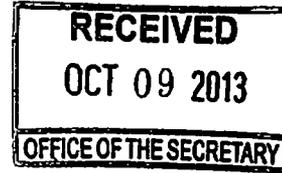




October 4, 2013

Elizabeth M. Murphy, Secretary  
Securities and Exchange Commission  
100 F Street, NE  
Washington, DC 20549-0609



**RE:** File Number S7-03-13, Money Market Fund Reform

Dear Secretary Murphy:

We submit as commentary on the proposed Reform the attached paper: "The Challenges Presented to Money Market Funds by Floating Net Asset Values and Their Impact on the Broker-Dealer and Trust Business."

Institutional interfaces for buying and selling MMFs are highly automated, and will require substantial modification to accommodate floating NAVs. As key intermediaries, broker-dealers and bank trust departments will incur very high one-time and ongoing VNAV compliance costs. Some associated operational challenges threaten the practicality of institutional prime and municipal MMFs going forward.

Based on interviews with broker-dealers and trust departments, we conclude:

- Most trust departments will not use floating NAV MMFs as a result of strict investment guidelines and operational challenges.
- Small and medium-sized broker-dealers will not offer floating NAV MMFs due to the high cost of system and procedural changes.
- Larger broker-dealers and trust departments will incur millions of dollars in system upgrade, process reengineering, and legal costs to accommodate floating NAV MMFs.
- Broker-dealer and trust IT systems cannot now accommodate floating NAV MMFs; trading, recordkeeping, accounting, and sweep systems will require enhancement.

Consideration of the proposals in S7-03-13 should include the huge implementation cost burden on this key part of the investment industry, and the impossibility for some industry sub-segments to sustain this burden.

Sincerely,

Anthony J. Carfang, Partner

Cathryn R. Gregg, Partner

Paul LaRock, Principal

Steven Wiley, Manager

Enclosures

CC: The Honorable Mary Jo White  
The Honorable Luis A. Aguilar  
The Honorable Daniel M. Gallagher  
The Honorable Kara A. Stein  
The Honorable Michael S. Piowar

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# THE CHALLENGES PRESENTED TO MONEY MARKET FUNDS BY FLOATING NET ASSET VALUES

and Their Impact on the Broker-Dealer and Trust Business

In June 2013, the SEC proposed additional changes to Rule 2a-7, which would require institutional prime and tax-exempt money market funds (MMFs) to change from a stable net asset value (NAV) to a floating NAV. Other types of MMFs may continue to maintain a stable NAV, but only if they limit redemptions to \$1 million per day per end investor. Unlike the changes of 2010, this proposal would fundamentally redesign the structure and nature of MMFs and would directly impact systems and trading processes at fund providers, intermediaries, and investors.<sup>1</sup>

In response to the proposal, Treasury Strategies, Inc. (TSI) has prepared the following study. TSI is the leading Treasury consulting firm working in the areas of treasury, liquidity, and payments. Treasury Strategies is the trusted adviser to hundreds of public and private sector clients including corporations, financial institutions, governments, universities and health systems. The firm has earlier testified before Congress regarding changes to money market fund regulations.

Implementing a floating NAV on institutional prime and muni MMFs will force MMF stakeholders to incur very high one-time and ongoing compliance costs. It will also cause severe operational challenges that threaten the practicality of institutional prime and muni MMFs going forward. This report explores the costs, operational challenges, and system complexities that will be incurred by three key stakeholder groups:

- I. Large broker-dealers, including bank capital markets groups
- II. Non-bank broker dealers
- III. Bank trust departments and trust companies

Key findings regarding the compliance burden of moving from a stable to a floating NAV:

- Most trust departments will not use floating NAV MMFs as a result of strict investment guidelines and operational challenges.
- Small and medium-sized broker-dealers will not offer floating NAV MMFs due to the high cost of system and procedural changes.
- Larger broker-dealers and trust departments will incur millions of dollars in system upgrade, process reengineering, and legal costs to accommodate floating NAV MMFs.
- Broker-dealer and trust systems can not now accommodate floating NAV MMFs; trading, recordkeeping, accounting, and sweep systems will require enhancement before these can be offered.
- Because of the complexity and interdependence of fund service providers, these groups will need more than two years to fully support a floating NAV.

<sup>1</sup> The \$1 million dollar rule offers little relief to broker dealers and trust departments dealing with large institutions and retirement plans because the size of those organizations make \$1 million redemptions relatively common.

Also, as explained later in the paper, the batching of trades for efficient transaction processing means even broker-dealers' small client activity can exceed the \$1 million threshold and thus be affected by conversion to FNAV.

# **THE CHALLENGES PRESENTED TO MONEY MARKET FUNDS BY FLOATING NET ASSET VALUES**

and Their Impact on the Broker-Dealer and Trust Business

## **I. LARGE BROKER-DEALERS AND BANK CAPITAL MARKETS GROUPS**

### **Background**

Many of the largest broker-dealers and bank capital markets groups are major investors in money market funds. They offer a range of investment management services to institutional investors. Among these are MMF products that facilitate the transactions of short-term needs of both retail and institutional investors.

