

# Managers using EXCHANGE-TRADED FUNDS:

*cost savings mean better performance for investors*

by Gary Gastineau, ETF Consultants LLC

**The growth in exchange-traded funds (ETFs) has been stimulated by the appearance of new services offered by specialised managers. These managers use ETFs as portfolio components. They use passive vehicles – index ETFs and index mutual funds – and traditional active management vehicles – mutual funds and specialised separate account portfolios – in eclectic combinations. They pursue most of the goals that traditional separate account managers pursue. However, these managers enjoy some unique advantages which often permit them to provide a better investment service at a lower net cost to the investor.**

The basic argument for using ETFs rather than just individual stocks in customised separate account portfolios is the low expense ratios and (often) lower relative trading costs for ETFs. ETF components in the client's portfolio permit the manager to offer a comprehensive separate account service at a lower total cost. Of course, there are some significant differences between the services provided by managers who use ETFs extensively and traditional active managers. We will observe a few of these differences as we examine how these managers operate.

The cost advantage of the new approach relies on the low expense ratios of ETFs – ranging from 9.45 basis points to 99 basis points (0.0945% to 0.99%) with expense ratios under 30 basis points (0.30%) on the most popular funds in the US market. Expense ratios are

generally higher in Europe and Asia, partly because ETFs tend to be smaller outside the US. In most cases, the combination of transaction costs inside the ETF and the cost of buying and selling ETF shares is lower than the best alternative way to take the position, whether in an entirely separate account composed of individual common stocks or in conventional mutual funds. The diverse menu of available ETFs also permits a manager to take low cost positions in asset classes or subclasses that provide useful diversification at far lower cost than direct investment without the ETFs.

Many of the pioneers in ETF-based investment management have (or soon will have) five-year records of performance. Prospective clients can compare their records with the records of other managers of complex diversified portfolios. Investors should examine the

records not only by comparing performance to traditional benchmarks, but also by comparing total expenses with the expenses of other management approaches.

The expense comparisons will be almost uniformly favourable with the use of ETFs. Correspondingly, the performance comparisons will get a boost from the savings in cost with ETFs. If two managers have equal skill, the manager using a technique with significantly lower embedded cost should deliver better average returns. To put the cost issue in perspective, some US-based ETF-oriented managers provide a comprehensive service with a few attractive bells and whistles for as little as 100 basis points (1%) in annual expenses, including the operating expenses embedded in the funds used in the portfolio. Managers providing similar services with active management of the entire portfolio incur higher aggregate expenses, often 2 to 3% annually. In addition to lower combined expense ratios associated with the management of ETF-based portfolios, total transaction costs are generally lower in the portfolios that use ETFs as components.

Many benchmark indices have substantial embedded transaction costs associated with costly changes in index composition, reconstitutions and re-balances. The more popular the index and the smaller the average capitalisation of its components, the higher these embedded transaction costs tend to be. However, there are index ETFs available with lower embedded transaction costs.

The standard index portfolio in an ETF makes trading in ETF shares themselves more economical than a basket trade in a nonstandard portfolio or separate trades in individual component securities. The ETFs based on the most popular indices are cheaper to trade, as ETFs, than funds based on less popular indices, but even relatively obscure index portfolios are usually less costly to trade as ETFs than separate stocks. The lower total management expenses from combining the expenses of the funds and the fee for the overall manager look even better when

accompanied by lower transaction costs at the component and portfolio levels.

The fact that they can obtain positions in appropriate asset classes with standardised ETF baskets also permits specialised ETF-oriented managers to meet investors' objectives and manage risks with greater precision than most conventional managers can attain. It is easier to establish, measure and maintain appropriate allocations and diversification with ETF positions.

Managers can provide a wide range of value-added strategies, including tax loss harvesting to facilitate realisation of gains on undiversified low-cost positions that dominate many investor portfolios. Some ETF-oriented managers offer managers using ETFs features ranging from sector rotation, style rotation and the more comprehensive core satellite or risk budgeting approaches used by sophisticated wealth and risk managers for much larger accounts than the ETF-oriented manager usually requires. The ETF-oriented managers provide some services with component portfolios they manage themselves or farm out to specialised sub-managers. In short, using ETFs, at least for core asset allocations, can reduce costs and make highly customised management available to smaller clients on attractive terms. It is useful to devote a paragraph or two to some of the specialised services ETF-based managers offer. These specialised services are often offered separately from a comprehensive ETF-based asset management package.

