INVESTMENT PERSPECTIVES

A guide to segmenting cash for liquidity and return goals

Managing large cash balances amid low interest rates adds impetus to the need for more optimal cash management.

An appropriate investment strategy depends on an assessment of a company's specific liquidity needs and risk tolerances.

Dividing cash balances into three segments—operating cash, working capital, and strategic cash—may be one way to enhance the return of an overall cash portfolio.

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We have always advised our clients to optimize, or segment, their cash by time horizon and risk tolerance and then invest each segment in a way that maximizes expected risk-adjusted returns. Solutions that help optimize a cash portfolio invariably require an intimate understanding of client needs and a sophisticated approach to help balance the competing challenges of maximizing investment returns while ensuring adequate safety and liquidity.

This paper outlines practical ways to help optimize a cash portfolio's investment strategy by using a full spectrum of liquidity solutions. In addition to money market funds for operating cash, solutions for assets that do not need to be available daily may include ultra-short-term fixed-income funds, short-term bond funds, or customized separate accounts. These additional liquidity solutions have the potential to enhance total returns because they are able to extend maturity out the yield curve and/or add credit risk—the two primary levers that cash investors can pull as they seek to increase returns.

Why consider "segmenting" cash? And what do we mean?

In the 2020 AFP Liquidity Survey, more than 30% of corporate practitioners reported an increase in their organizations' cash holdings within the U.S. in the past 12 months. That fact highlights the importance of accurately estimating a company's cash flows to allow an entity to optimize its strategies for liquidity, stability, and return.

February 2021

As Exhibit 1 shows, it's helpful to think of three potential segments for cash investments:

1. Operating cash is used for regular cash needs, such as payroll and vendor payments. Its key characteristics are that it's available on a daily basis, which means it seeks the highest level of liquidity, and capital preservation is important, so its investment objective is to prioritize low volatility. This segment should also be available for unexpected cash needs.

2. Working capital is used on a less frequent basis for items such as quarterly tax payments, dividends, or other capital expenditures. As a result, its time horizon is longer than that of operating cash and it does not require same-day liquidity.

3. Strategic cash is not needed for daily liquidity and instead has a time horizon greater than one year. Ideally, this would be a pool of money that's maintained on a firm's balance sheet for a number of years at a relatively stable amount.

Accurate forecasting of how much and how long cash will be available in each of these segments is important. If the amount of operating cash is overstated, then the benefit of investing an optimal amount in higher-yielding investment strategies is lost. If the amount of cash with a longer-term time horizon is overstated, then an unexpected loss or gain could be incurred if cash is not available, should it be needed immediately and unexpectedly. Tapping into funds with a longer-term time horizon could prove costly in the short term if the investment environment has changed, such as if interest rates or credit spreads increased.

Exhibit 1: Spectrum of liquidity solutions

Segment	Operating cash	Working capital	Strategic cash
Used for	Payroll, operating expenses, etc.	Quarterly tax payments, capital expenditures, etc.	Long-term spending needs
Time horizon	1 day to 30 days	1 month to 12 months	1 year to 5 years
Risk/reward tolerance	Low-risk, low-return overnight cash	Medium-risk, medium-return enhanced cash	Higher-risk, higher-return limited duration
Investment type	Money maket funds, bank deposits	Ultra-short-term fixed income, separate accounts, self-directed investments	Short-duration fixed income, separate accounts, multi-asset solutions