Broker-dealer procedures and systems are designed around the stable NAV characteristic of MMF funds. They will have to be dramatically altered to support a floating NAV, resulting in substantial one-time and ongoing operational costs for broker-dealer MMF processing.

The following areas will be impacted by the proposed change to an FNAV:

- “New” product development
  - Product creation
  - Client outreach and training
- Transaction processing reengineering
  - Trade processing
  - Sweep transaction processing
- System modifications
  - Online portals
  - Accounting and recordkeeping systems
  - Sweep systems
  - Asset allocation systems
  - System interfaces
- Tax and financial reporting
- Legal

## “New” Product Development

### Product Creation

Broker-dealers with whom we spoke likened the floating NAV MMF to building and introducing a new, multifaceted product to investors.

At a large bank or brokerage, new product introduction requires the participation of many departments. A new product committee, with representatives from across the organization, reviews and approves proposed products. Information technology ensures that existing systems can be adapted to support new products. Sales and account management act as the voice of the client as products are developed, providing perspective on key features. They are also tasked with product introduction and client training. Implementation and customer support develop new procedures. Operations teams design and implement the new systems and procedures. Legal creates or updates product documentation and client agreements. Risk management evaluates new product risk components and determines how risk can be managed.

Broker-dealers will also have to reprice new and existing MMF products and communicate intra-day price changes to their clients. New pricing will reflect added systems and human costs of the new MMF transaction process.

### Client Outreach & Training

Broker-dealers will have to instruct their customers on new procedures and system functionality. Client outreach teams will educate all investor clients in how each aspect of the trade process will change. Capital markets groups that have made significant changes to their online portal products will also have to re-educate investors.

Broker-dealer personnel such as accounting, operations, account management/sales, and IT will also require training in new procedures and system functionality. Third-party system vendors and fund providers will help develop new trading procedures and train employees in those procedures.

## Transaction Processing Reengineering

### Trade Processing

Chart 1 displays the current state of trade processing workflow for broker-dealers. In the current state, a broker-dealer accepts orders on behalf of investors, generally over the phone, via the web, or through an online portal offered by the bank. Online portals are especially convenient for large MMF investors because they permit trading from a menu of funds. They also allow investors to program in their investment policy parameters.

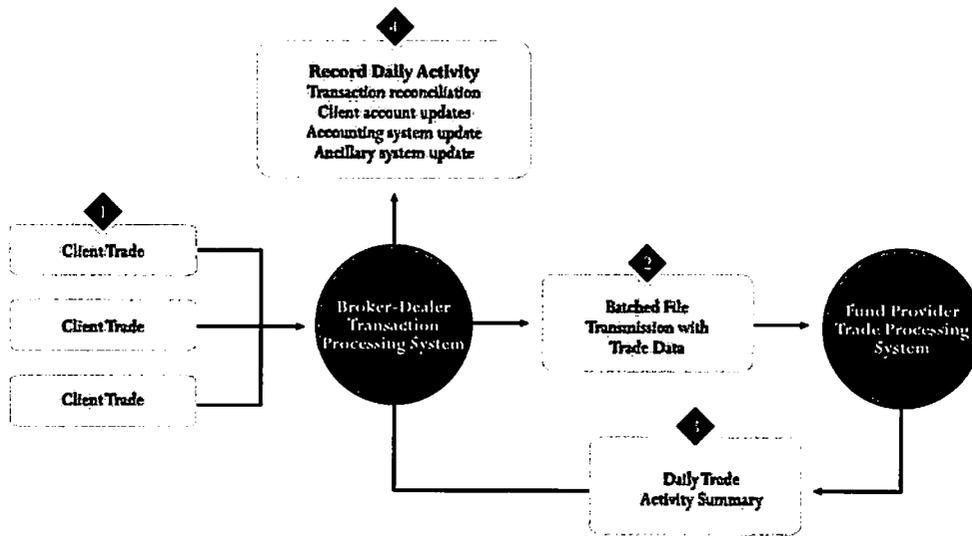
Characteristics of the current, stable NAV trade processing workflow shown below include:

- Straight through processing of trades with minimal manual intervention
- Real-time liquidity access for investors
- Minimal processing errors and exceptions
- Data transparency across workflow steps

The broker-dealer receives trades, which are fed from the trading system to the accounting or other recordkeeping system. Trades are batched and sent to the fund provider for processing. Broker-dealers with omnibus accounts at fund providers will generally net purchases and redemptions, providing a single buy and sell order to the fund.

