Discussion of “Investor’s Appetite for Money-Like Assets: The Money Market Fund Industry after the 2014 Regulatory Reform” by Cipriani, La Spada, Mulder

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The US MMF reform and this paper

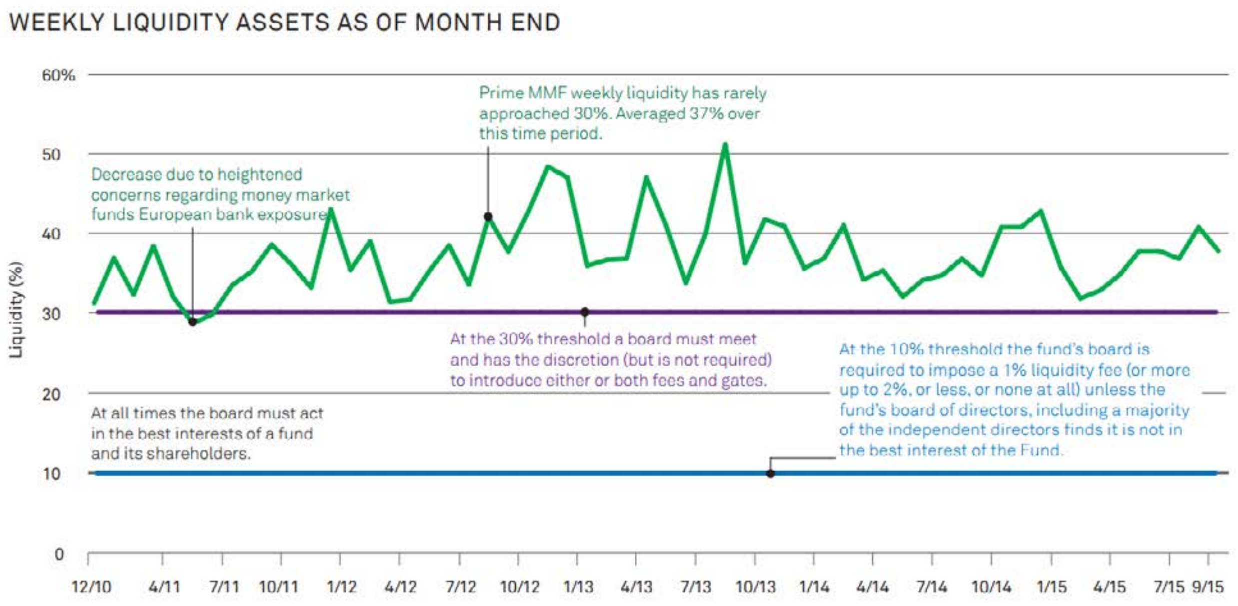
- US MMF reform changed the way wholesale funding works in only a few months.
    - More than $1 trillion went from prime & muni funds to government funds.
    - Very important implications for bank wholesale funding, especially for foreign banks:
        - Aldasoro, Ehlers, Eren and McCauley (2017); Aldasoro, Ehlers, Eren (2017); Pozsar (2017).
- This paper: How did investors react to the MMF reform?
    - Investor flows from prime and muni funds were mostly to agency funds.
    - Flows occurred within fund families.
    - The outflow from prime was stronger for institutional investors…s.t. stricter regulation than retail investors
    - Credit to private sector reduced, while credit to GSEs (and FHLB in particular) increased.
- Interesting paper. There is room for improvement.

Comment 1: What does money-like mean? Policy implications differ.

- Key message: Investors' appetite for money-like assets explains their reaction to the reform.
- Reform: Redemptions gates and fees, and floating NAV. Changes moneyness of prime.
- Alternative hypothesis: Operational difficulties from marking to market.

1) Redemption gates and fees for all prime & muni funds:

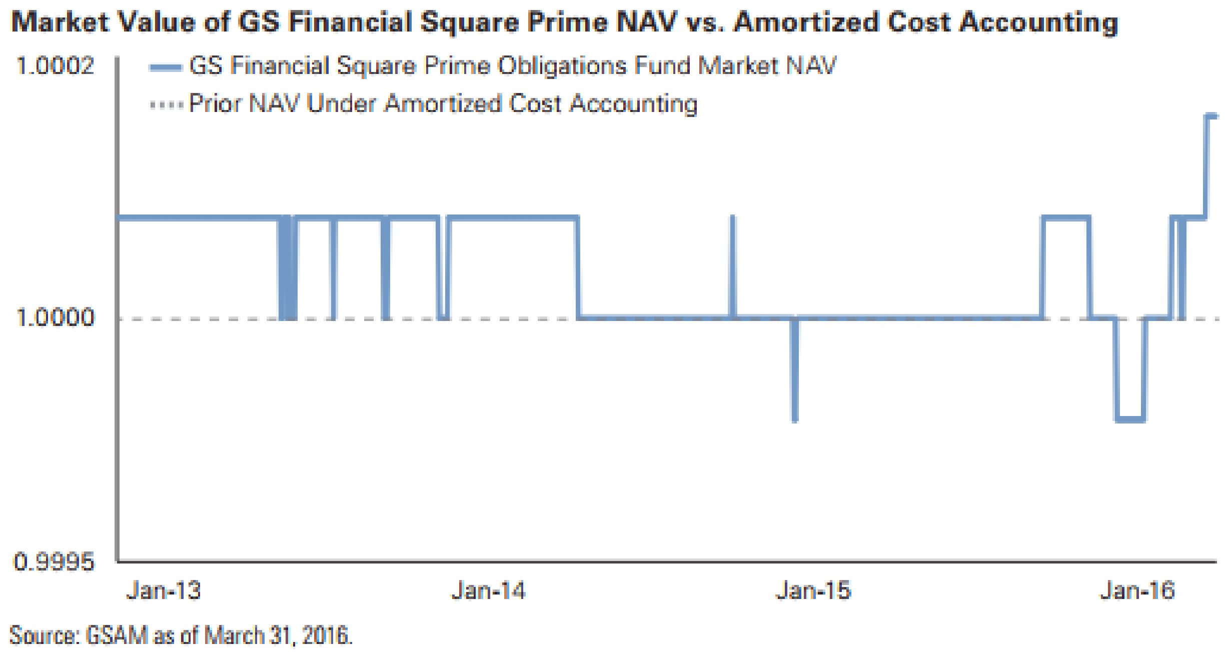
- If weekly liquidity < 30%, board **has the discretion** to introduce fees/gates if it is in the fund's best interest.
- If weekly liquidity < 10%, a board **is required to** introduce fees or gates, but **there are ways to escape it, if it is not in the fund's best interest**. Weekly liquidity well above 10% since 2011.
- From BlackRock:



Comment 1: What does money-like mean?

2) Floating NAV for institutional prime funds & penny to basis point rounding.

- Advantages of stable NAV funds: Amortized cost accounting and penny rounding.
- Is this an issue (economically)? The market value of prime funds is quite stable generally.



Comment 1: What does money-like mean?

- Sure, these things are important at crisis times, so peaceful period may not measure risks.
  - Yield spread between prime & government institutional funds:

Time Period	Average prime institutional yield (%)	Average government institutional yield (%)	Average yield spread (basis points)
Jan 04, 2011-Dec 29, 2015[1]	0.044	0.013	+3.1
Jan 05, 2016-Dec 27, 2016[1]	0.273	0.113	16.0
As of Dec 27, 2016[2]	0.530	0.230	30.0

Source: iMoneyNet, Inc.

1 average of weekly annualized net 7-day simple yield
2 7-day simple yield as of Dec. 27, 2016

- Low volatility of NAVs and a search for yield environment: why not invest in prime funds?

- BoA survey: 30-40 bps enough to return to prime funds. That is much higher than before.

Money-likeness: Operational issues more than preference for safe assets?

- Stable NAV is treated like cash in accounting. Stable NAV: redemptions easy.
- Floating NAV can be recorded as cash in balance sheet, but needs to be marked to market.

- There are operational difficulties, more than any deep preference for money-like assets.
  - Calculation of NAV on an ongoing basis by both investors and funds.
  - Makes redemptions potentially problematic. Cause delays.
  - Industry estimates: Adjusting systems have $2 billion fixed costs, with $2 billion annual operational costs.

- Alternative hypothesis :
  - Leave prime because it is too uncertain how to deal with it. Come back once the dust settles.
  - BoA survey: 30-40 bps enough to return to prime funds. In line with operational costs?

- It would be good to see a discussion of what exactly “money-like” means:
  - Different reasons for switching has different policy implications.
  - If operational, then once the dust settles, we are back to normal and MMFs are still runnable.

Comment 2: “supports the hypothesis that flows were due to regulatory changes”

- What is the alternative hypothesis?
  - Changes in macroeconomic conditions? Later say: “[MMF reform was]…in a time of relative calm.”
  - Government funds had better advertising strategies in 2016.
  - This is not a very fruitful. It is obvious that all the changes are due to the reform.

- Instead, use the fact that there are three distinct episodes to develop other hypotheses:
  - 2008: Run on funds – Credit risk across the board.
  - 2011: Only funds with exposure to European banks.
  - 2016: No credit risk issue.

- (How) did flow-performance relationship change in each of these episodes?
- What happened to the funds that investors ran to afterwards?
- Develop further how this time is different from other episodes.

Comment 3: The flow from prime funds into agency funds: Supply or demand?