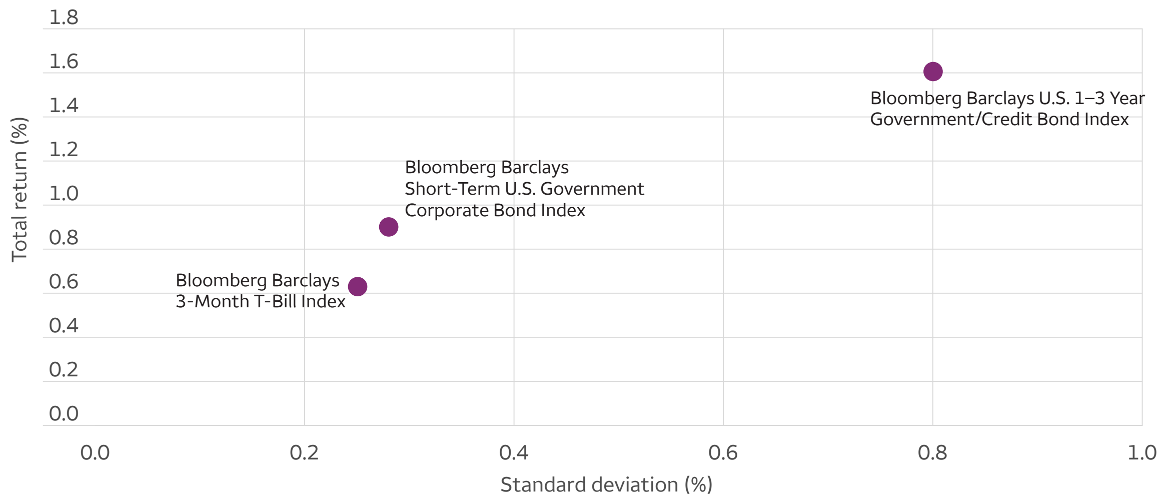
Source: WFAM

What types of investment strategies are in each segment?

The investment choices along the liquidity solutions spectrum (Exhibit 2) are most liquid and have the greatest stability of capital on the left. As you begin to move to the right of the spectrum and seek additional yield or total return opportunities, risk also increases, as measured by standard deviation of returns. It's important to understand the investment objective of each of these strategies and translate that knowledge into whether the expected investment outcome is suitable for a particular company's cash needs.

Exhibit 2. The liquidity solutions spectrum shows that longer maturities can provide higher returns but with higher volatility

Risk and return



Sources: WFAM and Bloomberg Barclays; data as of December 31, 2020. **Past performance is no guarantee of future results.**

Operating cash (1 day to 30 days)

Money market funds

Money market funds continue to be a widely used investment strategy for operating cash because they offer investors daily liquidity. Government/Treasury money market funds transact at a constant or stable net asset value (NAV) of $1.00, an attraction for investors seeking the highest levels of principal preservation and liquidity. It also means they are often a fund of choice for cash sweep purposes.

Institutional prime and tax-exempt money market funds transact at a floating, market-based NAV that is priced to four decimal places ($1.0000) and may be subject to liquidity fees and redemptions gates under special circumstances. To help investors make confident choices, we recommend that they:

- Watch the money market fund data being posted on fund websites, including market-based NAVs, daily and weekly liquidity percentages, and net fund flows. All funds are required to report this data, and our data can be found here: https://www.wellsfargoassetmanagement.com/investments/mutual-funds/daily-fund-metrics.html

- Consult with us to decide which type of money market fund would be most appropriate for daily cash needs. For some institutional investors, the stable NAV of a government/Treasury money market fund may be the best choice. For other investors, the potential yield advantage over government money market funds may make prime or tax-exempt money market funds more attractive.

Bank deposits

Bank deposits are less attractive today than in years past due to stricter banking regulations, such as Basel III. Among the reforms designed to strengthen the banking sector's resilience to liquidity shocks is the liquidity coverage ratio (LCR). The LCR is the requirement that banks have sufficient high-quality liquid assets to withstand a period of significant liquidity stress lasting 30 days. The new regulations make some types of deposits less profitable for banks. Therefore, they are likely to move them off the bank's balance sheet or charge fees to hold those types of deposits.

Working capital (1 month to 12 months)

Ultra-short-term fixed-income funds

Ultra-short-term fixed-income funds are often used by cash investors seeking additional yield opportunities for a portion of working capital beyond daily liquidity needs. These types of funds are the first step beyond money market funds in the liquidity spectrum. They offer low-volatility NAVs and longer-term allowable maturities and credit risk, which allows for additional yield. They typically have an average duration of less than one year.

Funds in the ultra-short-term fixed-income universe can vary. They represent a range of investment strategies with varying maturity and credit profiles. For example, all three of the taxable Wells Fargo Ultra-Short Funds (Exhibit 3) fall into the Morningstar ultrashort bond category and the Lipper ultra-short obligation category despite having different duration targets, credit profiles, and allowable investments. With different types of strategies available in the ultra-short-term space, investors should choose solutions that most closely meet their objectives.

