

## Viewpoints

June 2009

### The CFO's Cash Dilemma



**Paul Reisz**  
Senior Vice President  
Product Manager



**Jerome Schneider**  
Executive Vice President  
Portfolio Manager

*While fears of a liquidity freeze and a once imminent collapse in the cash markets appear to be gradually subsiding, many investors remain especially aware of the potential risks embedded in cash-equivalent portfolios. Market participants have become vigilant about managing risk and those memories will likely define their cash investment strategy not just for this year, but for many years to come. Treasurers and CFOs from all types of organisations and market sectors are echoing the same mantra: Capital and liquidity preservation are critically important.*

### The Price of Liquidity

The yield curve for cash instruments today is very flat. With nominal rates extremely low, maintaining liquidity comes at a significant inherent cost. Even individual investors feel the implicit cost of investing in highly liquid investment alternatives, as the returns are likely to be only a handful of basis points. The investment choices in the safest realm of the cash markets – from government money market securities to T-bills and Agency discount notes – are very liquid and come with the highest of ratings. In many cases, investors are limited to holding US Treasury instruments, which offer liquidity and simultaneously seek to protect capital. However, the current yields on such government-backed investments do not come close to reaching the investment targets set by most individual or institutional investors.

Institutional investors such as corporations, hospitals, nonprofits, insurance companies, universities, and foundations, who are charged with making investment selections specifically for operating cash, have another set of considerations they cannot overlook: the financing rate of their liabilities and the cost of capital of the entities they represent. On the liability / cost-of-capital side of the equation, many institutions have looked to maintain vast amounts of liquidity in order to be able to fund their cash commitments, even in this volatile environment where liquidity comes at a premium. This premium is represented in Chart 1, which illustrates just how flat the money market yield curves are currently. Yields are low and there is little differentiation in the yields on cash products at

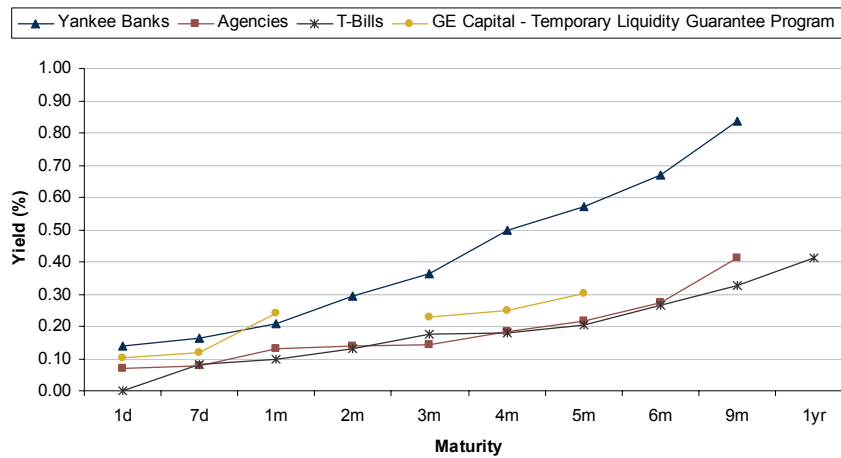
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\* All investments carry some level of risk.

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the short end of the curve. There is an abundance of cash being invested in the short end, a clear signal of the extreme demand for liquidity.

**Money Market Yield Curves**

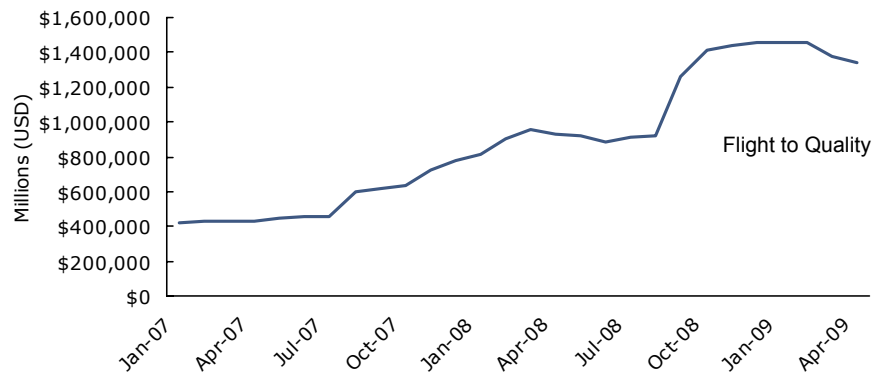


Data as of 28 May 2009  
Sources: Bloomberg, PIMCO

**Chart 1**

The demand for safety and liquidity among individuals and institutional investors alike is also demonstrated by the growth in assets under management specifically for US government money market funds (Chart 2).

