



# MUTUAL FUNDS

*Ideal vehicles for managing cash reserves, money market funds are nearly as safe as insured bank accounts and tend to offer higher yields.*

## A Closer Look at Money Market Funds: Bank CD Alternatives

By Albert J. Fredman

Since their debut in 1972, money market funds have delivered better returns than those available at banks by making prime short-term debt instruments accessible to individuals. The generally high levels of interest rates prevailing in the 1970s and 1980s made the group a huge success, which, in turn, provided many people with their first introduction to mutual funds.

The money fund/bank account rate differential was particularly large in the 1970s and early 1980s when Federal Reserve Regulation Q was still in effect. Regulation Q, which was gradually phased out beginning in 1980, placed a ceiling on the rates banks could pay savers, so it penalized the latter while subsidizing the former.

Starting in 1982, banks were allowed to offer money market deposit accounts, giving them a chance to compete with money funds. Even though banks can now pay whatever rates they wish, the yields on money market deposit accounts are generally lower than those

on money funds because of a bank's higher operating costs.

In December 1996, money-fund assets surpassed \$900 billion for the first time in their history, according to Investment Company Institute data. Total money market fund assets account for 25% of the \$3.5 trillion invested in all mutual funds, according to the Investment Company Institute. Table 1 contains data on amounts invested in taxable and tax-free money funds.

The money fund group consists of both retail and institutional portfolios.

**Table 1.**  
**The Money Market Fund Universe\***

	Net Assets (\$ billions)	No. of Funds
Taxable money market funds	758.86	648
Tax-free money market funds	139.75	318
<b>Total</b>	<b>898.61</b>	<b>966</b>

\*As of December 31, 1996  
Source: Investment Company Institute

The latter are for pension plans and other large investors. Some money funds are quite large. Fidelity, Merrill Lynch, Smith Barney, Schwab, and Vanguard each have portfolios with more than \$15 billion in assets. With \$37 billion, Merrill Lynch CMA Money Fund is the largest of the group.

Table 2 identifies the major kinds of taxable short-term debt that money funds hold. These securities are often sold at a discount to their face or maturity value; there is no interest payment in these cases, and the size of the discount determines the purchaser's yield. Short-term rates exhibit wider swings over time than long-term rates. They are highly sensitive to anticipated changes in inflation and Federal Reserve policy. Key short-term rates can be tracked daily in the Money Rates box in The Wall Street Journal's section C. Because of their short maturities, and the fact that they are typically issued by large creditworthy borrowers, money market securities have extremely low default risk.

Thanks to the stable nature of their investments, money funds are able to keep a constant net asset value pegged to \$1 a share. Only your yield fluctuates. Thus, money funds are the safest of all mutual funds from a principal-risk standpoint. The \$1 net asset value is not guaranteed, though. Rather, fund companies simply try their best not to "break the buck."

### 1994's Derivatives Fiasco

The money fund industry suffered some embarrassment in 1994, however, when more than a dozen fund sponsors had to step in with huge sums of money to make up for losses incurred by their funds through the indiscriminate use of deriva-

tives such as inverse floaters and structured notes. The derivatives held by some money funds were used to juice up yields in a falling interest rate environment, which existed prior to 1994.

*Albert J. Fredman is a professor of finance at California State University, Fullerton (714/773-2217). Prof. Fredman is co-author (with Russ Wiles) of "Building Your Mutual Fund Portfolio: A Passport to Low-Risk, High-Return Investing", 1996, Dearborn Financial Publishing; available through AII for \$15.95 (publisher's price, \$19.95).*

**Table 2.**  
**An Overview of Taxable Money Market Securities**

<b>U.S. Treasury bills</b>	Short-term IOUs of the U.S. government. Auctioned weekly and mature in 13 or 26 weeks. One-year bills are auctioned monthly. The safest of all securities, they have no default risk. Income is usually exempt from state taxes.
<b>Federal agency notes</b>	Issued by agencies of the U.S. government such as the Federal Home Loan Bank System. These securities have the implied backing of the federal government.
<b>Repurchase agreements (or "repos")</b>	A short-term obligation (often overnight) between a borrower (often a government securities dealer) and a lender (such as a money market fund) to sell and subsequently repurchase securities (frequently Treasuries). The securities serve as collateral.
<b>Commercial paper</b>	These IOUs of large, creditworthy corporations are a staple of money fund portfolios. Paper is rated in terms of quality.
<b>Jumbo CDs</b>	Issued by U.S. banks in exchange for a deposit of \$100,000 or more. Unlike "small" certificates of deposit (CDs), they are not insured.
<b>Eurodollar CDs</b>	These dollar-denominated instruments are issued by a foreign branch of a U.S. bank or by a foreign bank. They are somewhat less liquid and riskier than domestic CDs.
<b>Yankee CDs</b>	Dollar-denominated obligations issued in the U.S. by large foreign banks that have branches here.
<b>Bankers' acceptances</b>	Obligations arising from bank guarantees of international business transactions. They are not as common as they once were.

