SIZING UP MUTUAL FUND RELATIVES: LOW-COST ALTERNATIVE INVESTING

By Albert J. Fredman

In general, ETFs, closed-end funds, HOLDRS, and folios require greater investment sophistication, but may offer unique advanges for savvy investors. Costs, investment control and tax efficiency play a major role in evaluating the alternatives.

Variable annuities, exchange-traded funds, closed-end funds, HOLDRS, and folios each appeal to their own special clientele. But the increasingly wide variety of mutual fund relatives has led to more confusion and misunderstanding among investors.

Many people will do just fine sticking with garden-variety mutual funds, but others may find one or more of these cousins appealing for a portion of their assets. In general, the latter require greater sophistication but may offer unique advantages for savvy investors, along with pitfalls for the uninformed. Costs, investment control, and tax efficiency play a major role in evaluating these alternatives. This article will give you essential background information on each alternative, and will analyze their pros and cons.

COMPOUNDING COSTS

Costs should be given top priority in analyzing the desirability of the various investments. And these costs vary considerably:

- HOLDRS, folios, and broad-based domestic equity exchange-traded funds are the lowest cost investments covered in this column.
- Closed-end funds have costs comparable to those of otherwise equivalent mutual funds.
- Variable annuities carry the highest costs.

Costs of actively managed mutual funds can often be very high. A typical large-cap domestic equity fund has a 1.25% to 1.3% expense ratio. However, there's more to the costs of active management. While difficult to quantify, trading costs (commissions, bid-asked spread, and price-impact costs of large block trades) of a big-cap domestic equity fund might consume 75 to 90 basis points yearly of gross returns. Conversely, trading costs are minuscule with a broad-based domestic equity index fund—be it exchange-traded or traditional. Such costs also can be very low or non-existent with HOLDRS and folios.

Long-term investors often marvel at the "magic" of compounding, where small amounts of money invested over long time periods grow into large nest eggs. However, this same principle applies to costs, although in reverse—I call this the "black magic" of compounding costs. Assume a 10% average annual return on the S&P 500 going forward. In five years, $10,000 invested in the "index" compounds to $16,105. However, a large-cap domestic equity fund with expenses and trading costs of 2% yearly compounds to only $14,693, or 91% of the market's return in five years, assuming the portfolio matches the market before costs. That's because the money compounds at only 8% (10% less 2% costs). Conversely, a low-cost S&P 500 index fund with 0.20% expenses plus trading costs garners a far superior 99% of the market return.

Table 1 illustrates the problem of compounded expenses over time; it shows the percentage of the underlying index returns earned by an S&P 500 index fund and an actively managed fund over various periods, assuming that the actively managed fund investments mirror the S&P 500. The longer the time horizon, the bigger the bite costs take from your nest egg. At the end of 40

Albert J. Fredman is a professor of finance at California State University, Fullerton (e-mail: afredman@fullerton.edu). Prof. Fredman is co-author of several mutual fund books.

TABLE 1. EXPENSES: THE BLACK MAGIC OF COMPOUNDING

Fund (Costs)	5	10	20	40
	After-Cost Percentage of Market Return*:			
S&P 500 index fund (0.20%)	99%	98%	96%	93%
Actively managed fund (2.00%)	91%	83%	69%	48%

Number of Years

**Assumes a 10% market return.*

years, the actively managed fund returns less than half of the market return. Those portfolios that lose the fewest basis points to costs have the best odds of becoming the real long-term winners.

Costs will weigh even heavier going forward as equity returns are likely to be far lower during the next 10 to 15 years than experienced during the unprecedented bull market years of the 1980s and 1990s.

VARIABLE ANNUITIES

Variable annuities are a moderately popular retirement vehicle. Basically, a mutual fund within an insurance wrapper, variable annuities offer tax-deferred growth through various portfolios (called "subaccounts") with different investment objectives. However, variable annuities cost even more than traditional mutual funds because their insurance component increases total expenses. All domestic equity variable annuity total expenses average 2.15%, according to Morningstar, Inc. That figure breaks down into fund expenses of 0.87% and insurance expenses of 1.29%.