**US Government Money Market Funds: Assets Under Management**



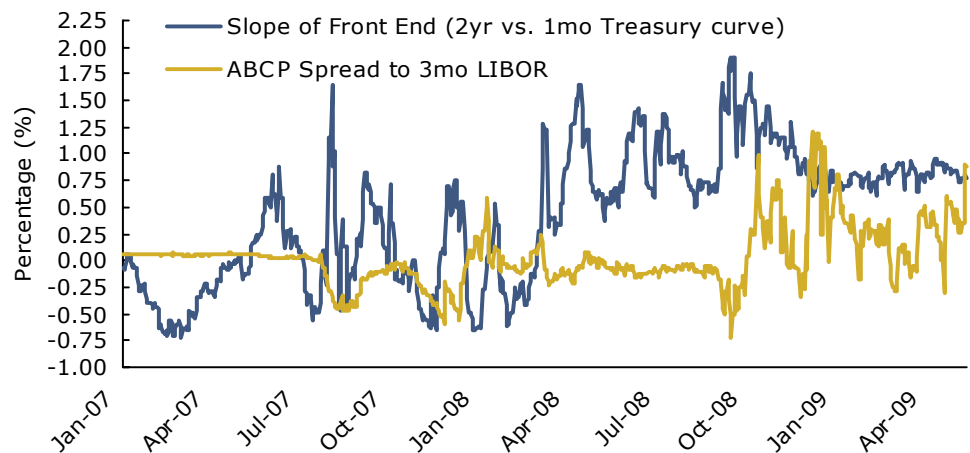
Sources: iMoney.net, ICI

**Chart 2**

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Although cash yields are low, CFOs and treasurers have added to their liquidity positions in two ways: either a) raising additional cash through equity or debt offerings, or b) reducing expenditures across the board (including postponing capital investments) and preserving positive cash flow to enhance the bottom line. A cost/benefit analysis accompanies each of these decisions. Insofar as the institution has issued debt to raise funds for future capital investments and projects, the key is to minimize the negative arbitrage between the cost of those funds (LIBOR+ spread) and the reinvestment opportunities until those funds are needed for disbursement. Chart 3 below helps illustrate the attractiveness of medium-term assets, specifically those that are LIBOR-indexed, as the Fed continues to target the OIS (overnight indexed swap) / LIBOR spread into the coming months. The blue line shows the slope of the 2-year versus 1-month Treasury curve. The spread is wide because of significant demand for shorter-dated Treasuries. Asset-backed commercial paper (ABCP) spreads are wide as well (yellow line), as yields on risk assets have remained high compared to LIBOR.

**Liquidity Stress in the Market**



Source: Bloomberg

**Chart 3**

Herein lies the CFO's dilemma: What is the appropriate cost to maintain liquidity? While individual investors have the same dilemma, as we each have different costs of our capital, corporations who can often value their enterprises daily in the capital markets should undertake a more quantitative analysis. Not so long ago, CFOs would have utilised money market strategies to reinvest their excess cash. But after the Lehman bankruptcy caused varying degrees of panic in the money market space over the last nine months, this simple approach is probably no longer sufficient. CFOs and treasurers have learned through experience that money market strategies with higher yields may no longer be as safe as they once believed. Additionally, investors can no longer assume

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that presumably “ultra-safe” money market strategies will return principal, especially after the Reserve Primary Fund broke the buck. The Federal Reserve and the US Treasury have programmes in place to free up liquidity in the cash markets, but what happens when these programmes are no longer in place? Now more than ever, CFOs feel the fiduciary responsibility to understand credit and liquidity risk within a corporate cash portfolio.

