

Looking Beyond Bank Deposits and Money Market Funds

Cash Investment Strategies in a New Era

Abstract

Greater vigilance is required of today's treasury investment professionals. Neither bank deposits nor money market funds may be appropriate in the post-crisis, post-regulatory environment. As yields start to rise, cash investment strategy decisions that may have been delayed will require serious consideration. Direct purchases in separately managed accounts may become the primary alternative cash strategy. A framework of stratifying one's cash balances by liquidity objective is discussed.

Introduction

Remember Broadhollow Funding and Ottimo Funding? Eight years ago this month, credit woes at the two subprime-tainted commercial paper issuers marked the beginning of the turmoil that fundamentally changed the financial world. As the economy improves and interest rates move higher, treasury investment professionals may be expecting the good old days of decent yields in safe investments, but a new and different world awaits us.

Today's cash investment landscape is shaped by higher risk awareness, better understanding of liquidity costs and stricter systemic regulation that requires new thinking in corporate cash investment strategies. Interest rate changes may be cyclical, but bank and money market fund regulations are likely to leave a long lasting structural impact. Taking the longer view, the sensible treasury investment manager may need to look beyond current practices for other cash investment alternatives.

In this commentary, we reintroduce some of our thoughts on cash investment strategies with the understanding that bank deposits and money market funds alone may no longer be sufficient cash management tools after new regulations are fully implemented.

August 1, 2014

Revised: July 27, 2015

The Search for Alternatives Delayed but Not Forgotten

The vulnerability of a corporate cash management model based on money market funds and uninsured deposits was evident during the turmoil following the Lehman Brothers bankruptcy. However, the government's subsequent guarantees on money market funds, bank debt and deposits delayed broader recognition of the faults in this model by several years. When the unlimited FDIC guarantees on transactional accounts expired in 2012, treasury investors still lacked the incentive to search for

Lance Pan, CFA

Director of Investment

Research and Strategy

Main: 617.630.8100

Research: 617.244.9466

lpan@capitaladvisors.com

alternatives, as money market reform remained uncertain. The near-zero yield environment also made risk-reward tradeoffs of alternative strategies less appealing.

Fast forward to the second half of 2014. Major bank reforms have taken shape. Final details of money market fund reform finally arrived. The Federal Reserve may raise interest rates in less than 12 months. The timing may be right to rethink cash investment strategies for three main reasons:

1. Bank Debt Less Creditworthy, Deposits More Expensive

- As regulators reduce potential government support for large banks, debt holders are exposed to higher bank credit risk, including bail-ins
- As rating agencies lower bank ratings in response to regulatory initiatives, the pool of eligible bank investments gets smaller
- As banks shrink balance sheets and change their business mix to comply with higher capital, leverage, and derivatives rules, their reduced funding needs may lead to lower bank issuance
- New liquidity coverage and stable funding rules make short-term deposits more expensive and less desirable for banks
- In a normalized interest rate environment, the yield disadvantage of bank deposits will become more evident

2. Money Market Funds Less Friendly Under New Rules

- Floating net asset value (NAV) requirements on institutional prime funds will redefine how corporate cash investors use money market funds
- Optional fees and gates introduce potential “liquidity cliffs” in times of stress, conflicting with liquidity investment objectives
- How fund sponsors and institutional shareholders respond to the new rules may create uncertainty and will likely necessitate strategies to cope with the transitional period
- In a normalized interest rate environment, the yield disadvantage generated by stricter liquidity requirements will become more evident