Because they offer tax deferral during the accumulation phase, variable annuities appeal to tax-conscious investors who presumably have taken full advantage of traditional tax-sheltered retirement plans such as IRAs and 401(k)s and are seeking another tax-deferral avenue. Pluses include the fact that there are no contribution limits and annuity holders are not required to begin taking distributions at age 70½.

But the pluses need to be weighed against the negatives. Tax deferral is valuable, but you shouldn't overpay. In addition, increasing maximum allowable yearly contributions now expected for IRAs and 401(k) plans going forward will diminish the appeal of variable annuities.

The "enhanced earnings benefit," the newest variable annuity feature, will pay taxes on gains paid to beneficiaries after the contract owner's death. But like other benefits, this one comes with a cost. Variable annuities are more difficult to analyze than ordinary mutual funds, which partly explains their lukewarm reception among investors. Potential purchasers must weigh costs and performance carefully and consider the implications of the alternative payout options during the contract's distribution phase.

Exchange-traded and traditional index funds that feature low portfolio turnover, and thus don't pay out much in capital gains, are tax-efficient competitors of variable annuities. Profits from the sale of an index fund are taxed at long-term capital gains rates, assuming the shares have been held for more than a year. Conversely, annuity earnings are taxed as ordinary income when withdrawn—a significant drawback for wealthier investors. In addition, most index funds offer simplicity, far lower ongoing costs, and access to your money without a surrender charge or premature withdrawal penalty. Variable annuities may impose a 10% premature withdrawal penalty for money withdrawn before age 59½.

Not all variable annuities carry high costs, however. Some companies, such as T. Rowe Price and Vanguard, offer affordable choices.

EXCHANGE-TRADED FUNDS

Exchange-traded funds rank among the most actively traded stocks on the American Stock Exchange (or Amex). Assets in these index-based vehicles totaled $73 billion at the end of April at the Amex. More than 80 such funds now change hands daily.

Exchange-traded funds are part mutual fund, part stock—they consist of a basket of stocks that track an index, but their shares trade on an exchange. Usually, their share prices trade very close to net asset value. Exchange-traded funds are categorized according to the indexes they track: broad-based, sector, and international. Go to the Amex Web site at www.amex.com for a listing of individual funds and information on each.

In contrast to traditional mutual funds, exchange-traded funds allow investors to buy and sell shares at varying prices throughout the day. Closed-end funds and HOLDRS also provide this advantage—but otherwise are very different, as will be explained.

Low expenses are an important feature of exchange-traded funds. Table 2 contains the expense ratios for the six largest exchange-traded funds. Together, these funds comprised about 88% of the assets of the Amex-traded funds on April 30. With a 9.45 basis point (0.0945%) expense ratio, Barclays iShares S&P 500 carries the lowest cost. Recently launched on the Amex, Vanguard Total Stock Market VIPERs (ticker: VTI) track the Wilshire 5000 and carry a 15-basis-point expense ratio—the lowest cost for an exchange-traded fund targeting the total U.S. stock market.

The international exchange-traded funds, or iShares MSCI, have the highest expense ratios of the group—ranging up to 99 basis points (most iShares MSCI charge 84 basis points). These costs are still well below those for the typical open- or closed-end foreign-stock fund.

TABLE 2. EXPENSE RATIOS OF THE LARGEST EXCHANGE-TRADED FUNDS

Name (Ticker)	Net Assets ($ Billion)*	Expense Ratio (%)
iShares S&P 500 (IVV)	2.40	0.09
S&P 500 SPDR (SPY)	28.13	0.12
DJIA Diamonds (DIA)	2.63	0.18
S&P 400 MidCap SPDR (MDY)	3.97	0.25
Nasdaq-100 Index Tracking Stock (QQQ)	25.90	0.18
Select Sector SPDR—Technology (XLK)	1.28	0.28

*As of April 30, 2001.
Source: Bank of New York, Barclays Global Advisors and State Street Bank.