- The story in the paper: Prime investors are more risk tolerant, so they choose agency.

- Equally plausible story:
  - Banks prefer agency repos to Treasury repos.
  - Fund families advertise agency funds to be able to provide more agency repos to banks.
  - Investors switch to agency funds within the same fund family.

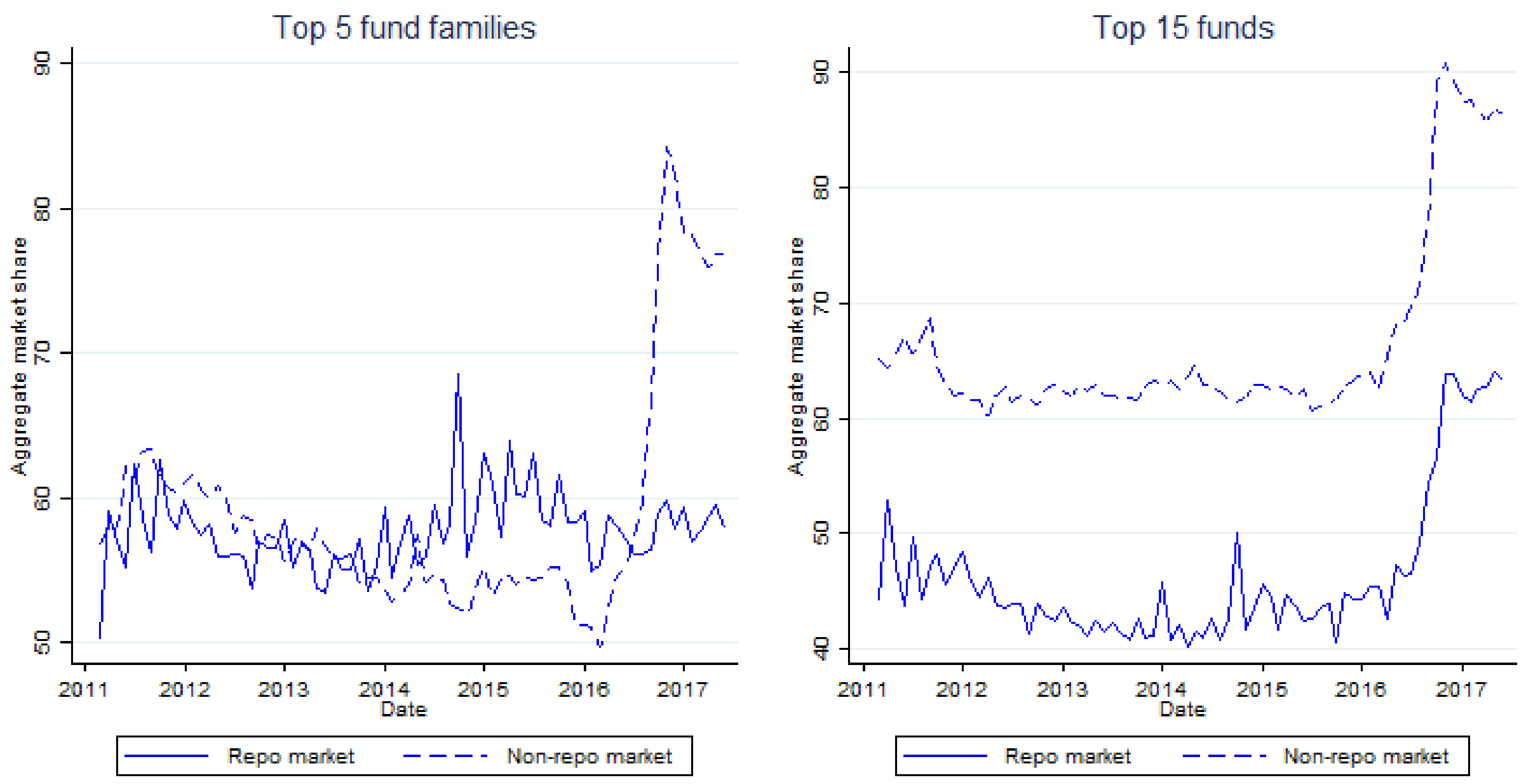
- Aldasoro, Ehlers, Eren (2017):
  - Average repo volumes since 2011 (using end-of-month data):

Table 6: Collateral Composition of MMF Lending

Collateral type	Treasuries	Government agency securities	All other collateral types
Avg outstanding MMF repos (USD bn)	189.5	219.7	81.7