3. Higher Priority for Counterparty Risk Monitoring and Management

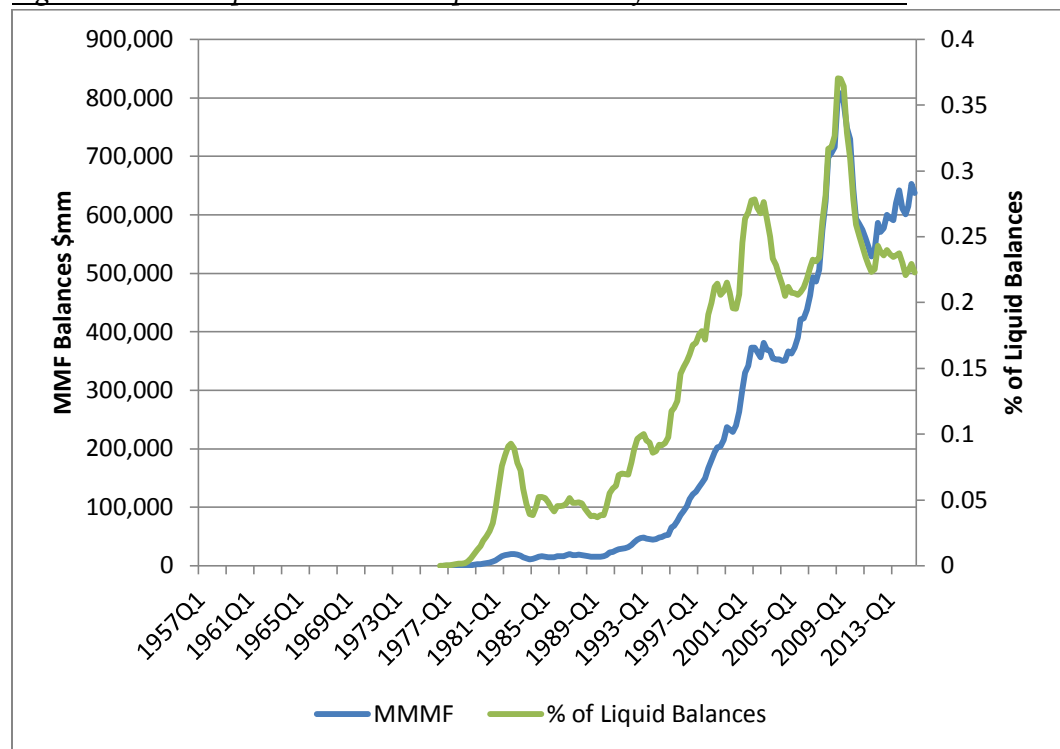
- The lessons from the financial crisis, the internationalization of counterparties and ongoing financial regulations place a high premium on improved counterparty management strategies for treasury managers

- Not addressed by bank and fund relationships alone, counterparty risk management needs to be integral to a comprehensive cash investment strategy

What Was Old May Be New Again

Many people tend to believe that the world of cash investments revolves around two limited choices: deposits and money market funds. This was not the case for much of the last half century. Although deposits were always a mainstay for corporate cash, the use of money market funds for corporate cash management is a recent phenomenon. In a way, one may argue that the popularity of a transplanted retail product in the institutional space was partially responsible for its structural instability during the financial crisis.