Exhibit 3: Comparison of Wells Fargo Ultra-Short Funds

	Conservative Income Fund	Adjustable Rate Government Fund	Ultra Short-Term Income Fund	Ultra Short-Term Municipal Income Fund
Duration target	Less than 1 year	1 year maximum	Maximum effective duration of 1 year and target duration of 6 months	Weighted-average effective duration target of 0.75 years
Credit quality	Has a maximum of 30% in BBB-rated issues	Targets a AAA-rated average	Has a maximum of 15% in below-investment-grade securities	Has a maximum of 10% in below-investment-grade municipal securities
Principal investments	Corporate bonds, commercial paper, CDs, time deposits, government securities, municipal bonds, MBS, ABS	MBS and CMOs	Corporate bonds, ABS, CMOs, CMBS	Municipal securities such as general obligations and revenue bonds, variable-rate demand notes

Source: WFAM

Abbreviations
MBS: Mortgage-backed securities
ABS: Asset-backed securities
CD: Certificate of deposit
CMO: Collateralized mortgage obligation
CMBS: Commercial mortgage-backed securities

Strategic cash (1 year to 5 years)

Short-term bond funds

Short-term bond funds are the next step beyond ultra-short-term fixed-income funds and are part of the strategic cash segment of the liquidity spectrum. In fact, short-term government bond funds are an intermediate step between ultra-short and short-term bond funds because they mainly seek additional yield by extending duration and maintaining a high-quality credit profile (government). For non-government short-term bond funds, additional yield is sought by extending duration, credit quality, and asset type. Funds in the short-term bond fund category have durations of 1.0 to 3.5 years according to the Morningstar definition. These funds are attractive to moderately conservative investors as they are less sensitive to interest rates than funds with longer durations. The returns, as measured by the representative indexes in Exhibit 4, show that the strategic cash segment has outperformed funds in the working capital segment. It's important to note that its volatility has been greater as well over the past 3-, 5-, and 10-year periods.

Customized separate accounts

Customized separate accounts may also be an investment consideration for institutional clients. The benefit of using a separate account is the ability to customize investment preferences for risk tolerances, return objectives, and cash flows. Customization can also address gain/loss sensitivity, financial statement implications, and tax concerns. Due to the investment flexibility, customized separate accounts can be used along the entire liquidity spectrum for operating cash, working capital, and/or strategic cash needs.

Multi-asset solutions

A customized solution that is unconstrained by asset class and can deliver on client outcomes, be it preservation, growth, and/or income, may be appropriate for strategic cash. Our Multi-Asset Solutions (MAS) team works with clients to invest this portion of their cash by understanding their investment objectives and risk tolerances, including any constraints they may have. The MAS team then creates a customized solution offering globally unconstrained investments, including passive, factor-based, fundamental, and derivative-based investment strategies that incorporate dynamic asset allocation and downside risk management. They also offer an off-the-shelf strategy, Risk Allocator Preserve, which seeks to preserve wealth using a multi-asset risk-balanced approach to maximize diversification and return for the risk taken.

Self-directed investments

Self-directed investments are an option for treasury departments with the expertise and resources to manage a fixed-income portfolio. It's time-intensive to conduct in-depth credit research, analyze yield-curve shifts, and understand supply and demand technical factors. The ability to achieve best execution in a competitive environment is also important. For total return needs, we believe it's important to be able to judge if a particular security presents a good value at a particular price. It's not enough that an asset is cheap because there may be a good reason for it, and it may be at risk of becoming even cheaper. Additionally, portfolio reporting and risk management should be undertaken internally.

How do the three cash segments compare?

Just as Exhibit 2 shows, Exhibit 4 also shows that total returns and volatility (as measured by standard deviation) increase as the duration and investment types are extended. As expected, the investment types within the operating cash segment have lower volatility and lower returns than the working capital and strategic cash segments.

Exhibit 4: Historical perspective of investment outcomes as of December 31, 2020

Cash segment	Operating cash	Working capital	Strategic cash
Investment type	Money market fund	Ultra-short-term bond fund/separate account	Short-term bond fund/ separate account
Representative index	Bloomberg Barclays 3-Month T-Bill Index	Bloomberg Barclays Short-Term U.S. Government Corporate Bond Index	Bloomberg Barclays U.S. 1–3 Year Government/ Credit Bond Index
Returns (%)			
1 year	0.67	1.31	3.32
3 year	1.61	1.99	2.97
5 year	1.21	1.55	2.21
10 year	0.65	0.92	1.59
Standard deviation (%)			
3 year	0.28	0.31	0.99
5 year	0.27	0.30	0.94
10 year	0.25	0.28	0.80
Duration	0.17	0.47	1.84
Settlement	Same day	Next day	Next day