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### TAX LOSS HARVESTING

Tax loss harvesting is a particularly interesting application partly, because it illustrates some of the differences between conventional separate account management and the ETF approach. Tax-loss-oriented managers have typically used moderately diversified single stock positions in separate portfolios. The portfolios are optimised to track either a standard

benchmark index or a standard benchmark index excluding the factor exposures of a large, low cost basis position in a stock the investor holds as a result of inheritance, employment or astute investment. The positions in this separate stock portfolio are monitored and managed to maximise the realisation of tax losses. A similar tax loss harvesting objective can be achieved using sector ETFs.

Without going into the economics in great detail, tax loss harvesting with sector ETFs can generally be achieved with management expenses (ETF sector fund expense ratio plus any specialised tax manager's fee) that are lower by about 40-50 basis points (0.40-0.50%) per year than a separate stock tax loss harvesting portfolio. Of course, the sector ETFs are typically less volatile than the single stock positions. Consequently, the investor and the investment manager need to discuss the relative importance of the tax loss harvesting feature. If tax loss harvesting is something that would just be "nice to have," it is not likely to dominate the investment and tax objectives of the account. Unless the case for tax loss harvesting is a compelling and immediate requirement, the sector ETF tax loss harvesting approach can be more attractive. It is certainly less costly. Some managers offer exactly this tax loss harvesting choice – between separate stocks and sector ETFs – to their clients.

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## SECTOR ROTATION

A variety of techniques are used by some specialty ETF managers to evaluate the relative attractiveness and likely future performance of different sectors. These managers overweight and underweight sector ETF positions relative to the aggregate index for the group of sector funds. Sector rotation is often combined with tax loss harvesting and other portfolio features. The range of principles used to weight sectors approximates the range of fundamental and technical approaches to individual stock selection.

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## STYLE ROTATION

Style ETFs are a difficult product for individual investors to use effectively and economically. The annual turnover in the composition of style indices and, consequently, the turnover within ETFs based on style indices, tends to be substantially higher than the turnover within broad market ETFs, sector ETFs or even small-cap ETFs. Some style indices and their associated ETFs use index rules designed to reduce portfolio turnover, but these rules do not necessarily lead to a better index or a better fund. The reduction in turnover typically delays the portfolio changes that give separate growth and value portfolios their expected characteristics. The result is a trade-off between transaction costs and style purity.

At least one manager has developed a unique model for both style rotation of long-only portfolios and a technique for managing long-short portfolios that relies in an interesting way on valuing the components of the style index portfolios. I expect successful use of style ETFs to be the province of such managers rather than a popular application for individual investors trading on their own. The costs embedded in the style indices and their associated ETFs are harder for individual investors to handle.

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## CORE-SATELLITE/RISK BUDGETING

Professional investors and analysts recognise that asset allocation is important and should depend primarily on the risk appetite and personal circumstances of the investor and on the timing and pattern of the investor's cash flow requirements from the investment portfolio in future years. Asset allocation decisions are complicated by the fact that opportunities to add value beyond a benchmark portfolio are not evenly distributed over the universe of available investments. Exhibit 1 shows a graph from Kritzman and Page (2003). The graph

indicates, apart from cost control, that meaningful opportunities to add significant value with active management are largely confined to individual stock and sector selection.

Opportunities for active weighting changes across asset classes are limited by the fact that acceptable variations in portfolio composition and their effect on aggregate return provide little scope or expected reward for an active asset allocation strategy. On the other hand, some sector and securities selection decisions provide a relatively large variation in return possibilities. Consequently, any information of value can make a greater impact on portfolio return when sector and stock selections are assigned most of a portfolio's risk budget.

Sophisticated managers allocate the risk budget where they feel they can add value with judgements based on research information. This most commonly will be in sector selection and in individual stock selection in small capitalisation stocks.

An attractive feature of the ETF-oriented separately managed account is that the expense and transaction cost savings associated with using ETFs for basic asset allocation provides an opportunity to make intelligent use of the risk budget to take appropriate sector or single stock exposures. The manager will try to add value where he feels that he or a selected sub-advisor can improve upon an indexed portfolio, while keeping the total expenses of the fund management process at modest levels.