### Money Market Solutions: Consider Hybrid Strategies

To that end, the Money Markets team here at PIMCO has created strategies that seek to provide suitable liquidity with short notice, but offer the potential for higher yields than those found in typical prime or US government money market strategies. In essence, we find in the current markets an opportunity to create a “hybrid”. Not a car that stretches your miles per gallon, but an investment strategy that attempts to stretch your investment return by barbellising the liquidity inherent in different products. This may oversimplify things a bit, but investors need to ask themselves two basic questions:

- Do we really need to pay for expensive liquidity?
- Are there ways to take advantage of the flight to liquidity and capture the premium in a barbelled strategy?

The key to managing cash is maximising liquidity while not overpaying for it. In times of stress, liquidity is an expensive option. In the “old normal” times (roughly 2002 through early 2007), there was hardly any premium placed on liquidity at all. Typically, institutions and corporate treasurers set up separate strategies: one to handle short-term operating cash and another to invest longer-term cash that is used for capital investments and projects (e.g., research and development).

The current markets are bifurcated and require a constant rebalancing between the two portfolio tiers as cash flows and market liquidity change. Today, we would suggest a customised hybrid strategy that combines the ultra-liquidity of the repo market with attractive high-quality short-term assets. The flexibility inherent in this approach enhances an institution’s ability to navigate through turbulent liquidity markets. The best way to exemplify this is to imagine three buckets:

- 1) The “all weather” bucket – These most liquid investments include T-bills, Agency discount notes and repos with a duration range of overnight to one month. You can’t predict the exact frequency or magnitude of cash flows, but you’re certain that they will occur often – in other words, you need sufficient liquidity to help protect you against all weather conditions (even if you live in Newport Beach, where it hardly ever rains).
- 2) The “lunch money” bucket – You know that you will eat lunch every day and you can estimate how much you’ll spend on it, so you can plan for it. The investments in this bucket let you meet your fiscal needs on a periodic basis. However, the general predictability of cash flows allows you to invest out the yield curve and take advantage of any upward slope (albeit somewhat limited in the current environment).
- 3) The “university” bucket – This is the bucket where you reserve funds for important capital investments. For institutions (such as “universities”), this could be construction

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or research and other capital expenditures; for individuals, this could be the down payment on a house or expenditures for college. These are funds that will be needed in the future, more than two or three years away. However, in the unexpected event that you need the monies earlier, you should be able to monetise them quickly with limited downside risk. In essence, you are selling the liquidity option in favour of high-quality assets that have a longer duration or weighted average maturity (WAM). ***In the current environment, this is the value proposition in your portfolio strategy.***

Many of PIMCO's institutional and corporate clients have their capital needs mapped out with a high degree of accuracy. This horizon of cash flow requirements is integral to and the deciding factor in the portfolio construction. Having three individual dedicated portfolios would be overly conservative, limiting the possibility for synergies and creating the possibility of incremental credit risk from overlapping exposures where an investor would least want it. However, by combining these strategies into a single dedicated portfolio, we may be able to combine liquidity with the opportunity for yield enhancement. An additional benefit of this strategy is that it can be customised. The portfolio can be adjusted as market liquidity and spreads change and as a client's cash flow requirements alter over time.

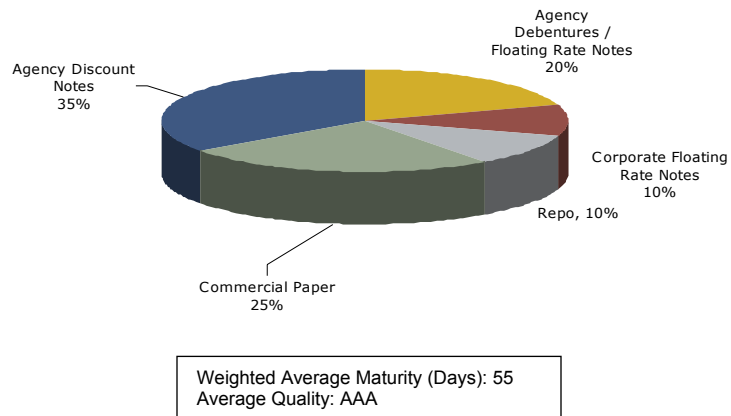
Credit selection is obviously an important component to this portfolio strategy, and we would envision remaining true to those credits that have benefited from government "partnerships". This would include modest exposures to Agency mortgages, which have benefited as the Fed purchases have begun to take hold in the marketplace. From a performance and yield perspective, we believe they remain a solid choice. Additionally, liquidity in these markets is growing as new and old participants are returning to the markets throughout the curve.