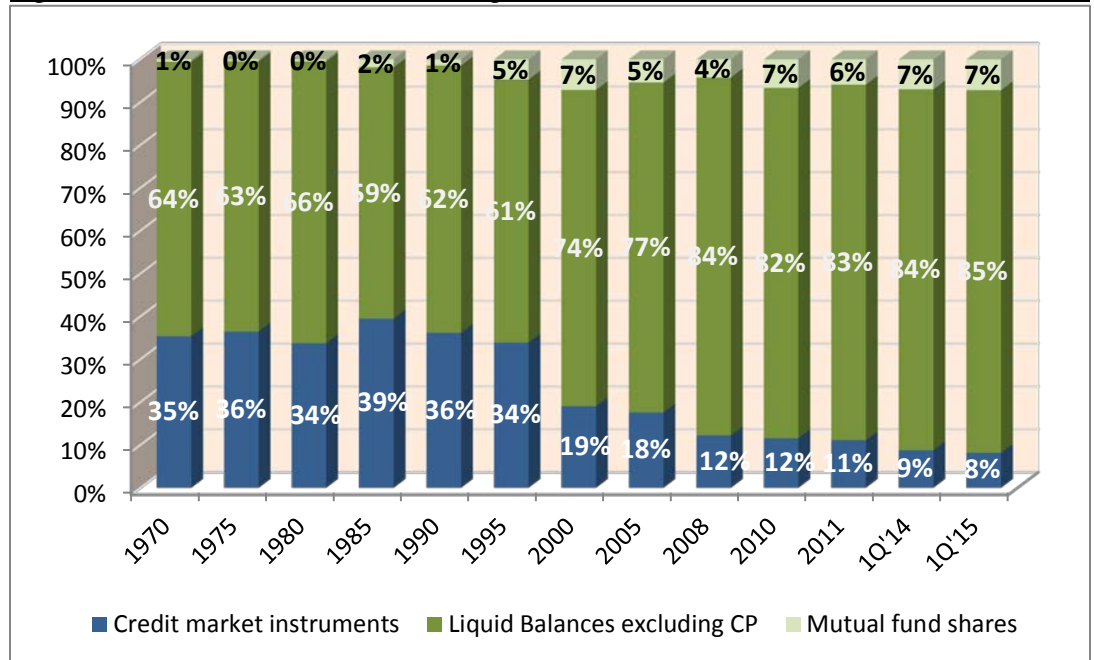
Figure 1: MMF Representation in Liquid Balances of Non-Financial Firms



Source: Federal Reserve Flow of Funds reports “L.101 Nonfinancial Businesses”

Figure 1 shows that MMFs were not meaningful cash management tools until the 1990s, when holdings first surpassed 10% of liquid balances. The meteoric rise in their popularity ended in the fourth quarter of 2008, when the concentration topped out at 37%. Since 2011, exposure has been consistent at 20% to 23%. Sharp-eyed readers may notice the significant percentage drops between 2002 and 2006, when the fed funds rate rose from 1% to 5.25% and made the funds less attractive than some other instruments.

Figure 2: Financial Assets (excluding Miscellaneous) at Non-Financial Businesses

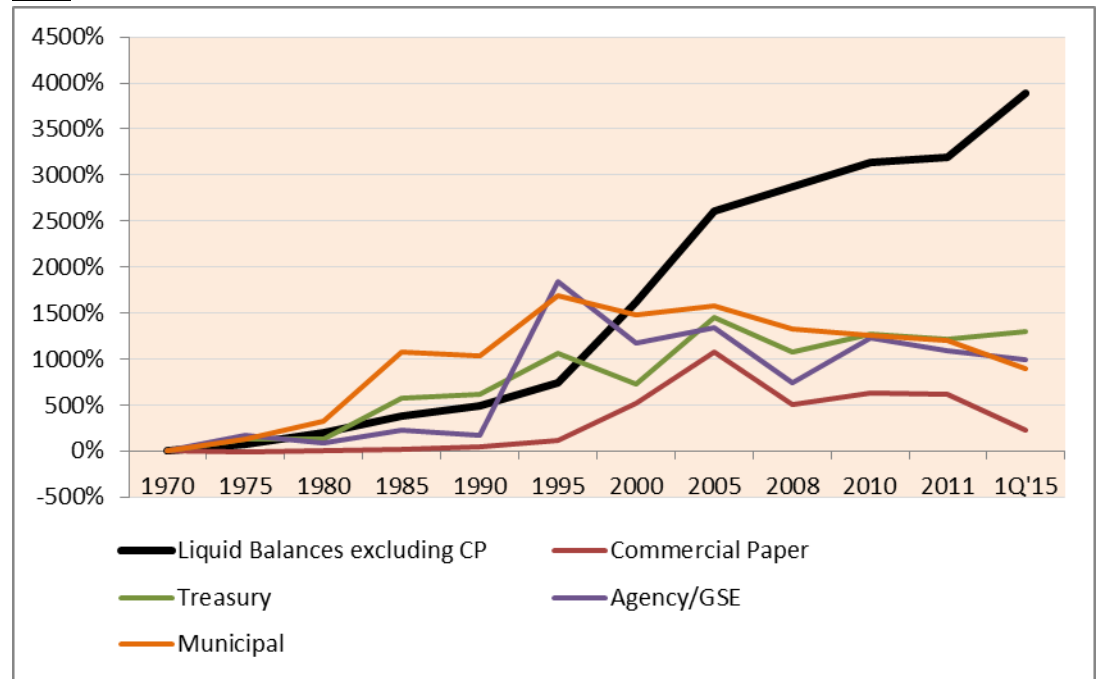


Source: Federal Reserve Flow of Funds reports “L.101 Nonfinancial Businesses”