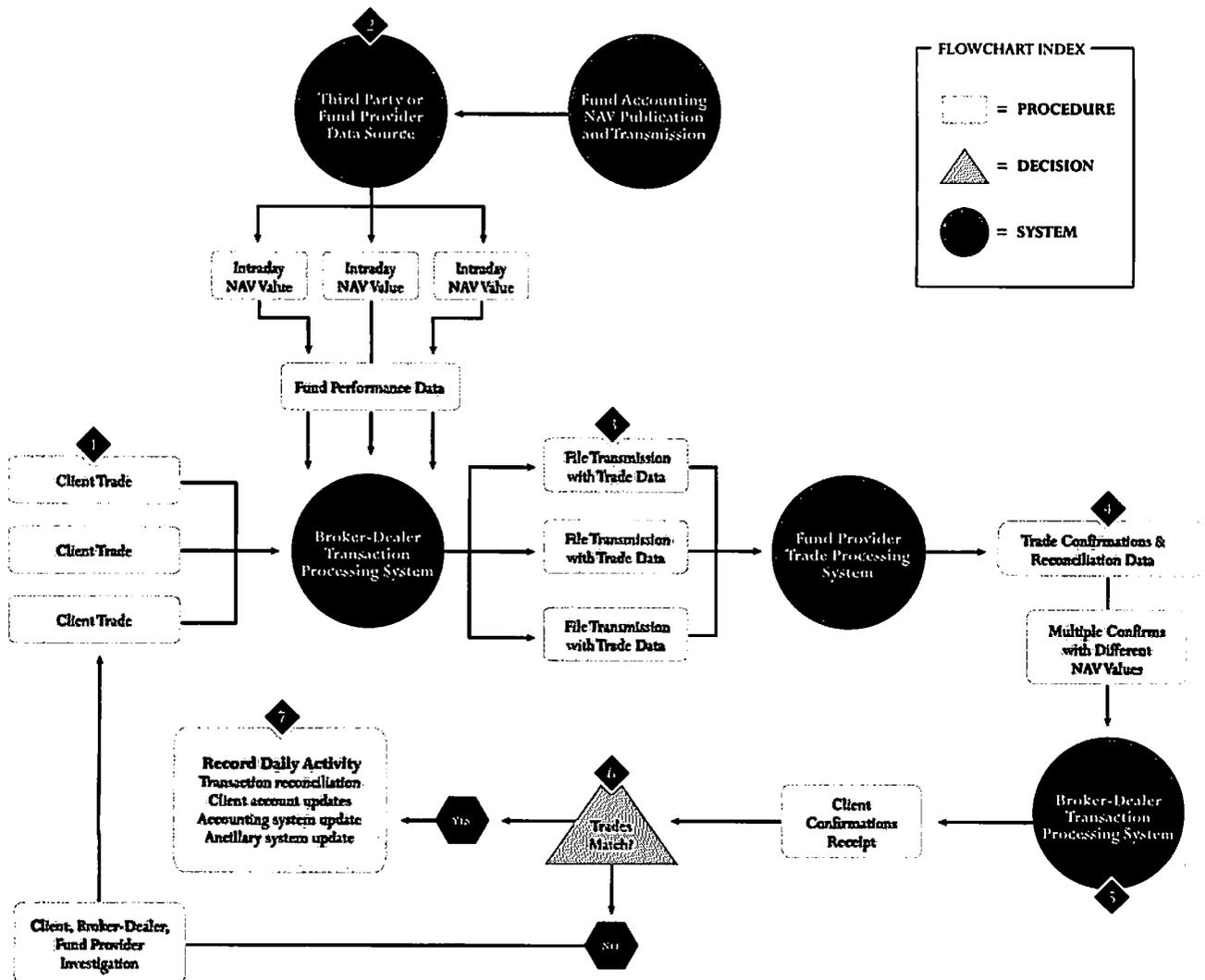
# CHART 1

## Current Broker-Dealer Trade Processing Workflow



# CHART 2

## Proposed Floating NAV Broker-Dealer Trade Processing Workflow



Applying the same stable NAV to many different trades facilitates trade batching and netting. Batching and netting simplifies the trading process for both broker-dealers and fund providers.

After trades are submitted, the fund provider transmits reconciliation data, including positions and transaction activity, back to the broker-dealer. The broker-dealer uses this to do daily transaction reconciliation, update client accounts, produce client reports, and update other systems.

Trade processing under the proposed VNAV scenario is significantly more complex and will likely deter or significantly delay same day settlement. This new workflow is shown in Chart 2.

With a floating NAV, broker-dealer systems and investors will need NAV data as soon as it is updated, which may be multiple times per day. To publish the NAV multiple times daily, the broker-dealer will need a new intraday interface with either the fund provider or a third-party pricing service. After the broker-dealer receives trades, they will apply a NAV to determine total shares purchased and then transmit trades to the fund provider.

A floating NAV will not accommodate streamlined omnibus transaction processing as the constant NAV does today. The practice of batching and netting trades for omnibus accounts will be disrupted, and will require system reengineering in both fund provider and broker-dealer systems.

After transmitting trades to the fund provider, the broker-dealer will receive individual trade confirmations several times per day. Currently, broker-dealers are required to provide monthly trade confirms to customers. In a floating NAV environment, all fund providers, capital markets groups, and other broker-dealers will have to provide confirms for every MMF trade. Processes

and systems will have to be redesigned to accommodate this.