This worked well as long as rates were declining, but the tactic backfired in early 1994 when rates suddenly spiked up.

Breaking the buck is devastating for a fund manager. In September 1994, Community Bankers U.S. Government Money Market Fund, a small institutional portfolio, became the first money fund to do so and liquidated at 94 cents on the dollar. No other money fund was forced to do this.

In the wake of the 1994 derivatives fiasco, the SEC banned the use of the riskiest derivatives by money funds. Derivatives are still used by the industry but should not be a concern today, particularly if you stay with the better and larger portfolios. For instance, some money funds may own floating-rate securities with returns derived from short-term interest-rate benchmarks, but these instruments don't have the kind of risk that can inflict losses of principal.

### The Money Fund Menu

There are several different kinds of money market fund portfolios. The group can be categorized as follows:

- **All U.S. Treasury:** These funds invest totally in U.S. Treasury securities, mainly Treasury bills. Consequently, these are the safest of all money funds. In addition, their income is normally exempt from state and local taxes. Because of their greater safety and state tax exemption, Treasury portfolios could be expected to have slightly lower yields than other taxable money funds.
- **U.S. government:** These portfolios invest in notes issued by federal government agencies in addition to Treasury bills and repurchase agreements. Agency securities have a bit more risk than Treasuries because they don't have the direct backing of the federal government, only an implied one.

- **General purpose:** The garden-variety fund invests in an assortment of high-grade money market instruments including commercial paper, U.S. government securities, certificates of deposit (CDs), and repurchase agreements. General-purpose portfolios normally provide the highest yield within the money fund arena.
  - **Federally tax-free:** These portfolios hold a variety of short-term municipal obligations. The income is federally tax-exempt, but only a modest portion may be exempt from state taxes, depending on the percentage of the portfolio that is invested in your state.
  - **Double tax-free:** Income from state-specific funds is exempt from state as well as federal taxes for taxpayers of the respective state.
- A handful of money funds are designed to have an average maturity of just a few days. By investing primarily in repurchase agreements, or

repos, collateralized by U.S. government securities, these portfolios can quickly respond to changing interest rates. Capital Preservation Fund II is an example. Repos are the shortest-term money market instruments and typically settle within one to seven days at a repurchase price tied to prevailing short-term rates.

A distinction can also be made between retail and institutional funds. The latter typically focus on pension plans and other large investors and rarely deal with individual investors. To keep expenses low, they require much higher investment minimums, which results in larger account sizes. For example, Vanguard offers both retail and institutional versions for its Money Market Reserves Prime Portfolio; the latter has a \$10 million minimum initial investment and a 0.15% expense ratio, whereas the corresponding values for the former are \$3,000 and 0.32%. Institutional money funds are available in both taxable and tax-free varieties and their assets comprise about a third of the money fund universe.

Finally, some retail portfolios have higher minimum initial investments in an effort to have larger average account sizes and lower costs. These include the Fidelity Spartan, T. Rowe Price Summit, Schwab Value Advantage, and Vanguard Admiral money funds. Minimum initial investments range from \$15,000 to \$50,000, with \$20,000 or \$25,000 entry fees being typical. When analyzing lower-cost funds such as the above, you need to pay close attention to the expense ratio and see how much you are really saving in return for maintaining your higher balance. Also, pay attention to special charges that might kick in if your account balance falls below some minimum threshold.

### Tax-Free Portfolios

Tax-free money funds buy short-term municipal debt known as municipal notes. There are several kinds of muni notes. For instance, tax anticipation notes are used by a municipality to obtain short-term funds to meet their cash needs while they are awaiting

money from tax collections.

Tax-free money funds also invest in so-called put bonds with longer maturities. The fund manager has an option to sell these bonds at a specific “put” price prior to maturity. The rates paid on put bonds are adjusted as frequently as weekly to keep them in tune with changes in short-term rates. These bonds have stable principal values due to the put feature.