What, then, did corporations use in place of money market funds prior to the 1990s? [Figure 2](#) may indirectly answer the question. The data series “liquid balances excluding CP” includes bank deposits, money market fund shares and repurchase agreements (repos). “Credit market instruments” refer to commercial paper (CP), Treasury and agency securities, municipal securities, mortgages, and consumer credit. Prior to the 2000s, the latter group accounted for over one third of the financial assets on corporate balance sheets. Over time, “credit market instruments” were reduced to less than 10% as of the first quarter of 2014.

[Figure 3](#) provides further illustration of this trend. Corporate liquid balances have grown steadily since the mid-1990s, but the share of marketable securities on corporate balance sheets has fallen. The combination of high fund balances and reduced holdings in marketable securities may be the direct result of corporations substituting MMFs for direct investments.

Figure 3: Cumulative Growth of Marketable Securities on Corporate Balance Sheets Since 1970



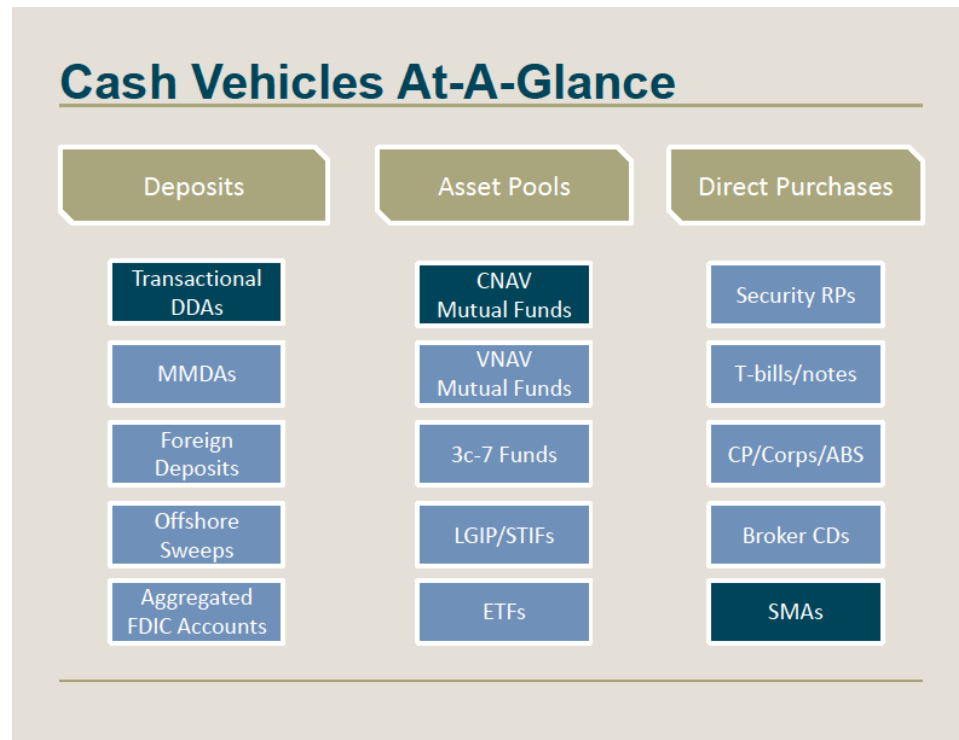
Source: Federal Reserve Flow of Funds reports “L.101 Nonfinancial Businesses”

If one looks for alternative strategies to deposits and MMFs in the post-reform era, should corporations look back to direct purchases as viable solutions? We think so.