Charts 4 and 5 below show examples of portfolios that could be structured based on an investor's capital needs. If they need immediate liquidity, then the money market portfolio in Chart 4 might be a fit. However, if an investor does not want to overpay for liquidity, then the "hybrid" portfolio in Chart 5 may be a solution. If we use Index yields as representative of what these two strategies might yield, the differential is startling. As of 30 April 2009, the yield on the Lipper Prime Money Market Index was 0.41%, while the yield on the Lipper Ultrashort Index was 2.68%. Based on that comparison, we can assume that the price of liquidity could cost as much as 2% or more.

So while liquidity remains a keystone of PIMCO's money market investment strategies, we also believe it is important to understand and articulate from an institutional perspective the reasons for and cost of requiring such liquidity. Everyone dislikes overpaying for anything, and today's cash markets present a situation where a clear vision of the market, combined with a solid assessment of the actual needs for cash, allows investors the opportunity to effectively and efficiently optimise their portfolio returns without overpaying.

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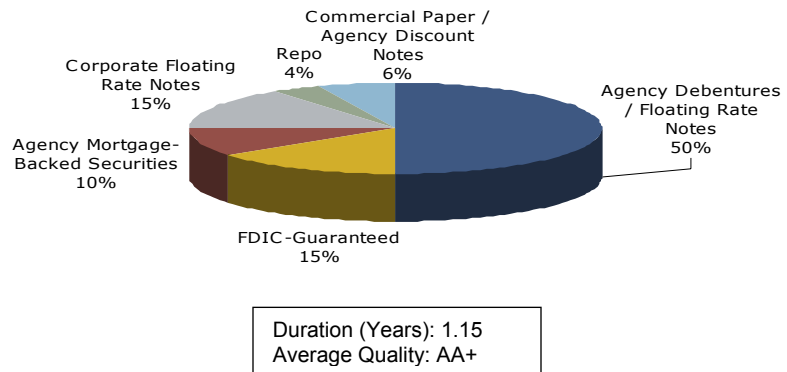
**Hypothetical Money Market Portfolio Structure†**



**Hypothetical Example for illustrative purposes only.**  
Based on Data as of 20 May 2009.  
Source: PIMCO

**Chart 4**

**Hypothetical Limited Discretion Short-Term Portfolio Structure†**



**Hypothetical Example for illustrative purposes only.**  
Based on Data as of 20 May 2009.  
Source: PIMCO

**Chart 5**

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### About the authors:

**Paul Reisz, CFA**, is a senior vice president in the Newport Beach office and a product manager covering the spectrum of money market, enhanced cash, stable value and income strategies. Prior to joining PIMCO in 2000, he was with Transamerica Asset Management for more than 10 years, responsible for business development, client servicing and product development. He has 25 years of investment experience and holds an MBA from the Marshall School of Business at the University of Southern California. He received an undergraduate degree from the University of California, Berkeley. He is also a certified public accountant.

**Jerome Schneider** is an executive vice president in the Newport Beach office and deputy head of the money market and funding desk. Prior to joining PIMCO in 2008, Mr. Schneider was a senior managing director with Bear Stearns. He specialised in credit- and mortgage-related funding transactions and was instrumental in the development of one of the first “repo” financing companies. He has 14 years of investment experience and holds an MBA from the Stern School of Business at New York University. He received an undergraduate degree from the University of Pennsylvania.

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#### **London**

PIMCO Europe Ltd  
 (Registered in England and Wales, Company No. 2604517)  
 Registered Office  
 Nations House  
 103 Wigmore Street  
 London W1U 1QS  
 England  
 +44 (0) 20 7872 1300

#### **Munich**

PIMCO Europe Ltd Munich Branch  
 (Registered in Germany, Company No. 157591)  
 Registered Office  
 Seidlstraße 24-24a

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80335 Munich  
Germany  
+49 (0) 89 1221 90

### Amsterdam

PIMCO Europe Ltd Amsterdam Branch  
(Registered in The Netherlands, Company No. 24319743)  
Registered Office  
Schiphol Boulevard 315  
Tower A6  
1118 BJ Luchthaven Schiphol  
The Netherlands  
+31 (0) 20 655 4710

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