The trade settlement process becomes extremely complicated for floating NAV MMFs. With a floating NAV, MMF shares purchased on different days or even different times during the same day may have different prices. As with equities, this will require programming of the liquidation protocol (FIFO, LIFO, etc.) to calculate the gain/loss.

For example, if an investor redeems 200 shares, but purchased two lots of 200 shares at different prices, the settlement system must call up the correct redemption price based on FIFO or LIFO. Correct settlement and trade reconciliation will depend on systems modifications that support this new redemption model.

The complex process changes discussed above will have several consequences for MMF trade workflow:

- Greater workflow complexity
- Longer trade processing cycle
- Greater number of interfaces and data exchange points
- Higher likelihood for errors and bottlenecks to wire transfer systems

### **Sweep Transaction Processing**

Broker-dealers offer sweep products that allow customer balances to be automatically swept into MMFs at times specified by the customer. Sweep products treat MMF shares as an alternative form of cash, and the stable value characteristic of MMF shares is what allows a sweep to work. In a floating NAV environment, sweep products and platforms would have to be completely overhauled.

The current process for sweep purchase and sell is relatively simple. Sweep systems evaluate balances in investor accounts, and if balances exceed a pre-established threshold, funds are swept into selected MMFs. If account balances are below a threshold, a redemption is executed to fund the account.

To process floating NAV transactions, broker-dealers will have to work with fund providers (who in turn must work with transfer agent systems and fund accounting departments) to obtain intraday feeds of NAV values. Should this not occur, systems would have to be configured so that any trade submitted via sweep receives the next available NAV. Sweep systems will also need enhanced functionality to ensure funds are swept in compliance with corporate investment policy. For example, corporates may not want to sweep if the NAV is above or below a certain value. This functionality does not exist today, and would be time-consuming and costly to develop.

After funds are swept into an MMF, the system generates a confirm to the investor. It will calculate the number of shares purchased by dividing dollars swept by the NAV at the time of sweep. Prior to initiating a redemption transaction, real-time or forward-pricing NAVs must be acknowledged for investor policy compliance. During redemption settlement, gain or loss must be calculated and provided to the client along with principal amounts delivered for the day. The gain or loss calculation is based on the settlement NAV received from the transfer agent systems.

## System Modification

A floating NAV will force broker-dealers to undertake major system modifications. The tiny price changes occurring with a floating NAV will require changes to virtually every MMF-related system. Interfaces between these systems and others along the MMF distribution chain will also require modification.

Key impacted systems include:

- Online portals
- Accounting and recordkeeping systems
- Sweep systems
- Asset allocation systems
- System interfaces

## Online Portals

One system that will be seriously impacted will be the online trading portal, or MMF portal, offered by capital markets departments and large broker-dealers to institutional investors. Corporate treasurers and institutional investors commonly access these portals to initiate MMF trades.

To support same-day liquidity with a floating NAV, portals will need to establish costly intraday interfaces with updated NAV data and apply the most recent NAV to transactions. Additionally, portal functionality that evaluates funds for compliance with corporate investment policy will have to be modified. Current policy compliance functionality offered by the more advanced portals simply evaluates fund investment amounts for compliance with customized limits set by the investor. Investors will require new functionality that analyzes the NAV for compliance to policy;

for example, if a trade is below or above a certain NAV threshold, it cannot be executed.

Many broker-dealers interviewed indicated they would simply remove floating NAV prime and municipal MM funds from their portals, as opposed to investing in long and costly portal functionality enhancement. Having to revert to manual trading would discourage portal investors from continuing to invest in prime funds.

### **Accounting and Recordkeeping Systems**

Broker-dealer accounting and recordkeeping systems must also undergo enhancement in a floating NAV environment. Broker-dealers use these systems to process and track investor activity including purchases, redemptions, exchanges, dividends, transfers of shares, shareowner identification and the related share ownership records. These systems are also used to reconcile cash and share activity, compute fees, and process shareowner trade confirmations, statements and related tax reporting.

All system functionality, from management and tracking of trades to reconciliation of daily positions, will require updating by the system vendor, and then implementation by the broker-dealer. Customer reports for tax and accounting will also have to be developed and modified. Additionally, trade reconciliation functionality will have to be reconfigured to allow the bank/broker to reconcile floating NAV transactions.

Interviewees described the upgrading and enhancement of these systems as being so significant that they are nearly as difficult as full system implementations. Accounting and recordkeeping system changes will be so drastic with a floating NAV that broker-dealers will rely

on third-party system vendors and IT consulting resources to complete the system overhaul. They said this sub-project alone could take 12 to 18 months and cost hundreds of thousands of dollars in third-party assistance.

### **Sweep Systems**

Sweep systems require a wide range of complex functionality enhancement. They must be reconfigured to gather and apply frequently changing NAVs when processing sweep transactions. Systems must be programmed to deliver investor confirms for all sweep transactions. Settlement will require a new gain or loss calculation to be performed and delivered to the client along with principal and interest amounts.