Some tax-free funds hold private activity securities that are subject to the federal alternative minimum tax (AMT). The proceeds from an issue of private activity securities are directed at least in part to a private, for-profit organization. Private activity munis pay a bit more than otherwise comparable munis. The alternative minimum tax applies primarily to high-income individuals and corporations who are able to substantially reduce their regular tax liability with passive income and deductions.

While less than perhaps 1% or 2% of all taxpayers are now subject to the alternative minimum tax, experts feel that the percentage could escalate significantly in the years ahead. Their reasoning is twofold: the exemption isn't linked to inflation and the alternative minimum tax rate was increased in 1993. Thus, investors in funds that hold alternative minimum tax issues are advised to keep up with their potential exposure to the alternative minimum tax in the future.

Your federal tax bracket would determine whether you would want to invest in a taxable or tax-free money fund. Suppose you're comparing yields on a federal tax-free fund and a taxable general money fund. You're in the 36% federal bracket and the tax-free fund yields 3%. In this case you wouldn't consider a taxable money fund unless it yielded at least 4.7%. The 4.7% taxable equivalent yield is calculated as follows:

$$\begin{aligned} \text{Taxable equivalent yield} &= \frac{\text{tax-free money fund yield}}{1.00 - \text{federal tax rate}} \\ \frac{3\%}{1.00 - 0.36} &= 4.7\% \text{ taxable equivalent yield} \end{aligned}$$

In addition, if you face a relatively high state tax rate you may want to consider a single-state fund. State-specific funds are available if you live in California, Connecticut, Massachusetts, Michigan, Missouri, New Jersey, New York, Ohio, or Pennsylvania. State funds can offer you double or even triple tax-free income. For instance, a New York city resident could invest in a fund that spins off income exempt from taxes at the federal, state, and local levels. A possible drawback of single-state funds is that they have less diversification than their national counterparts.

Keep an eye on the relationship between taxable and tax-free money fund yields. The closer the two, the greater the advantage of going with a tax-free fund. If your fund family offers both kinds of money fund, it's easy to make the comparison and switch when appropriate.

### Using Money Funds

Money fund investments can be made sporadically or through an automatic investment plan where the investments are brought in electronically from your bank account, paycheck, or Social Security check. Dividends are declared and credited to your account every day of the year and distributed monthly. You're entitled to all accrued distributions when you redeem your shares, which can be done without penalty at any time. Conversely, bank CDs traditionally require funds to be kept on hand for a designated period and impose early withdrawal penalties.

The checkwriting privilege is another attractive feature of money funds. Checks can be written in minimum denominations of normally \$250 or \$500, and less in some cases. You continue to earn interest on the balance in your account until the check clears. Incidentally, writing checks on a money fund account is not a tax hassle, in contrast with writing checks on bond funds. While a money fund has a constant net asset value of \$1, a bond fund has a fluctuating price. Therein lies the problem—with every check you write on a bond fund you realize a taxable gain or

**Table 3.**  
Returns of Taxable  
Retail Money Market Funds

Year	Return (%)
1996	4.80
1995	5.37
1994	3.65
1993	2.62
1992	3.31
1991	5.70
1990	7.81
1989	8.85
1988	7.09
1987	6.17
1986	6.30
1985	7.77
1984	10.21
1983	8.69
1982	12.55
1981	17.16
1980	12.88
1979	10.92
1978	7.25
1977	4.92
1976	5.11
1975	6.39
1974	10.79
1973	7.60
1972	0.38

Source: Lipper Analytical Services, Inc.

loss, which you must report.

In many cases you can also wire large sums of money between your bank and money-market fund for a fee. A systematic withdrawal plan is a convenient way to take money out of your account regularly and can be used by retirees looking for a stream of income. Again, you don't have to worry about tax hassles caused by fluctuating net asset values, since money market NAVs are constant. You can also make redemptions by phone. Some money funds even provide access to your cash through ATMs.

Money funds also offer convenient access to their family's stable of portfolios. You can deposit your money in the money fund first and then switch to another portfolio in the complex with-

out filling out a new application. Be aware, however, of the minimum initial investment requirements of any funds to which you plan to transfer.