Because exchange-traded funds do not deal with cash investments and redemptions by individuals, they can be more tax-efficient than even a traditional index mutual fund. Placing day or GTC (good till cancelled) limit orders to buy below the bid is a great way for patient, big-ticket investors to lock in a favorable purchase price. The savings can be substantial for those investing $50,000, $100,000, or more, at a pop. This advantage also applies to patient sellers. However, those wishing to make small periodic investments would be better off with a traditional index mutual fund to avoid the brokerage costs associated with each purchase.

In addition, fund families such as Fidelity, Schwab, and Vanguard offer lower expense portfolios for big-ticket investors. Vanguard offers substantially lower expense ratios on its Admiral shares for those making a $250,000 initial investment. For example, it charges only 12 basis points on its S&P 500 index fund as opposed to 18 basis points for regular shares of that same portfolio.

Index-based exchange-traded funds provide low-cost sector exposure. With a 1.35% dollar-weighted average expense ratio, sector equity funds have the highest average cost of the domestic equity categories, according to Lipper, Inc. By contrast, 0.60% is the highest cost for sector exchange-traded funds and the Select Sector SPDRs have 0.28% expense ratios. Fidelity offers more sector funds (38 at this writing) than any other mutual-fund family. For short-term traders, they compete with exchange-traded funds because their net asset values are priced hourly. However, costs are far higher. There is a 3% front-end load, a 0.75% trading fee (to sell shares within the first 30 days), and a $7.50 exchange fee (for those trading through a representative). Investors probably overpay for most managed sector funds because their managers do less, as sector selection and weighting are not an issue.

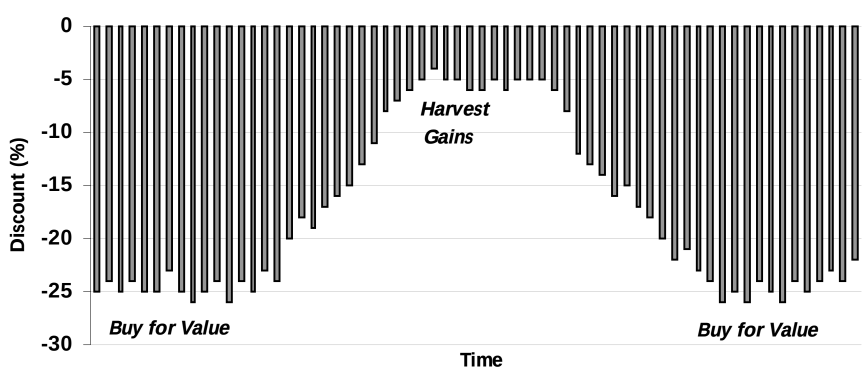
CLOSED-END FUNDS

Nearly 500 closed-end funds are available in a wide range of stock and bond categories. Assets recently totaled $139.8 billion, according to Lipper, Inc. Like an exchange-traded fund, a closed-end fund is part stock and part mutual fund. Unlike the latter, their shares rarely trade at net asset value. In fact, a closed-end fund's share price often exhibits fluctuations that are more than 50% greater than those of the fund's net asset value. Investing at an attractive discount results in a higher yield and a chance for gains if the discount narrows or turns to a premium.

Figure 1 illustrates how investors can profit by purchasing a fund at deeper than normal discounts and harvesting their gains at smaller than average discounts (or premiums). Buying a fund at a small discount may lead to losses if the discount deepens. Buying at a deep discount can be advantageous even if the markdown doesn't narrow because the investor earns a higher yield, assuming regular distributions are made. If a fund at a 25% discount pays $1 in dividends, that $1 costs you only 75 cents! Bond funds at double-digit discounts can be particularly attractive in this respect.