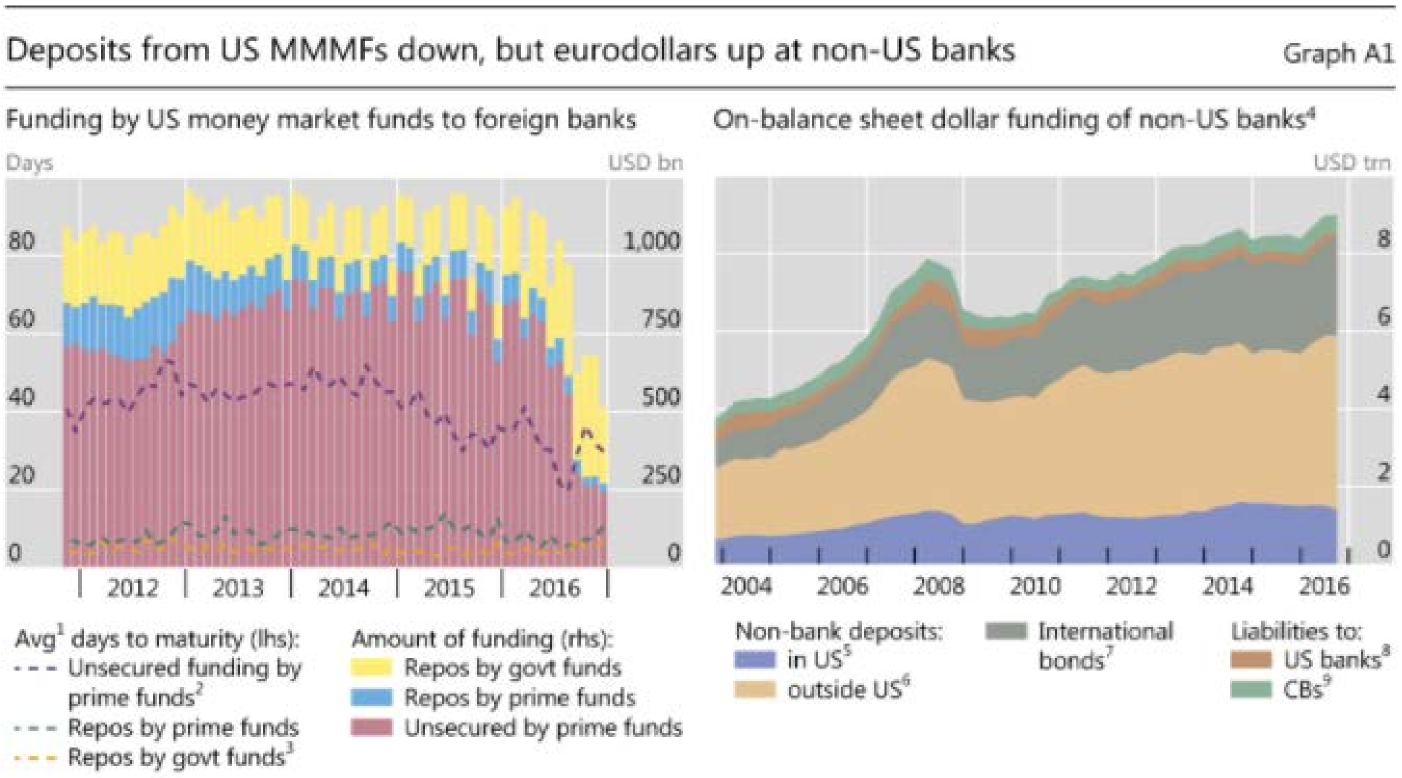
Comment 4: MMF market power; bank side affects investor side.

- Aldasoro, Ehlers, Eren (2017):
  - MMFs are not competitive. Funds exercise market power over banks.
  - Power of fund family matters. Market structure changed after the reform.
  - Pricing power with banks → higher yield → inflows influenced by this?



Comment 5: Has US dollar intermediation changed? NYFed data?

- “Credit to private sector decreased, while credit to GSEs (in particular FHLB) increased.”
- What does this mean for US dollar intermediation? Very important question. NYFed ?
- Pozsar (2017) speculation: FHLB -> US money center banks -> Foreign banks (via FX swap)
- Aldasoro, Ehlers, Eren, McCauley (2017) – increase in Eurodollar deposits:



Conclusion

- Developments in the US MMF sector are very important for regulators to monitor.
- This paper is a good effort to show the initial reaction of investors to the MMF reform.
- The impact of the reform is not over.
  - As yield spreads between prime and government funds change, the landscape will continue to evolve.
- Open questions: Unintended consequences of the reform?
  - Average maturity of bank borrowing has declined (Aldasoro, Ehlers, Eren, McCauley (2017)). Rollover risk?
  - Excess inflow into government funds → Excess demand for Treasuries?
  - Lengthen the intermediation chain? Financial stability?
  - Debt ceiling effect on the supply of Treasuries? How will that affect government funds?
  - Flow into ultra-short bond funds?