and designed facilities to revive and increase liquidity in the corporate and asset-backed commercial paper markets. Ultimately, in 2010 the SEC introduced various reform measures to strengthen the money market industry going forward and a final, much-publicized, ruling with two primary amendments was established in 2014. These are set to become effective October 14, 2016.

2a-7 Reform Measures

The measures introduced in 2010 were primarily focused on increasing the liquidity profile of the funds and addressed maturity, liquidity and position thresholds. In summary, the weighted average maturity limit was reduced to 60 days from 90 days, liquidity

buffers with a minimum amount in cash/Treasuries were required and a limit was imposed on the exposure and maturity of higher risk/second-tier credits. The final ruling issued in 2014 has much broader structural and operational implications:

- 1) NAVs will no longer be held at a constant \$1 but will fluctuate along with the market value of the underlying assets. This will apply to institutional prime money market funds.
- 2) Money market fund boards will have the ability to impose gates on redemptions for up to 10 days and impose liquidity fees if liquid assets fall below a 30% threshold. This will apply to both retail and institutional prime money market funds.

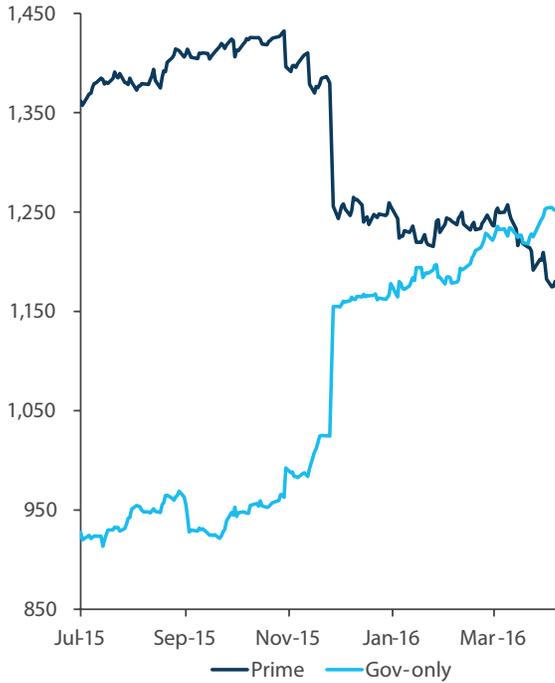
To be sure, these sweeping rulings in the industry represent a significant change for traditional money market investors who are now faced with uncertainty surrounding the true liquidity of their cash. With the compliance date for institutional prime money market funds only six months away, we have already started to observe a reallocation of assets within the industry and a changing supply mix in the short-term markets.

The Industry

During 2015 large fund families began converting their prime funds to government-only status in anticipation of the upcoming reform measures. This led to a dramatic transformation within the industry as smaller funds either closed or merged resulting in the decline of the number of prime funds from a peak of 450 in 2008 to 250 currently. This consolidation has led to increased concentration within the industry and the top 25 funds now manage 95% of assets.

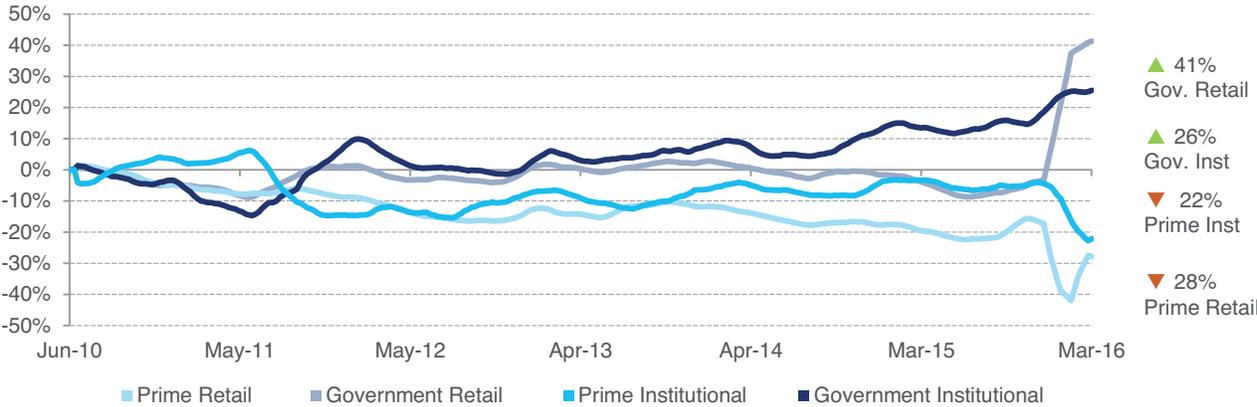
Although we have seen planned conversions of funds from prime to government status, we have not yet witnessed meaningful shareholder redemptions *but expect these to pick up starting 2Q16*. The YTD decline in prime fund AUM of \$20 billion is almost entirely due to planned conversions by various funds bringing the amount that has officially converted to \$200 billion with an additional \$70 billion expected to be done by October. Market estimates for total fund flows (planned conversions + redemptions) from prime to government status vary greatly and range from \$400 to \$600 billion.