Cash Investment Vehicles Revisited

Before discussing alternative strategies, let us recap some common cash investment vehicles from our August 2012 whitepaper.

Figure 4: Cash Vehicles At-A-Glance



Generally speaking, liquid instruments suitable for corporate cash management invariably fall into three categories: deposits, asset pools and direct purchases.

Deposits are essential for transactional purposes with assumed principal stability. They are generally less attractive as investment vehicles due to yield disadvantage. Uninsured concentrations in a single bank credit, the lack of liquidity with term deposits, and the cross-border risk of foreign deposits and offshore sweeps are the main risk considerations.

Asset Pools, including money market mutual funds, represent pro rata interest in underlying securities with the advantage of risk diversification, simple accounting, professional management, and low execution costs. They generally offer higher yield than deposits in a normalized interest rate environment. Shared liquidity, lack of transparency and control, and regulatory restrictions are the common drawbacks.

Direct Purchases, the most traditional of all cash management vehicles. These involve direct ownership and management of a portfolio of marketable securities. Attractive yield, customized strategies, full transparency and risk control are their main benefits. Investment expertise, accounting requirements and liquidity management present the main challenges.

When discussing alternative strategies, we believe that it is important to consider all three types of vehicles in a combined approach in order to derive the benefit of a spectrum of solutions.

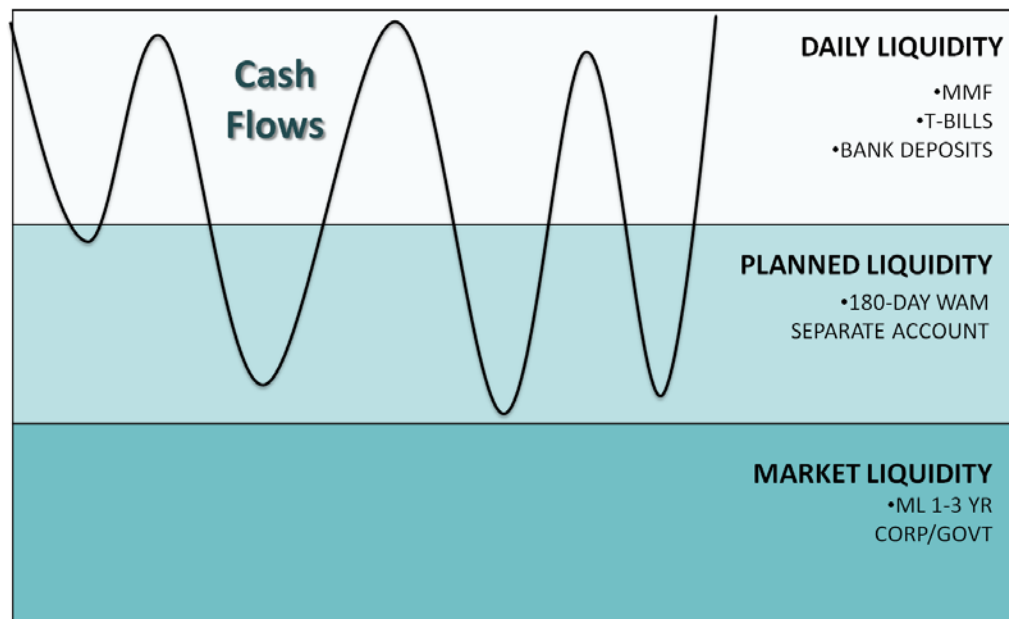
Stratified Strategies

For centuries, using bank deposits as the primary cash management tool has been a legacy practice thanks to banks' role as society's main financial intermediaries and credit providers. More recently, MMFs' ease of use and cost savings established legitimacy in corporate cash management. However, in the post-crisis era, neither group may be sufficient in addressing new challenges. A stratified approach should be adopted to divide cash balances into specific categories; one may apply strategies appropriate for each. A key objective, of course, is to reduce unnecessary balances in overnight bank deposits and MMFs and deploy cash in a diversified portfolio of high quality instruments.