In contrast to index-based exchange-traded funds, closed-end funds are actively managed, and thus have the higher ongoing costs characteristic of managed mutual funds. However, the beneficial effect of buying at a deep discount can offset the negative impact of expenses. Thus, it's insightful to compare a fund's discount to its expense ratio by dividing the former

FIGURE 1. TRACKING A CLOSED-END FUND'S DISCOUNT



The bars represent consecutive monthly discounts.

by the latter. A fund with a 15% discount and a 1% expense ratio equates to a discount-to-expense value of 15. Conversely, a 25% discount and a 3% expense ratio equates to a value of 8.33. Discounts offer value and expenses erode returns, so the higher the quotient the better. Avoid funds with values below 10. If a fund trades at a small discount or a premium, you are better off using a regular mutual fund or an exchange-traded fund with a similar objective.

Morningstar.com (www.morningstar.com) provides charts of historical weekly and monthly discounts and premiums. Key in the fund's ticker and look under "Total Returns."

Because of the challenge posed by the growing number of more popular exchange-traded funds, closed-end funds are employing various discount-narrowing strategies such as share repurchases, tender offers, and management fee cuts. Taken to the extreme, some funds have converted to regular open-end funds or liquidated. With a 21% market-price return, Pakistan Investment Fund was the best-performing country fund during the first quarter of 2001 based on a decision to liquidate.

In contrast to a traditional mutual fund, a closed-end fund is not forced to sell holdings in bear markets to meet redemption requests. Because closed-end fund managers work with a stable pool of capital they need not worry about large inflows or outflows of shareholder money at inopportune times. Thus, the closed-end structure provides an important edge during severe market downturns like the 2000-2001 technology-stock plunge. Conversely, cash does not pile up during a market surge.

STOCK BASKETS: HOLDRS

In contrast to exchange-traded funds, HOLDRS do not replicate a market benchmark. More similar to stocks than to funds, HOLDRS are not registered investment companies. Rather, they are structured like American depositary receipts (or ADRs) and trade like stocks on the Amex. HOLDRS can only be traded in round lots (100 shares), or multiples thereof. Through HOLDRS shares, you have beneficial ownership of a fixed basket of about 20 (in a few cases 50) stocks. Like unit investment trusts, these portfolios are unmanaged and almost never experience turnover. Spin-offs, mergers, and acquisitions result in changes within the basket, however. If another company acquires one of the stocks in a basket it will drop out. New stocks will not normally be added. As a shareholder, you receive proxy statements and annual reports from each company, which you can elect to receive electronically.

Table 3 contains a directory of HOLDRS. Total assets of the group amounted to $4.5 billion on April 30, 2001.

At inception, most portfolios weight stocks either on a modified market-cap basis or equally. Europe 2001 and Market 2000+ are the only baskets that weighted their stocks equally at inception. Both began by assigning a 2% weight to each of their 50 stocks. Weightings change substantially over time as a function of the individual price trends of the underlying stocks. More than half of your assets may be in just a few stocks. Go to the Merrill Lynch Web site (www.holdrs.com) for a listing of each basket's stocks and their current weights.

As evident in Table 3, most baskets represent highly defined sectors or sub-sectors. Europe 2001 and Market 2000+ are the only cross-sector baskets. The former contains 50 of the largest European companies whose equity securities also trade in the U.S. market as ADRs. A global basket, Market 2000+ is comprised of the world's 50 largest companies (35 domestic and 15 non-U.S.).