Prime and Government Money Market Fund AUM (bln)



Source: Crane's Data, Barclays Research

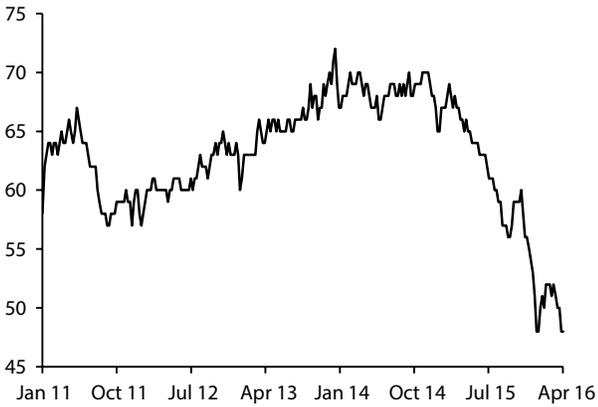
Divergence of Fund Flows Based on Strategy



Source: iMoneyNet as of 3/2/16
Note: Percent change calculated by 2-month rolling average.

In anticipation of active shareholder redemptions, institutional prime funds will likely remain very liquid and begin shortening their maturities ahead of the October implementation date. This has already started and is evidenced by the weighted-average lives of prime funds which have been declining over recent years and is now at the lowest point since 2011.

Prime Money Market Fund Weighted-Average Lives (Days)

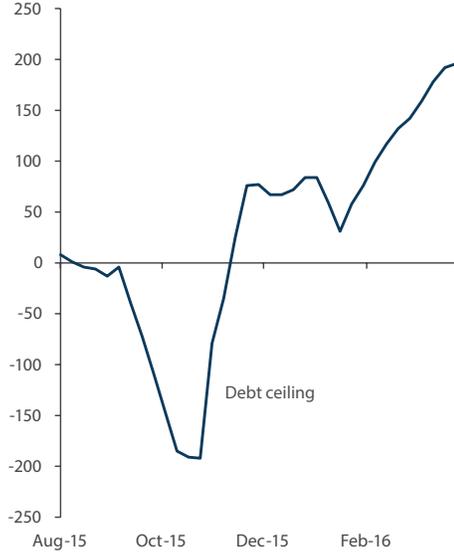


Source: iMoneyNet

Short-Term Markets

As funds are reallocated into Treasury and government-only funds, we have naturally seen a large pick-up in demand for Treasury bills as well as agency discount notes and repo collateralized by government securities. Although there was initially concern about a shortage of Treasury bills and repo (due to shrinking dealer balance sheets), two factors have allayed investor concerns for now. First, Treasury bill supply has increased meaningfully over the last six months and we expect it to remain high given Treasury’s stated desire to maintain a higher running cash balance, increase bill issuance in lieu of nominals/TIPS, and increase bills as a percent of outstanding debt.

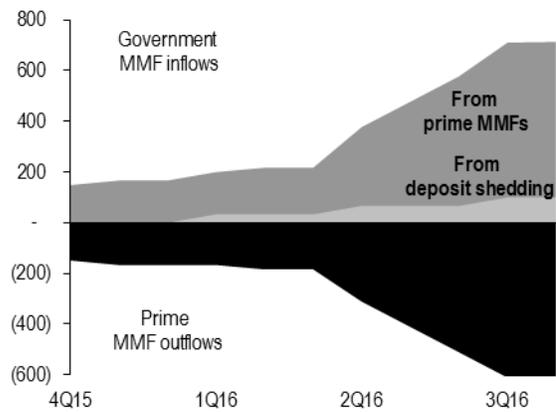
Cumulative Net Treasury Bill Issuance (bln)



Source: U.S. Treasury, Barclays Research
Note: Cumulative issuance since early August 2015.

Second, the Fed’s reverse repo program should also provide ample Treasury collateral for eligible counterparties as the amount of available collateral is currently “uncapped” at \$2 trillion (market value of Treasuries in the Fed’s System Open Market Account) with a \$30 billion per counterparty limit. This enormous supply of Treasury collateral comes as a welcome relief to the market as government funds could also see substantial in-flows from banks that are actively shedding non-operating deposits from their balance sheets due to regulatory costs.