All broker-dealers interviewed for this report said that instead of upgrading sweep software, they would simply not give investors the option of sweeping funds into floating NAV MMFs.

### **Asset Allocation Systems**

Many broker-dealers provide investment strategy to their clients, and may also manage that strategy based on the client's unique objectives. Asset allocation software helps them do this by balancing risk and reward, maintaining performance data on investments, searching for best performing investments, performing statistical analysis and reporting.

Individual investment characteristics are critical to asset allocation systems. Instrument details such as NAVs are core data used to determine optimal asset allocation, generate reports, and provide other analysis to system users.

Asset allocation systems are currently programmed to treat prime MMFs as cash equivalents with a

\$1.00 stable NAV. Floating NAV MMF instrument details will have to be established within these systems, and interfaces must be developed or modified in order to ensure the NAVs are updated in real-time. System reporting and calculations must also be modified to ensure they are accurate in the floating NAV scenario.

### **System Interfaces**

The intraday floating NAV will require broker-dealers to modify interfaces and data transmission frequency with both fund providers and clients. They will rely on multiple new intraday NAV feeds from fund provider systems to process transactions using the most current market data. With NAVs floating throughout the day, the time at which an MMF transaction is initiated will determine the exact price and settlement amounts.

Trade information interfaces between broker-dealers and fund providers must be reconfigured to include NAVs, and will have to be transmitted in a modified incremental batch style throughout the day. This is a significant change from the current omnibus trade process, which allows trades to be batched and netted.

Interfaces between broker-dealers and investors must also be modified. Today, broker-dealers may deliver summary trade information to investors. The interface file will have to include a field for the floating NAV, and the investor system will need a corresponding field to accommodate the NAV. More confirm file interfaces will also be needed, as a result of new trade-by-trade confirmation requirements.

### **Reporting**

Several aspects of internal and external broker-dealer reporting will have to be modified to accommodate a floating NAV. Reporting stable NAV MMF positions is fairly simple, normally including investment positions, dividends earned, and other general fund information. It does not currently show gains/losses or mark-to-market calculations on the MMF position. Customers will require new fair value reporting for MMF positions on a regular schedule, as they actively monitor positions and perform fair value accounting that will be required for MMF investments.

In a floating NAV environment, MMF transactions will be taxable events, and a 1099-B will have to be delivered to all investors by broker-dealers and fund providers. The 1099-B lists profits and losses from brokered transactions, such as the sale of stocks or bonds, over a 12-month period. These profits and losses are based on the owner's cost basis (LIFO, FIFO, etc.).

New daily confirmation reporting from broker-dealers to customers will be required. While some broker-dealers are already equipped to deliver daily trade confirms, others can only deliver them monthly. The information in confirmation reports will also change; reporting systems will have to provide details on trade amount, share amount, and NAVs.

## Legal

Changes to customer legal agreements will be lengthy and expensive for broker-dealers. Client documentation, agreements, contracts, product documentation and fund provider contracts will require legal review and revision to incorporate a floating NAV.

For customers opting out of floating NAV MMFs, broker-dealers will be required to obtain written authorization to transfer customer balances to different account or investment types. This means multiple exchanges of documents along with reviews and approvals for each iteration.

The use of MMFs as a core account option for certain customers may make existing agreements void since they are based on the presumption of a constant NAV. These contracts will have to be modified or replaced. For larger capital markets groups and broker-dealers, this means contract review for thousands of customers.

## Summary of Consequences

**Large broker-dealers and bank capital markets departments are extremely concerned about the many complex procedure and system changes needed to accommodate a floating NAV. System**

**changes are so far-reaching that many clients said they simply would not modify systems to incorporate floating NAV transactions.** Sweep and online portal systems are examples of systems that will probably not be updated to support floating NAV MMF products. It is unlikely that broker-dealers will be able to replicate the automated, convenient transaction processing capabilities and products that exist today in a floating NAV environment, which will discourage MMF use.

Compliance costs and time lines are functions of the size of the broker-dealer operation and number of changes they are willing to make to accommodate a floating NAV.

It will take a minimum of 24 – 30 months to comply. Systems and procedures changes depend on vendor-provided upgrades and fund provider transfer agent system readiness, which may lengthen the time line.

**For large broker-dealers and capital markets groups, one-time costs will be between \$3 – \$3.5 million. Ongoing processing costs will also be higher as a result of the more complex transaction processing workflow. Operations staff will have to expand to accommodate additional work required at each step of the transaction processing cycle.**

# THE CHALLENGES PRESENTED TO MONEY MARKET FUNDS BY FLOATING NET ASSET VALUES

and Their Impact on the Broker-Dealer and Trust Business

## II. NON-BANK BROKER-DEALER CONSIDERATIONS

Non-bank broker-dealers will be forced to address nearly all of the challenges faced by the largest capital markets broker-dealers. Transaction process reengineering, system enhancement, and additional reporting requirements also apply to non-bank broker dealers.