### Credit Risk

Money market funds are not insured against credit risk. Conversely, the principal value of the typical bank savings account or CD is insured up to \$100,000 by the Federal Deposit Insurance Corporation (FDIC). Nevertheless, money funds represent a highly attractive alternative to bank accounts, small CDs, and even money market deposit accounts, because they yield more and have minuscule credit risk. How can money funds offer higher yields? First, they don't have to pay for FDIC insurance. Second, they have lower overhead because they generally don't maintain local branches and tellers that deal face-to-face with depositors. In addition, banks have many small accounts, which are costly to maintain.

With the exception of default-free U.S. Treasury securities, the kinds of instruments money funds hold have just a tiny amount of credit risk, plus the money fund is required to diversify. The risk/reward trade-off is one of the best available because you get a substantially higher yield—along with the other advantages discussed above—for taking on a very small amount of default risk.

SEC money fund regulations, which were made more stringent in 1991, restrict the kinds of securities a fund can invest in, provide rules for diversification, and limit maturities. With the exception of U.S. government securities, a money fund cannot invest more than 5% of its assets in the paper of a single issuer. In addition, it can't allocate more than 25% of its assets to the securities of a single industry.

The SEC also requires money funds to invest in the highest quality commercial paper. Specifically, the ratings must be A-1 for Standard & Poor's or P-1 for Moody's. These are the top ratings given by those agencies. Money funds can then invest up to 5% of their assets in paper with lower ratings. Those

who are still nervous about credit risk can invest in one of the U.S. Treasury-only money funds, which hold all their assets in Treasury bills.

### Inflation and Income Risk

For those reasons, credit risk should not be a concern for most individuals. But that doesn't mean money funds are risk-free. They still face inflation risk and income risk.

*Inflation risk:* The long-run returns of money funds have been the lowest of the three main asset classes (stocks, bonds, and cash). U.S. Treasury bill rates are often used as a proxy for the long-run returns on money funds because money funds themselves have been around only since 1972. Based on Ibbotson Associates' data, 30-day U.S. Treasury bills returned on average 3.7% annually compared with a 3.1% yearly U.S. inflation rate over the 1926-1996 period. In addition, fund expenses take a bite out of your returns. Thus, if a money fund is held in a taxable account, your aftertax return could easily be below the rate of inflation. For this reason, allocation of a substantial percentage of your assets to money funds as a long-term investment can be highly risky.

*Income risk:* This is the danger that the income provided by a money fund will fall sharply in a relatively short time, in tandem with declining money market rates. Short-term interest rates are much more volatile than long-term rates over time. Table 3, which contains annual composite returns of the taxable retail money funds tracked by Lipper Analytical Services, illustrates the ups and downs. Observe how the returns climbed from 4.92% in 1977 to 17.16% in 1981. They then declined to 8.69% in 1983. In 1993, they averaged a mere 2.62%.

It's easy to see how income risk works. Suppose you have \$100,000 invested in a money fund that returns on average 6% for the year. Your income amounts to \$6,000. Now suppose that a few years later your average yearly return has fallen to 3%. The income from your \$100,000 portfolio would now be

just \$3,000, a 50% decline.

**Interest-rate risk** Money funds tend to have a higher income risk than longer-maturity bond funds because short-term rates are more volatile. On the other hand, money funds do not face interest-rate risk. When interest rates rise, a bond fund's net asset value will drop, and the longer the maturity, the greater the drop, all other things equal.

### Tracking Return

Money fund returns are tracked by the press. The Wall Street Journal provides a table of taxable and tax-free money fund data on Thursdays based on data from the National Association of Securities Dealers. A more comprehensive weekly table is contained in Barron's based on data from IBC's Money Fund Report. Many other newspapers also publish weekly money fund tables. Check with your local paper for further details.

Money funds report their annualized yields in different ways: seven-day simple and seven-day compound yields are the most common. The compound yields are a bit higher than their simple counterparts because they assume reinvestment. A 30-day simple yield is also available in Barron's. All yield measures are net of fund expenses. You can also call the fund company to find out the basic information on its money funds, including their expense ratios. Current yield rankings of the top 20 money funds in three different groups (general purpose, U.S. government-only, and tax-free) are available on-line from IBC via <http://www.ibcdata.com> at no charge. The Web site also provides a list of the 15 largest money funds and recent money fund news.

