



Liquidity Management Solutions

Making Your Cash Work Harder

During the last several years, there has been a steady rise in corporate cash balances. In 2016, the S&P (ex-financials) cash and short-term investment balance hit record levels of USD 1.5 trillion, the largest cash total in more than 10 years¹. Against this backdrop, the importance of liquidity and cash management has become more essential than ever before for organizations to successfully meet their day-to-day operations, invest in profitable business opportunities and to finance product and geographic expansion.

Opportunity Costs of Overnight Deposits

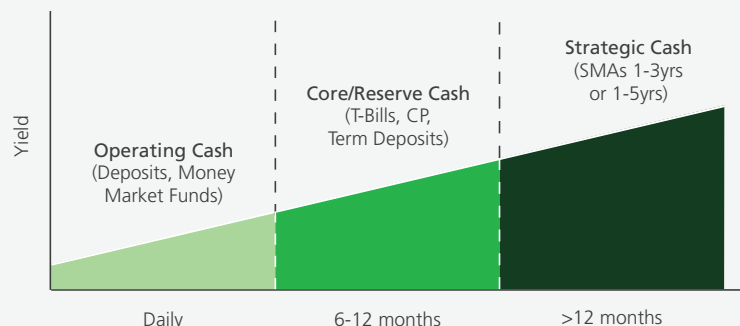
When managing cash, organizations are tasked with balancing capital preservation, maintaining liquidity and generating appropriate returns on investments. Solutions for these goals typically include money market funds and bank overnight deposit strategies, which are easily accessible and plentiful. However, in a low rate environment, overnight deposits earn minimal returns and can create a significant opportunity cost. For example, as of May 2017, cash invested in a government money market mutual fund had a yield of 0.54%². The opportunity cost of maintaining all cash balances in overnight investments was approximately 0.74% when using the 2 year on the run treasury yield³ as a proxy for the yield in a potential liquidity management solution. By using a broader managed liquidity management solution, investors can capture the liquidity premium with a portion of their cash by investing further out on the yield curve.

Segmenting Cash to Optimize Liquidity

In our view, cash forecasting is the cornerstone of effective liquidity management and is used to identify a firm's short, medium, and long-term cash requirements. With that, many organizations have realized the importance of cash segmentation to help classify cash needed for different activities. Through forecasting liquidity needs and segmenting cash into the three below segments, companies identify cash that can be managed to provide additional yield:

- **Operating cash:** refers to cash required for day-to-day operations. Operating cash investments should focus on capital preservation and daily liquidity.
- **Core/Reserve cash:** refers to cash for short-term use (usually during the next 6-12 maturities). Core cash should focus on liquidity and can be invested in slightly longer term instruments.
- **Strategic cash:** refers to cash that is not required for short-term use and can be managed to provide additional yield (usually anywhere from 1 to 5 year maturities). Strategic cash should focus on generating additional yield.

Cash segmenting for a potential boost in yield



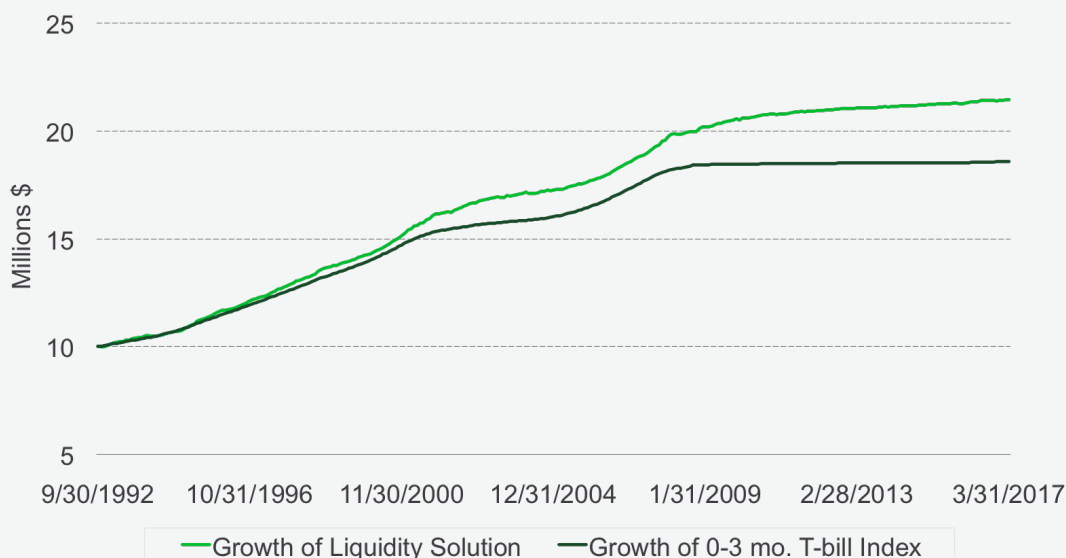
For illustrative purposes only.