Sources: WFAM and Bloomberg Barclays; data as of December 31, 2020. **Past performance is no guarantee of future results.**

To expand on this idea, Exhibit 5 shows the range of total returns over the past 10 years based on the rolling one-year returns as of month-end. This gives investors an idea of the highest, lowest, and mean return over the long term, which may be helpful in assessing an investor's risk tolerance. We've provided Exhibit 6, which shows similar data but includes rolling three-month returns over the same period, to give investors an idea of what return volatility may look like for a three-month holding period. Both exhibits indicate that, as duration is extended, average returns increase over time but with additional volatility.

Exhibit 5: More duration risk has resulted in higher returns but with more volatility

Rolling one-year returns at month-end
December 31, 2010–December 31, 2020

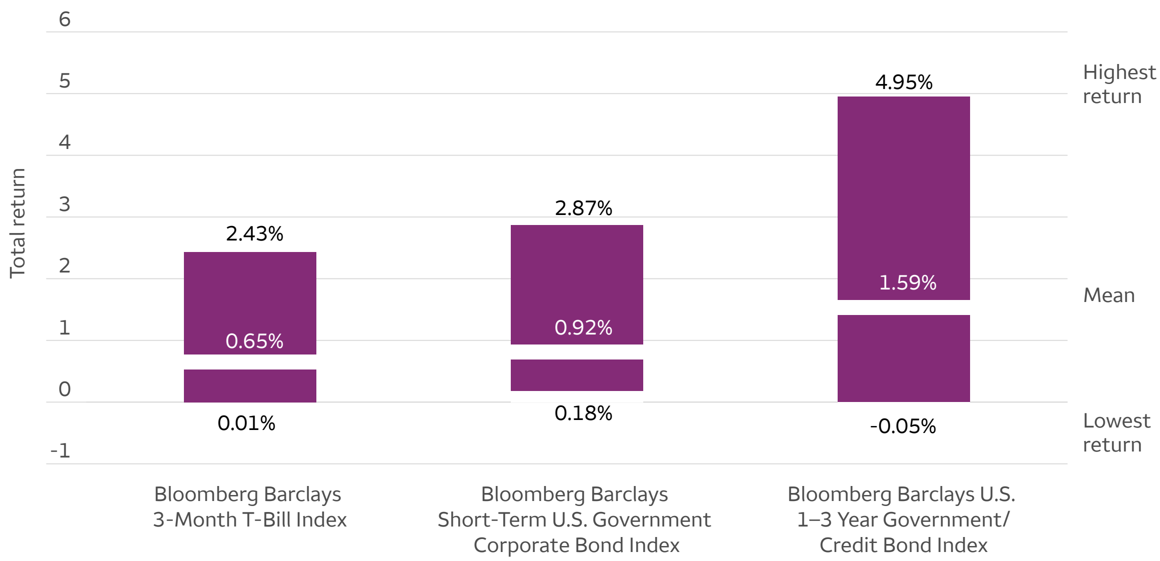
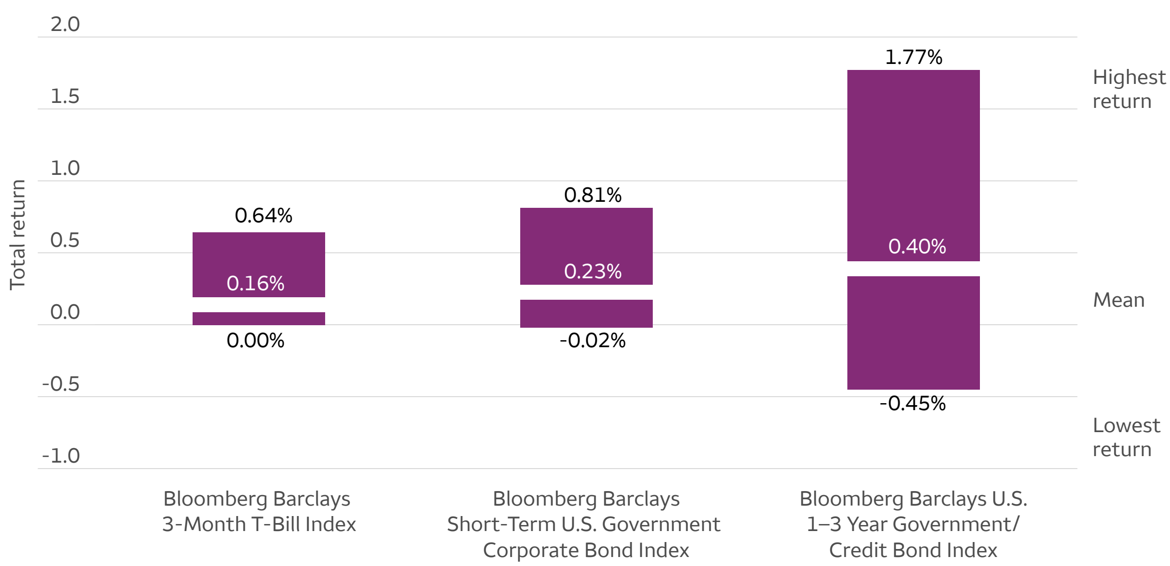