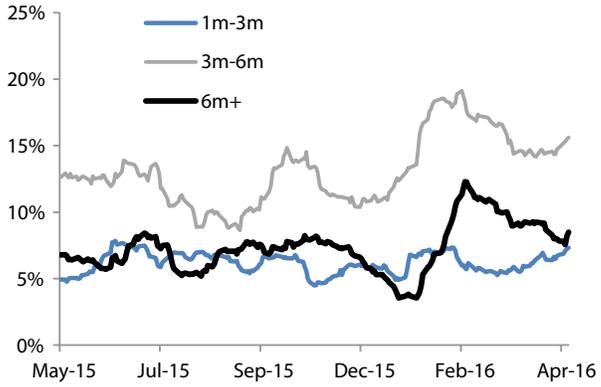
2016 Projected Flows Including Non-Operating Deposits (bln)



Source: J.P. Morgan

Heading into 4Q16, we expect the shrinking buyer base, active shareholder redemptions and prime funds' desire to keep maturities short to widen short-term credit spreads and steepen the LIBOR curve. Commercial paper issuers may find that they need to pay higher rates in order to fund themselves beyond three months, therefore, could consider alternatives such as longer-term issuance (financials and non-financials) or more actively pursuing retail deposits (financials). However, issuers will be impacted differently based on their dependence on short-term funding. Frequent issuers will need to cheapen longer-dated issuance (greater than three months) to attract other short-term investors while those issuers who were issuing more opportunistically to exploit the Interest on Excess Reserves (IOER) arbitrage will not be impacted.

Issuance in CP Markets Trending Towards Shorter Dates



Source: J.P. Morgan, DTCC

For non-U.S. financials, the funding pressures could be more pronounced since borrowing U.S. dollars via commercial paper or other short-term credit products could get markedly more expensive. They may have to source dollar funding by swapping their local currency into USD. The accompanying graph shows the cost of swapping Euros to dollars on a 3-month basis. Over the last two years, this implied cost has been trending lower (cost increasing) indicating a persistent bid for USD funding (currently -22.3606 bps).

3-Month \$/Euro Cross-Currency Basis Swap



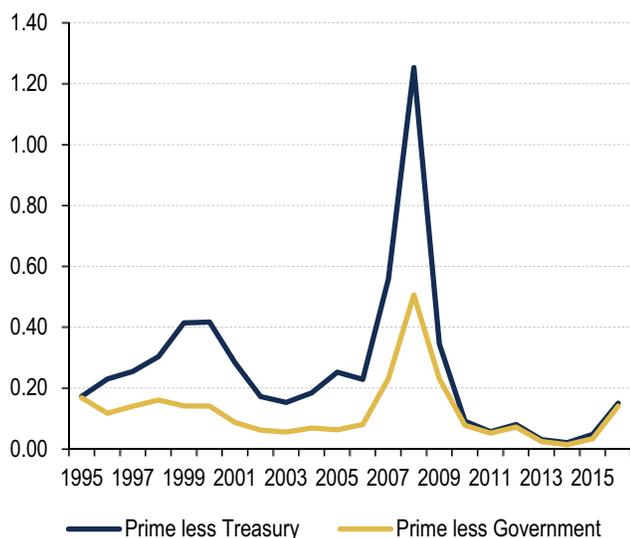
Source: Bloomberg

The Future

While it is difficult to predict exactly how investors will react to upcoming reform, we broadly expect them to consider one of three options. First, investors may reallocate money to high-quality short-term bond funds although they are not a perfect substitute. Second, investors may elect to manage their short-term investments themselves although this is not always feasible given the operational issues involved. Third, some investors may elect to stay in institutional prime funds if they view the interest differential between prime and government funds to be attractive enough. Since 1995, the average spread between prime/Treasury and prime/government funds has averaged 26 and 12 bps while current spreads to both are 15 bps. Investor surveys indicate that to remain in a prime fund, many would need to see a prime to government spread over 30 bps suggesting further spread widening over the next few months.

So while there are plenty of unknowns as to how investors (and issuers) will ultimately respond to money market reform, one thing is certain: change is coming to the industry. Investors may find that liquidity in prime funds will not be what they have traditionally expected from their cash allocation especially if there is a run on the funds. Investors need to **know what they own** with respect to their cash allocations and be more proactive when making and managing asset allocation decisions within this sector. Evaluating the tradeoffs between liquidity, yield and quality in this asset class will be more important than in the past given upcoming stricter regulations. ■

Prime/Government Spread (bps)



Source: BofAML Global Research, Crane

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