Most cash investment policies subscribe to the objectives of principal stability, liquidity and income potential. Until recently, money market funds achieved all three objectives reasonably well, and deposits may have accomplished the first two. The status quo, unfortunately, may not hold true in the future for the reasons we outlined earlier. The hands-off liquidity management practice of leaving all cash balances in a few bank accounts or money market funds may become increasingly unattractive from a risk-reward perspective.

Stratifying Cash Balances: We suggest that cash investors divide liquid balances into roughly three segments according to liquidity volatility: daily, planned, and market.

Figure 5: Stratifying Investment Strategies According to Liquidity Volatility



- **Daily Liquidity:** Maintaining sufficient daily balances for daily cash use and reserves for unanticipated fluctuations refers to the concept of daily liquidity. The appropriate vehicles may include transactional bank deposits, stable NAV money market funds and other pooled investments, and overnight repos.
- **Planned Liquidity:** For seasonal cash needs and planned expenditures, a liability driven strategy with targeted maturities may provide higher income opportunity without sacrificing liquidity. Accounting rules may vary, but many such portfolios offer principal stability with “held to maturity” treatment without regard to unrealized gains or loss. Appropriate instruments may include term deposit accounts, treasury and agencies securities, and high quality corporate and financial credits.
- **Market Liquidity:** Sometimes referred to as core cash or strategic balances, market liquidity balances represent excess balances without near-term liquidity constraints. The stability of cash balances allows more flexible strategies to maximize return potential. In addition to maturity proceeds, liquidity may come from the secondary market. With a moderately longer time horizon, portfolio strategies may include more high quality asset-backed and mortgage backed securities in addition to the aforementioned instruments.

The stratifying of cash balances into several sub components and applying associated strategies helps to delineate the three objectives of cash management. As deposits and MMFs become increasingly unable to deliver on all three objectives, a stratified approach may allow cash managers to pick the best strategies suited for each. At the aggregate level, they may continue to use deposits, MMFs, and direct purchases in a comprehensive approach.

Separately Managed Account Strategies over Deposits and Commingled Vehicles

Since most of the strategies discussed thus far involve the use of direct purchases, we think it may be appropriate for certain treasury organizations to use the separately managed account (SMA) approach. On the one hand, SMAs allow organizations to maximize direct purchase strategies that are not feasible in bank deposits and money market funds. On the other hand, they have the benefit of professional expertise, risk diversification, customized liquidity, and counterparty risk oversight. Without repeating our own earlier research on this subject, we would like to highlight how SMAs may broaden one's opportunity sets with higher income potential without sacrificing principal stability and liquidity.

1. SMAs vs. MMFs

- **Yield:** When the yield environment returns to normal, the yield impact of MMFs' 30% weekly liquidity limitation will become more pronounced. An unconstrained SMA portfolio with customized liquidity construction may provide substantial yield advantage.
- **Liquidity:** As evidenced by recent market events, the daily liquidity feature of stable NAV commingled vehicles may become vulnerable at times of uncertainty. SMA investors are insulated from "hot money" and "early mover advantage" as they have full control of their own liquidity.
- **Principal Stability:** While prime funds will be forced to recognize daily principal fluctuations beginning in 2016, SMAs offer viable principal stability. Even with a similar credit and maturity structure to a MMF, an SMA portfolio does not have the issue of non-par redemptions since portfolio securities are typically held to maturity.
- **Risk Customization and Control:** MMFs tend to be heavily exposed to financial issuers, with fund managers free to make their own credit decisions. SMAs allow direct credit input from the investors. An SMA portfolio as part of

a large, well-structured liquidity portfolio may reduce specific credit exposure through selective risk optimization.

2. SMA vs. Deposits

- **Risk Mitigation:** SMAs may enhance credit risk management through preemptive credit screening. Credit risk concentrated in a single bank credit can be reduced through portfolio diversification.
- **Yield:** When the yield environment returns to normal, yield opportunity from marketable instruments may be higher than bank products with equivalent credit and maturity characteristics.
- **Liquidity and Term Flexibility:** Even for the same bank credit, marketable instruments may be more liquid than certificates of deposit, which tend to have early redemption penalties. As overnight and other short-term deposits become rarer, the bond market may offer more maturity choices.