Exhibit 6: Shorter time periods help further quantify risk and returns

Rolling three-month returns at month-end
December 31, 2010–December 31, 2020



Sources: WFAM and Bloomberg Barclays; data as of December 31, 2020. **Past performance is no guarantee of future results.**

The takeaway is that the working capital and strategic cash segments may have some negative quarterly returns, but the average rolling one-year returns historically were positive. Operating cash investments, which are focused on capital preservation, consistently had positive returns.

What are some practical ways to assess investment needs and risk tolerances?

After cash has been allocated to the appropriate investment strategy segment, an assessment of a company's liquidity needs, risk tolerances, and return objectives is needed. Many treasury departments will work with us to develop appropriate investment policies and strategies. This conversation should include a realistic understanding of what each investment strategy would mean to a cash portfolio. Questions that should be asked include:

How liquid is an investment solution?

For money market funds, daily liquidity is possible as the fund's holdings can be sold quickly and converted to cash to meet shareholder redemptions. Government and retail money market funds transact at a stable NAV, but institutional prime and tax-exempt money market funds are subject to a floating NAV and fees/gates. Since 2016, many firms have become comfortable with the structures of prime and tax-exempt money market funds. Ultra-short bond funds and separate accounts are also very liquid; however, liquidity is typically available next day.

How much interest rate risk is acceptable?

Duration of a fixed-income investment is an important consideration in determining an appropriate investment. Simply put, duration measures the interest rate sensitivity for a fixed-income security or portfolio as interest rates fluctuate. For example, a fixed-income security or bond portfolio with a duration of one year means that if interest rates fluctuate up or down by 1.00%, the value of the security or portfolio would be expected to fall or increase by 1.00%, respectively. Over the course of one year, however, a 1.00% rise in interest rates would be offset by coupon income and also provide an opportunity to reinvest at higher rates.

How can other downside risks be gauged?

A scenario analysis is done by using a proxy portfolio of potential duration and credit profiles to analyze the effect of higher interest rates or an increase in credit spreads. For cash management decisions, it's appropriate to analyze the effect of these potential events on return and income potential over a 3-month and 12-month period.

Review the investment policy statement

The investment policy statement (IPS) is a document that serves as a policy guide to meet the goals and objectives of an investment portfolio over the long run. Whether reviewing an IPS or broadening it to include a full spectrum of liquidity solutions, the goal is the same: to fully understand an institution's specific situation, including investment objectives, risk tolerance, return expectations, and investment constraints.

We recommend that an IPS be reviewed at least annually to determine if the institution's needs have changed. Within the permitted investments portion of an IPS, a fund (money market or short-term bond) should be an approved investment type itself, as opposed to looking at each security within a fund on an individual basis. With regard to 2a-7 registered money market funds, in particular, it may be helpful to document and approve within allowable investments that prime and tax-exempt funds include floating NAVs, liquidity fees, and redemption gates.

Develop an investment strategy for each segment

An investment strategy should be developed for each cash segment based on the investment objectives, which are generally prioritized in the order of capital preservation, liquidity, and competitive returns. As risk tolerance and return requirements are at the heart of an institution's investment objectives, it's worth a closer look with regard to each investment segment.