Source: TDAM.

Overnight Returns vs. Liquidity Management Solutions

Companies who segment their cash are able to develop an investment strategy for each segment based on their investment objectives and risk appetite. Essentially, instead of holding all cash in money market funds or overnight accounts, segmented cash can be allocated to appropriate investments, offering a total solution designed to meet each firm's unique objectives and goals, with the intent to ensure cash works harder to earn a higher yield in the process. To illustrate, below is a graph depicting the growth of \$10 million from 1992 to 2017 invested in an overnight account, represented by the Bank of America Merrill Lynch (BofAML) 0-3 month US T-Bill Index, vs. a typical liquidity solution, represented by a blended index comprised of 40% BofAML 0-3 Month US T-Bill Index for operating cash, 20% BofAML 3-6 Month US T-Bill Index for core/reserve cash, and 40% BofAML 1-3 Year US Corporate Government Index for strategic cash⁴.

Growth of \$10 Million: Blended BofAML Index vs. T-bill Index



For illustrative purposes only.

Source: Data from Bank of America Merrill Lynch Index System on Bloomberg. As of March 31, 2017.

All information is based on historical data.

The graph clearly demonstrates that a segmented liquidity solution would have generated higher returns when compared to cash that was invested in the 0-3 month T-bill index and underscores the value of a thoughtfully constructed total liquidity solution. The liquidity premium is partially represented by the advantage in total return of the liquidity solution over the T-bill; the rest is attributed to credit risk.

It is worth noting that during the selected time period, many rate change regimes occurred. Accordingly, results show that on a monthly basis, negative total return periods are infrequent and not prolonged. In fact, there have only been five negative total return quarters during the entire specified time period with the maximum drawdown being only -0.32% during the second quarter of 2004. During that time the 2 year on the run treasury yield climbed 124 basis points from 1.58% to 2.82%. Moreover, there have been no annual negative years and only one period of three consecutive months with negative total returns. This occurred in the fourth quarter of 2015 producing a negative quarterly return of 13bps⁵.

Tailored Solutions to Meet your Needs

Separately Managed Accounts (SMAs) are used to help customize solutions so they are appropriate for a company's liquidity needs, risk parameters, and asset size. TD Asset Management can assist in the development of a sound liquidity strategy designed to address an organization's quality, maturity and yield objectives.

TD Asset Management's Liquidity Management Solutions are designed with your needs in mind. We understand that for organizations, managing day-to-day and future cash requirements is a fine balance that requires a solution where capital preservation, liquidity and yield are top considerations.

¹FACTSET Analyst Report. Cash and Investment, Andrew Birstingl. Dec 21, 2016

²Source: Crane Data. As of May 31, 2017

³Source: Bloomberg. As of May 31, 2017

⁴The BofA Merrill Lynch 0-3 Month US Treasury Bill Index is a subset of The BofA Merrill Lynch US Treasury Bill Index including all securities with a remaining term to final maturity less than 3 months. Inception date: Jun 30, 1992

The BofA Merrill Lynch 3-6 Month US Treasury Bill Index is a subset of The BofA Merrill Lynch US Treasury Bill Index including all securities with a remaining term to final maturity greater than or equal to 3 months and less than 6 months. Inception date: Jun 30, 1992

The BofA Merrill Lynch 1-3 Year US Corporate & Government Index is a subset of The BofA Merrill Lynch US Corporate & Government Index including all securities with a remaining term to final maturity less than 3 years. Inception date: Jun 30, 1986

It is not possible to invest directly in the index. Investors pursuing a strategy similar to an index may experience higher or lower returns and will bear the cost of fees and expense that will reduce returns.

⁵Ibid.



For more information, please contact your TD Asset Management (TDAM) Relationship Manager.



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