3. SMAs vs. Ultra Short Bond Funds

- **Liquidity:** Ultra short-term bond funds and exchange traded funds (ETFs) were thought to be viable alternatives to money market funds. However, all daily NAV commingled vehicles face the same dilemma of long-maturity portfolio assets funding overnight obligations. They are exposed to a liquidity crunch and price volatility during market turmoil. SMAs do not have shared liquidity characteristics.
- **Principal Stability:** SMAs are not subject to daily NAV fluctuations and thus may better preserve principal stability.
- **Simplicity in Tax Accounting:** Ultra short bond funds and ETFs, by virtue of being floating NAV instruments, incur tax and accounting treatment with each shareholder activity. SMAs, on the other hand, encounter such issues only when portfolio assets change.

Conclusion: Back to the Basics

One of the lessons learned from the financial crisis is that the complexity of our financial world trickles down to the short-term funding market from other risk assets. Greater vigilance is required of treasury investment professionals when implementing liquidity investment strategies. Neither the intermediation model of bank deposits nor the one-size-fits-all model of money market funds may be appropriate in our post regulatory environment. With the yield environment poised to move higher, some of

the delayed decisions regarding long-term cash investment strategies may now require serious consideration.

In this commentary, we discussed why deposits and MMFs may soon become inadequate in a new regulatory era. We offered the historical perspective of direct purchases as the main alternative cash strategy prior to widespread adoption of MMFs as institutional cash management tools in the 1990s. After a review of common cash vehicles, we provided a framework on stratifying one's cash balances by liquidity objectives, with appropriate strategies applied to each segment. We hope we have shown that SMAs may be appropriate for executing direct purchases for certain organizations.

In the final analysis, SMAs do not represent a new strategy, but rather a return to the more traditional way of corporate cash management which may be more versatile and durable than other alternatives.

Any projections, forecasts and estimates, including without limitation any statement using “expect” or “believe” or any variation of either term or a similar term, contained herein are forward-looking statements and are based upon certain current assumptions, beliefs and expectations that Capital Advisors Group (“CAG”, “we” or “us”) considers reasonable or that the applicable third parties have identified as such. Forward-looking statements are necessarily speculative in nature, and it can be expected that some or all of the assumptions or beliefs underlying the forward-looking statements will not materialize or will vary significantly from actual results or outcomes. Some important factors that could cause actual results or outcomes to differ materially from those in any forward-looking statements include, among others, changes in interest rates and general economic conditions in the U.S. and globally, changes in the liquidity available in the market, change and volatility in the value of the U.S. dollar, market volatility and distressed credit markets, and other market, financial or legal uncertainties. Consequently, the inclusion of forward-looking statements herein should not be regarded as a representation by CAG or any other person or entity of the outcomes or results that will be achieved by following any recommendations contained herein. While the forward-looking statements in this report reflect estimates, expectations and beliefs, they are not guarantees of future performance or outcomes. CAG has no obligation to update or otherwise revise any forward-looking statements, including any revisions to reflect changes in economic conditions or other circumstances arising after the date hereof or to reflect the occurrence of events (whether anticipated or unanticipated), even if the underlying assumptions do not come to fruition. Opinions expressed herein are subject to change without notice and do not necessarily take into account the particular investment objectives, financial situations, or particular needs of all investors. This report is intended for informational purposes only and should not be construed as a solicitation or offer with respect to the purchase or sale of any security. Further, certain information set forth above is based solely upon one or more third-party sources. No assurance can be given as to the accuracy of such third-party information. CAG assumes no responsibility for investigating, verifying or updating any information reported from any source other than CAG. Photocopying or redistributing this report in any form is strictly prohibited. This report is a confidential document and may not be provided or disclosed to any other parties than the intended recipient(s) without the prior written consent of CAG.