### Why Do Yields Vary?

Yields vary among money funds at any given time due to three primary factors:

- Expenses

**Table 4.**  
**Income Consumed by Expenses**

Fund	Gross Income to Net Assets (%)	Expenses to Net Assets (%)	Net Income to Net Assets (%)	Gross Income Consumed by Expenses (%)
<i>High-interest-rate period:</i>				
Fund A	7	0.9	6.1	12.9
Fund B	7	0.4	6.6	5.7
<i>Low-interest-rate period:</i>				
Fund A	3	0.9	2.1	30.0
Fund B	3	0.4	2.6	13.3

- Portfolio quality and composition
- Portfolio average maturity

Of the three, expenses are the most important because the funds face limitations on portfolio composition and average maturity. The SEC requires that money funds maintain average-weighted maturities of no more than 90 days. Most keep their maturities well below that limit, typically ranging from 30 to 60 days for conservative portfolios. The shorter the maturity, the easier it is to roll up maturing obligations to higher rates during times of increasing rates.

At the extreme, a fund could have a one-day maturity if it held only instruments that matured overnight such as repurchase agreements. Conversely, with a shorter average maturity, a fund's yield would fall more quickly when rates decline. Predicting near-term interest rate movements is extremely difficult, however, so it generally doesn't pay managers to make big changes in their average maturities within the limited one- to 90-day range.

### Be Penny-wise

Because money funds all invest in very similar securities they are fairly homogeneous. Thus, you may simply want to use one offered by your favorite family. Remember that one of the advantages of a money fund is that it can serve as a link to other fund family members. If, however, your family does not offer a suitable choice for your cash reserves you may want to look elsewhere.

The expense factor is most important with a money fund because these portfolios have the lowest absolute returns of the various fund categories, particularly the tax-free funds. Money fund expense ratios can range from about 0.2% to more than 1%. The taxable retail money fund group recently had a 0.71% median expense ratio, according to Lipper Analytical Services. You want a fund that has a reputation for low expenses because each penny saved in expenses goes directly to the bottom line, adding to your yield.

Table 4 illustrates the considerable importance of low cost by comparing the results of high-cost Fund A with the otherwise comparable low-cost Fund B. This is done by relating each fund's expense ratio to its gross income ratio (gross investment income divided by average net assets). The higher the ratio of expenses to gross income, the greater the percentage of the fund's income eaten up by costs. Note that expenses consume a far greater percentage of the gross yield for the high-cost fund. The results are more pronounced when the gross income ratio falls to 3%.

### "Teaser" Yields are Temporary

Typically, the low-cost money funds are larger, established portfolios. But be aware of any "teaser" yields because they are temporary. Facing intense competition, there is pressure on mutual fund groups to raise their money fund yields and thereby draw in more dollars. They do this by waiv-

ing the advisory fee and also often reimburse the fund for its operating costs.

Many funds use this practice to lure in new shareholders, hoping that they will not notice when the fee waiver is quietly lifted, expenses rise to their normal level, and yields decline. If you took advantage of a teaser yield by purchasing a fund that has had its fees reduced temporarily, you need to check in regularly to see whether or not the expense ratio has risen because the fee waiver is off. You can track fund yields weekly in *The Wall Street Journal*, *Barron's*, or other newspapers. Better yet, contact the fund company to find out when the fee cap is expected to be lifted and what the expense ratio is likely to be when it returns to its normal level. This information should also be contained in the prospectus.

Incidentally, a recent visit to IBC's

Web site confirmed that the majority of the top-ranked government-only, general-purpose, and tax-free money funds that made IBC's "20 Top Retail Money Funds" lists were waiving or reimbursing all or a portion of their expenses. A footnote follows the names of money funds that are waiving or reimbursing all or a portion of fund expenses in the IBC money fund listings contained in *Barron's* and other publications. Nearly six out of every 10 money funds recently had temporarily reduced or eliminated their fees, according to IBC.

### Conclusion

Money funds are ideal vehicles for managing your cash reserves. They are nearly as safe as having your money in an insured bank account. Their advantages of a higher yield and convenient

access to other funds in a family make them a superior alternative. You can still get a higher yield and be totally protected against credit risk if you hold a money fund that invests in U.S. Treasury bills. This product is particularly appealing if you live in a high-tax state because the income from Treasuries is normally exempt from taxation at the state level. If you're in a high tax bracket you can derive advantage from a federally tax-free or double tax-free fund.

Money funds are fairly homogeneous and their managers don't have much opportunity to add value the way those at the helm of a stock fund can. The best money funds are those of large, well-known families that have expense ratios below 0.5%. You can say with a fairly high degree of certainty that these funds will be able to deliver the best returns in the future. 

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