One critical difference between these two key stakeholders, pointedly noted by non-bank broker-dealer interviewees, has to do with economies of scale. Many non-bank broker dealers are much smaller and do not have the economies of scale that benefit large capital markets groups. Most have limited resources (staff and dollars) for such a significant reengineering project, which will deter most non-bank broker-dealers from offering floating NAV products. This alters the competitive balance for these institutions.

Regardless of whether they decide to support floating NAV products, non-bank broker-dealers will have new issues. Today, these firms use MMFs as their core customer accounts. Customers use core accounts to pay bills, write checks, or to send wires; they are used to settle securities transactions and hold balances awaiting investment. MMFs' stable NAV and intraday liquidity characteristics make them a suitable core account. Because a floating NAV will complicate many of these core account functions, broker-dealers will need to migrate customers to other instruments.<sup>2</sup> This will require customer agreement and system modification.

Non-bank broker-dealers must assess the impact to all products affected by a floating NAV, including sweep vehicles, checking, ATM, and other payment products. Investors using these products will have to adopt other products that better support their objectives. For example, those using MMFs for transactions (check writing, wires) will not be able to use floating NAV MMFs for these purposes. Additionally, other investment vehicles will have to be substituted to sweep client funds.

**The floating NAV MMF strategy at many non-bank broker-dealers will be one of avoidance, not compliance. The high costs and resource requirements for reengineering systems and procedures will lead to floating NAV MMFs being discontinued for core accounts and not actively offered to investors as they are today. Unlike large broker-dealers and capital markets departments, smaller and medium-sized non-bank broker-dealers do not have the resources to manage additional system and operational burdens inherent in floating NAV funds.**

<sup>2</sup> Fidelity Investments' Letter to SEC Re: "Comments on Financial Stability Oversight Council Proposed Recommendations Regarding Money Market Mutual Fund Reform," February 4, 2013.

# **THE CHALLENGES PRESENTED TO MONEY MARKET FUNDS BY FLOATING NET ASSET VALUES**

and Their Impact on the Broker-Dealer and Trust Business

## **III. TRUST COMPANIES AND BANK TRUST DEPARTMENTS**

### **Background**

Trust departments were among the first users of MMFs for the temporary placement of client cash balances. Today, thousands of trust organizations invest billions in MMFs on behalf of their clients. The stable NAV characteristic of MMFs enables them to invest cash for flexible periods of time, with a safe and competitive return.

Floating NAV funds do not have the characteristics that have made MMFs so convenient for trust activities. For this reason, trust departments will migrate from prime MMF funds into other investment vehicles should a floating NAV become reality.

### **Areas of impact**

- **Investment policy**
  - Client outreach
  - Bond indenture considerations
  - Escrow considerations
- **Investment process reengineering**
- **Systems modifications**
  - Trust accounting systems
  - Sweep systems
  - Interface modifications
- **Reporting**

## Investment Policy Impact

The mission of trust departments is to ensure trust assets are safely preserved and easily accessible, while earning competitive return. Stable NAV MMFs perfectly meet these criteria. The ease of transacting with MMF providers adds to their appeal.

A floating NAV does not meet several trust or client-specified criteria as permissible investments. Chart 3 compares stable and floating NAV instruments to trust investment guidelines. NAV uncertainty coupled with a more costly and complex operational architecture will cause virtually all trust funds to move out of institutional prime MMF instruments.

**CHART 3**

<b>Trust Department Investment Guidelines</b>	<b>Current State / Stable NAV Characteristics</b>	<b>Proposed State / Floating NAV Characteristics</b>
Preservation of Principal	Trust departments consider safety of MMF's most critical characteristics. Preservation of principal is a primary trust investment policy guideline.	Likelihood of principal gains and losses. This will make it harder for a trust department to meet customers' specific transaction amount needs.
Intraday Liquidity	The ability to redeem shares and receive cash on a same-day basis makes MMFs a practical way to fund pending trust client transactions.	Most fund providers believe they will be able to support intraday liquidity, although it is likely that purchases and redemption deadlines will be moved to a time earlier in the day.
Risk Diversification	MMFs provide an effective way for trust departments to hold a diverse portfolio of high-quality short-term securities.	Will lead to the concentration of trust funds in a smaller number of investment instruments with fewer counterparties, ultimately reducing risk diversification.
Administrative Ease	The stable \$1 Net Asset Value (NAV) share price dramatically simplifies trust department transaction processing and reporting.	Trust department systems cannot currently process floating NAV MMFs. The floating NAV environment will be more complex and manually-intensive, even after costly system enhancements. MMF sweeps will no longer be viable.
Known Return	A fair return without material risk to principal.	Floating NAV will have small gains and losses associated with transactions. Trust departments will seek other investment alternatives that are administratively simpler.

## Client Outreach

Trust departments will have to undertake extensive client outreach to the many customers whose balances are invested in MMFs. This effort will communicate trust policy changes regarding MMFs, and modify existing customer agreements. Agreements will have to be updated to specify whether and under what conditions customer funds may be invested in floating NAV funds. Legal personnel will have to modify all customer agreements to reflect a floating NAV. This will be an important, costly effort for all trust groups.