Initially, you own a group of stocks as a single asset, but you can take delivery of them by cancelling your HOLDR. To do so, you pay a fee of $10 per 100 shares of HOLDRS. That way, an investor can sell some losers and realize the tax losses, while deferring gains indefinitely on the best performers. Conversely, with open- and closed-end funds, you usually pay taxes on any realized gains when your manager sells a stock—unless your holdings are in a tax-deferred account. Thus, HOLDRS are advantageous for tax-sensitive accounts because they allow investors to realize losses for tax purposes or to prune out perennial losers. However, the more companies you sell, the higher your transactions costs unless your broker offers unlimited trades based on an annual account maintenance fee.

Low costs are a big draw. Instead of paying 20 separate commissions to buy 20 stocks, you pay only a single commission for the group. Through their low-cost structure, individuals avoid paying manage-

TABLE 3. DIRECTORY OF HOLDRS

HOLDR	HOLDR Symbol	HOLDR	HOLDR Symbol
Biotech	BBH	Oil Services	OIH
Broadband	BDH	Pharmaceutical	PPH
B2B Internet	BHH	Regional Bank	RKH
Europe 2001	EKH	Semiconductor	SMH
Internet	HHH	Software	SWH
Internet Architecture	IAH	Telecom	TTH
Internet Infrastructure	IIH	Utilities	UTH
Market 2000+	MKH	Wireless	WMH

ment fees. Investors incur a $2 quarterly custody fee per 100 shares (or 8 cents/share yearly), offset by the dividends on the holdings. This fee is waived if no dividends or cash payments are made by any of the stocks in the basket.

HOLDRS require more knowledge on the investor's part than managed investment companies or index funds. That's because you own the underlying companies and some baskets are heavily weighted in their top two to five companies.

In addition, extreme volatility may occur when a basket of stocks is in a small technology subsector. A case in point: B2B Internet plunged more than 90% from its February 24, 2000, inception to its April 2001 lows. You also need to be prepared for the tax issues associated with events such as spin-offs since the IRS treats the owners of HOLDRS as direct owners of each of the underlying stocks.

It is important to understand the individual stocks because if you take them out of the basket you face the concern of what to sell and when. You also need to determine the cost basis of each stock. The Merrill Lynch Web site (www.holdrs.com) has up-to-date information on HOLDRS. It also contains a Cost Basis Calculator, which is used to calculate an approximate cost basis for each of the underlying securities included in a basket.

CUSTOMIZED PORTFOLIOS

Folios are another alternative to the traditional mutual fund. These new products give investors the flexibility of managing a portfolio of individual stocks with the built-in diversification inherent in a fund.

Several firms now offer these products. An example is FOLIOfn, a registered-broker dealer founded in 1998. With their folios, investors create customized low-cost baskets of stock for a flat annual fee. About 3,500 "window stocks" are available and can be bought or sold in the twice-daily trading windows. Or, an individual can choose from an array of "already-assembled" folios.

The investor can create up to three folios for a $29.95 monthly fee ($295 a year), which includes unlimited trading during two daily windows. Each additional folio costs $9.95 monthly ($95/year). Placing a market order outside of window trade times costs $14.95. However, limit orders are not possible at this time.

How do these costs compare with the other basket alternatives? Figure 2 contains annual cost comparisons for a 0.12% expense ratio S&P 500 index fund, a basic $295 flat-fee folio, a 1.25% expense ratio managed large-cap domestic equity fund, and a 2% expense variable annuity. A $100,000 investment is assumed. As another point of comparison, a $250,000 investment in a 0.12% expense index fund costs $300 a year, about the same as the yearly flat fee on a folio.

As with HOLDRS, an investor owns the shares of the underlying folio companies. Stocks can be sold to establish tax losses or simply to restructure. Additional stocks can be added to a folio. By controlling turnover, taxable events are under the investor's control. A folio can hold anywhere from one to 50 stocks, so you couldn't get an S&P 500 folio, although you could have a customized folio containing only an S&P 500 exchange-traded fund. Ready-to-go folios generally have 20 to 30 stocks. "Folio 30" contains the 30 stocks in the Dow. Some folios include exchange-traded and closed-end funds as holdings.