Investment risk tolerance

While a risk-averse client is likely to seek capital preservation above all other objectives, there are a number of sources of risk that an investment committee needs to consider, such as credit risk, interest rate risk, and liquidity risk. The potential effect of these risks on a cash portfolio should help an investment committee understand the risk it may be undertaking and the amount of risk it's willing to take.

Return requirements

An investment committee should consider how much return is needed and is realistic for various yield environments. The type of return matters as well. Short-term operating cash portfolios may not require much in terms of total return and may focus primarily on capital preservation. Others may need a certain amount of income or yield, and still others may seek a combination of income and capital appreciation and therefore specify total return requirements.

Conclusion

The current federal funds target range of 0.00% to 0.25% is expected to remain for the foreseeable future due to uncertainties related to the global pandemic. In order to achieve your desired investment objective, now is a good time to explore ways to optimize your cash portfolio's investment strategy.

Money market funds are likely to remain a good choice for many investors, particularly for operating cash needs. Ultra-short-term and short-term bond strategies are designed to offer more yield and total return potential but have less liquidity and more volatility. In thinking about optimizing investments along the liquidity spectrum, it's important to keep in mind that ultra-short-term and short-term bond funds as well as customized separately managed accounts are designed for cash investors who desire additional yield opportunities for a portion of their working capital or strategic cash beyond daily liquidity needs. These types of investment strategies seek to efficiently manage cash with appropriate amounts of volatility by limiting interest rate risk, owning high-quality securities, and relying on experienced credit research teams.

For more information:

Please contact our Institutional Sales Desk at 1-888-253-6584.
Or, visit our website at wfam.com.
(Click "*Select Your Role*" in the top navigation and select "*Institutional Cash Investor.*")

- In addition, a total return calculator is available on our website to help investors understand how the yield and NAV movement of floating NAV money market funds versus stable money market funds could affect returns.

Standard deviation is the square root of the sum of squared deviations from the mean. It's often used as a measure of volatility, variability, or risk.

The Bloomberg Barclays 3-Month Treasury Bill Index is an unmanaged index representing the on-the-run (most recently auctioned) U.S. Treasury bill with a three-month maturity. You cannot invest directly in an index.

The Bloomberg Barclays Short-Term U.S. Government/Corporate Bond Index contains securities that have fallen out of the Bloomberg Barclays U.S. Government/Credit Bond Index because of the standard minimum one-year-to-maturity constraint. Securities in the Short-Term U.S. Government/Credit Bond Index must have a maturity from 1 up to (but not including) 12 months. You cannot invest directly in an index.

The Bloomberg Barclays U.S. 1–3 Year Government/Credit Bond Index is the one- to three-year component of the Bloomberg Barclays U.S. Government/Credit Bond Index that includes securities in the Government and Credit Indexes. The Government Index includes Treasuries (that is, public obligations of the U.S. Treasury that have remaining maturities of more than one year) and agencies (that is, publicly issued debt of U.S. government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. government). The Credit Index includes publicly issued U.S. corporate and foreign debentures and secured notes that meet specified maturity, liquidity, and quality requirements. You cannot invest directly in an index.

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For government money market funds: You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at $1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time. For government funds: The U.S. government guarantee applies to certain underlying securities and not to shares of the fund.

Floating NAV (FNAV) For floating NAV money market funds: You could lose money by investing in the fund. Because the share price of the fund will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

For retail money market funds: You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at $1.00 per share, it cannot guarantee it will do so. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Stock values fluctuate in response to the activities of individual companies and general market and economic conditions. Bond values fluctuate in response to the financial condition of individual issuers, general market and economic conditions, and changes in interest rates. Changes in market conditions and government policies may lead to periods of heightened volatility in the bond market and reduced liquidity for certain bonds held by the fund. In general, when interest rates rise, bond values fall and investors may lose principal value. Interest rate changes and their impact on the fund and its share price can be sudden and unpredictable. Some funds, including nondiversified funds and funds investing in foreign investments, high-yield bonds, small- and mid-cap stocks, and/or more volatile segments of the economy, entail additional risk and may not be appropriate for all investors. Consult a fund's prospectus for additional information on these and other risks.

Carefully consider a fund's investment objectives, risks, charges, and expenses before investing. For a current prospectus and, if available, a summary prospectus, containing this and other information, visit wfam.com. Read it carefully before investing.

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PAR: 0221-00671