## Bond Indenture Considerations

When a bond is issued, a third-party trustee, generally a bank or a trust company, is assigned by the issuer to serve the needs of bondholders. The bond or trust indenture is a legal contract between the issuer and the trustee that details the scope and responsibilities of the borrower, the trustee, and the lender. Covenants in the indenture specify acceptable investment instruments for monies held by the bond trustee. MMFs are commonly listed as acceptable investment instruments.

Because a floating NAV MMF may not be an acceptable investment under these agreements, trust departments and their legal counsel will need to change existing indenture documentation to reflect the floating NAV. All parties to these contracts must approve the new agreements.

## Escrow Considerations

Many trust departments offer escrow agent services to retail and institutional customers,

where funds invested in MMFs on behalf of the customer are used to cover a future, specified expense. Trust departments acting as escrow agents currently hold funds in MMFs if contracts allow it. Stable NAV MMFs are convenient investment vehicles for escrow funds requiring specific settlement amounts because they preserve principal and offer intraday liquidity access. Additionally, MMFs do not have the credit risk of a single issuer, but represent a diversified pool of high-quality short-term debt obligations of many underlying issuers.<sup>3</sup>

A fluctuating NAV would be unusable for escrow purposes for two primary reasons. First, the floating NAV could result in an insufficient amount to cover the expense for which funds are escrowed. This is an issue, because escrow agents are charged with delivering exact amounts required for transactions. Secondly, the strong possibility of not having intraday redemptions is problematic. Escrow funds are often used to settle transactions that require intraday transfer of funds – M&A activity is a good example. Being unable to access funds in a floating NAV MMF at the drop of a hat rules them out for many institutional trust clients.

## Investment Process Reengineering

For trust departments that continue to invest in prime MMFs, the process of initiating and redeeming transactions must change dramatically. Procedures and systems associated with initiation, tracking, and redemption of money market funds will have to be significantly reengineered with a floating NAV. In the current state, trade processing workflow is as simple as transferring

<sup>3</sup> Arnold and Porter, LLP Letter to SEC Re: "Economic Consequences of Proposals to Require Money Market Funds to "Float" Their NAV: File No. 4-619," November 2, 2012.

customer funds into and out of separate accounts that earn interest. Processing trades in a floating NAV environment becomes much more complicated.

In the future state, trust departments will not be able to initiate floating NAV trades without first ensuring NAV values are aligned with new internal and client investment policies. These new policies will likely be very strict in how funds may be invested in a floating NAV instrument (if allowed at all) to ensure preservation of client principal. Evaluating NAV values prior to investment is an additional manual step in the custodial investment process.

The trade process will also involve a new element of confirmation. With a floating NAV, trust departments will be required to confirm all trades daily. In some cases this confirmation detail must be provided to the clients. Today, clients are generally provided with a periodic account statement, often once per month. Trust departments must create confirmation procedures and configure current systems to accept and match electronic trade files on behalf of clients, or else confirm these manually.

Because the recent SEC proposal contemplates calculating the NAV to four decimal places, there may be frequent small movements in MMF share prices. This will lead to gains and losses on MMF transactions similar to those of an ultra-short bond fund. Trust departments' systems and procedures must be redesigned to identify, report, and account for these gains and losses associated with a four decimal place NAV. After recording the NAV settlement detail, trust departments must confirm the income and settlement amount, ensuring the MMF share price matches that recorded by the trust department.

Trust departments must also evaluate gain/loss impacts to pending transactions. This is important for funds held in trust that will be used to settle a specific transaction, such as a real estate or M&A deal. Such transactions require precise settlement amounts known in advance, and uncertain NAVs leading to unknown redemption values may complicate the process. The following excerpt from a United Bank letter to the SEC highlights the importance of a known settlement value:

“This (floating NAV) would reverberate through the operational and administrative systems that are currently structured to anticipate shares being purchased and redeemed at \$1.00. In virtually all circumstances, our clients' assets require a precise valuation (sometimes by state statute, governing documents or client investment limitations) to ensure seamless and predictable liquidity services. The introduction of a variable net asset value would, in essence, result in what has become a cost-effective and highly efficient service reverting to a pre-money market mutual fund business model that existed in the early 1970s. The assembly of a portfolio of individual securities would require the repricing of our entire business as a result of the addition of an extra layer of administrative work that the management of individual securities would require.”<sup>4</sup>

Additionally, new redemption tasks and procedures will hamper the ability of the trust department to access customer funds on an intraday basis, further complicating and delaying the settlement of pending transactions.

4 United Bank Letter to SEC Re: “Money Market Fund Reform; Amendments to Form PF Release No. IC-30551; File No. S7-03-13,” August 6, 2013.

## Systems Modifications

### Trust Accounting Systems

Trust accounting software vendors supply systems to trust departments that track and manage all trust activity. These systems are responsible for transaction processing, accounting, and internal and external reporting. Trust departments using these systems generally have multiple internal and external interfaces to support transaction processing and recording.