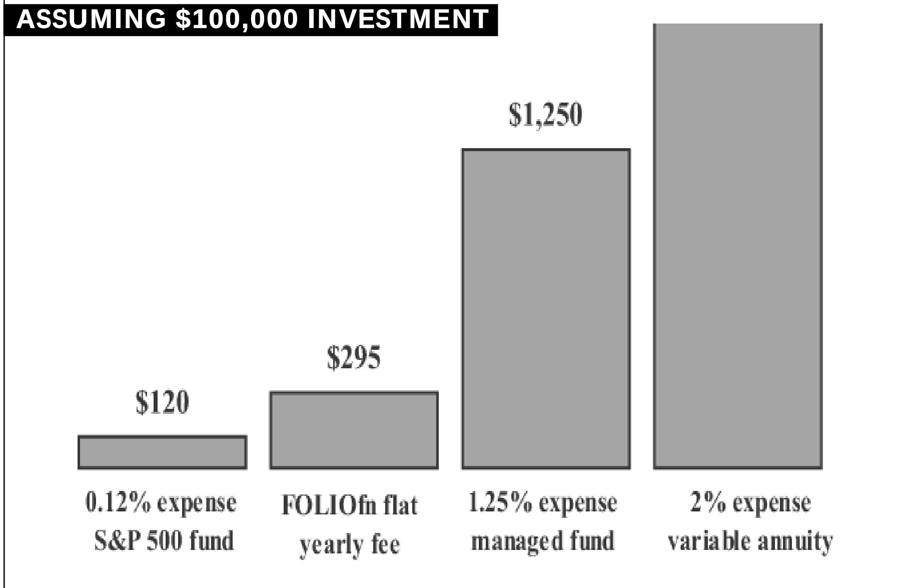
Folios can be a very low cost, tax-efficient option for large-dollar value portfolios. However, because many folios have fairly narrow daily trading windows, an investor risks not getting the best prices when buying or selling. Thus, folios' trading limitations make them ineffective for active traders. The execution price of a trade is far more important than the brokerage costs.

Folio investors need an in-depth understanding of individual companies to know what stocks to include or eliminate from a portfolio. More work is required to build and maintain stock baskets than is needed to select and monitor a few low-cost stock funds. Go to www.foliofn.com for further information on folios.

COMPARING ALTERNATIVES

The mutual fund relatives featured

FIGURE 2. ANNUAL COST COMPARISONS ASSUMING $100,000 INVESTMENT



in this article offer an array of options for today's increasingly sophisticated investor.

Long-term investors are encouraged to keep costs as low as possible. As Table 1 demonstrated, the black magic of compounding costs can take its toll on a retirement nest egg. Here are some points to keep in mind when comparing the alternatives:

- Variable annuities provide tax-deferred compounding coupled with some insurance features, but high costs and increased complexity can be drawbacks. Go with one of the low-cost companies if the product appeals to you.
- Deeply discounted closed-end funds may offer a "free lunch" for bargain seekers who understand what they are buying.
- Index-based exchange-traded funds feature low costs, tax efficiency, intraday liquidity, transparency, and are easier to understand than closed-end funds.
- HOLDRS and folios may offer the ultimate in economy and the ability to control capital gains and losses for individuals willing to spend more time on their portfolios. Although HOLDRS are sometimes confused with exchange-traded funds, they are very different—they are simply unmanaged baskets of stock and do not replicate an index.
- Low-cost traditional index funds are still great vehicles for those looking for tax efficiency and aiming to gradually build a position through small periodic investments.

Most individual investor money still flows into the $7 trillion mutual fund industry, and that's unlikely to change any time soon. Many mutual fund investors are looking for simplicity and do not want to venture into any stock-related vehicle—even if substantial cost and tax advantages are possible.

Nevertheless, one or more mutual fund relatives could be ideally suited for a portion of a well-informed investor's assets. ❖