Transaction processing in these systems would have to be significantly enhanced to accommodate a floating NAV. A new unique trade type would be needed that permits the NAV field to change multiple times per day based on interfaces from other systems. This field must be stored in the trade tracking/management screen, then linked to other key system modules such as accounting and reporting. This floating NAV field will be central to many aspects of trade tracking and management.

Trust accounting systems will not be able to track multiple NAV price points throughout the day without an interface with the fund provider or other pricing service. Otherwise, the NAV would have to be manually monitored, which would be extremely costly and error-prone. In practice, most trust departments will be forced to incur the cost of an automated interface to update their systems with the slightly changing floating NAV prices.

In a floating NAV environment, trust accounting systems must link the sale (redemption) of MMF shares to the original purchase price to calculate gain or loss, then allocate this gain/loss to the appropriate customer account. In this modified

settlement workflow, when the bank sells shares on behalf of a client, the gain or loss, based on the client's selected cost basis methodology, is calculated in the trust accounting system after the user or system interface populates the NAV field with the final redemption price.

### Sweep Systems

Trust departments commonly sweep idle cash into MMFs overnight. Trust departments interviewed said they would not offer sweeps into floating NAV MMFs. Sweep functionality as it exists today is years away from being able to work with a floating NAV. Furthermore, sweep programs could only invest in floating NAVs if the systems could validate adherence to client policy and provide automated mark-to-market reporting. These functions are unlikely to be offered in the near future.

Trust departments using third-party sweep software would depend on their system vendors for sweep enhancement. Redevelopment to accommodate a floating NAV would take years, and would require cross-functional support from system providers, banks, fund providers, and other sweep system users. Costs would be at least \$2 to \$3 million per vendor, possibly more, once all new requirements have been scoped. The modification timeline and cost estimates for system enhancements support the conclusion that these products will no longer support floating NAV instruments.

### Interface Modification

A number of established trust department interfaces would be affected by a floating NAV. Trust accounting systems frequently interface with other internal, front-end trade processing

systems. Multiple departments in the bank, such as corporate trust, wealth management, and retirement trust, use them to enter trades. These systems interface trade detail into the trust accounting system, which is then responsible for deal tracking, management, accounting, and reporting. These interfaces must all be redesigned and configured to accept a floating NAV, essentially a new trade type.

Procedures to interface trade data from trust departments to fund providers must be completely reengineered in a floating NAV environment. Today, omnibus accounting practices allow trust departments to batch and net multiple customer transactions into a single summary file, which may be transmitted once or a few times per day to fund providers. In the future state, if the NAV changes throughout the day, interface frequency and content will have to be modified. More frequent interfaces that accommodate trades with different NAV values will be needed. This is a significant change from the current process.

Trust departments will also need new interfaces that provide current NAV values to facilitate trade processing and confirmation. This information is also important to help trust departments adhere to client investment policy parameters. The NAV updates would likely interface with multiple systems, such as front-end trading systems and recordkeeping systems.

## Reporting

Reporting functionality will have to be significantly enhanced to accommodate a floating NAV. Trust departments rely on trust accounting systems for both client-facing and internal reports. Impacted reports include gains/losses on transactions, mark-to-market reporting, confirmation reporting, and tax-related reports.

Trust departments will have new responsibility for tracking gains and losses on client accounts invested in a floating NAV MMF. Where client funds are commingled in a pooled account, procedures will be required to allocate gains/losses to the appropriate client. Additionally, contracts between trust departments and broker-dealers must address the gain/loss allocation issue.

The frequency with which trust departments communicate trade confirmation detail depends on individual client agreements and client preferences. In a stable NAV environment, customers typically receive monthly statements, and there is no need to confirm client trades. In a floating NAV environment, a price confirmation process will be required similar to that which exists for equity or bond funds. Trust departments systems will have to be reconfigured to accept a daily confirm, and in some cases transmit this to clients. Client-by-client transmissions will also have to be rescheduled for clients receiving confirmation detail.

## Consequence Summary

A floating NAV MMF instrument will not be considered a viable investment option for the vast majority of trust departments and their customers. The loss of key benefits provided by stable NAV MMFs (principal preservation, administrative ease of use, and intraday liquidity) will force trust funds into other investments.

This excerpt from a Chemung Canal Trust Company letter to the SEC highlights a likely end result for many trust companies:

“Our transaction processing and accounting systems depend on a stable NAV and frequent intra-day settlement capability. The systems we use and make available to our clients are not equipped to process Money Funds with a floating NAV. It would be very expensive (and not economically justified) to rebuild our automated systems to process these transfers and payments at other than \$ 1 per share.”<sup>5</sup>

Trust departments that choose to accommodate floating NAV MMFs will face long and costly systems, process, and policy change initiatives, which will put upward pressure on investor fees. One-time costs for a large trust group will be in the range of \$2 million. Elapsed time, based on our discussions with our clients, will be up to two years, possibly longer depending on the timing of enhancements from trust accounting system vendors. Trust transaction processing groups will need more permanent staff to perform additional work at each step of the transaction processing cycle.