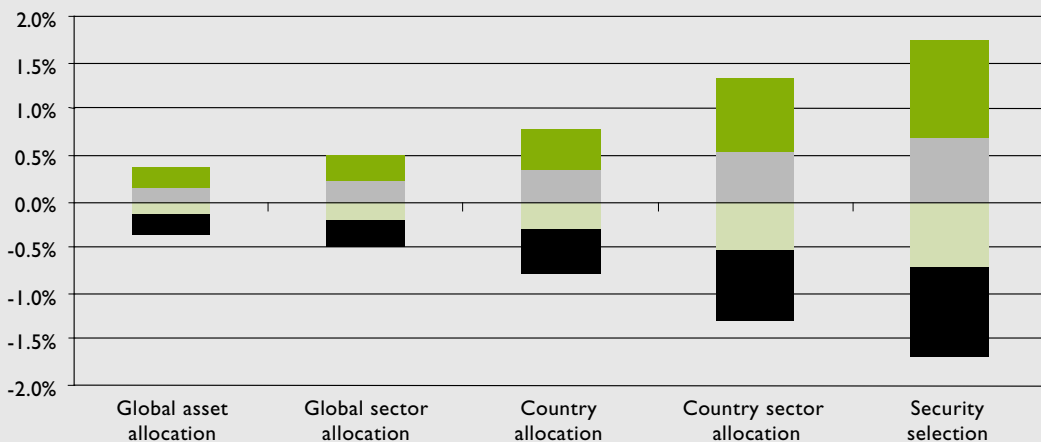
## OTHER WAYS AN ACTIVE MANAGER USING ETFs CAN ADD VALUE

Most individual investors using ETFs have severely limited access to good quality information that helps them:

- distinguish among the indices used as templates for ETFs; and

Fifth, 25th, 75th and 95th percentile performance over horizon annualised difference from average (1987 - 2001)

Exhibit 1



Source: Kritzman and Page (2003)

- evaluate the quality of management provided by ETF issuers.

In general, the best information published on these topics is available from major investment banking firms. The major fund services do not provide very useful or comprehensive coverage of ETFs. I believe that the reason some brokerage firms do a better job of covering ETFs than the fund services is that the brokerage firms are more likely to be involved in an ETF transaction (which must be executed in the securities market) than in a conventional fund transaction (which is often executed directly with the fund issuer or through a non-brokerage intermediary – such as a 401-k or other retirement plan provider – with links to mutual fund issuers).

Using the information assembled and published by some of the leading brokerage firms with ETF research coverage, an ETF specialist manager can do some things that most individual investors cannot easily do for themselves. First, the manager can evaluate the indices underlying the ETFs. As noted earlier, the embedded transaction costs associated with composition changes, reconstitutions and re-balancing in the more popular indices can have a significant adverse effect on index performance relative to the universe of stocks from which the index is drawn. For the most widely used indices, there is what William Bernstein refers to as an ‘execution advantage’ if a good index fund manager can recapture some of the embedded transaction costs associated with index changes.<sup>1</sup> There are also substantial differences across funds in the quality of their index fund management and execution.

As I have pointed out elsewhere, an astute index fund manager who transacts at a time other than the moment of the official index composition change can often add substantial value for investors.<sup>2</sup> The most dramatic recently published evidence of differences in index fund performance by different managers comes from Elton, Gruber and Busse (2004). They compared the expenses and performance of all the Standard & Poor’s 500 index mutual funds offered in the US from the beginning of 1996

through the end of 2001. There were 52 open-end index funds available over the entire period. The best of these funds outperformed the worst fund by an average of 209 basis points (2.09%) per year over the six-year period. Index funds are clearly not as commoditised as many investors believe. There is substantial scope for fund selection by a manager using funds as portfolio components.

Exhibit 2 shows the median tracking error and range of tracking errors for various categories of US-based ETFs for both 2002 and 2003. The median tracking errors and the ranges of tracking errors are large. The magnitude of the median tracking error illustrates that many of these funds have not been managed aggressively. The dominant ETF performance determinant for 2002 and 2003 appears to have been fund cash balances. An ETF manager does not have to maintain a cash balance in the fund portfolio to meet redemptions. The manager can invest virtually all the fund’s cash. In 2002, a very weak year in many equity markets, the median negative tracking error was relatively modest. For many ETFs, the tracking error was less than the expense ratio, suggesting recapture of some of the transaction costs embedded in the index composition change process. However, the very poor performance of the same funds in 2003 suggests that attributing 2002 performance to aggressive management is probably incorrect.

The performance in 2003 suggests that the reasonably good results in 2002 probably came from holding cash in a weak market environment. Strong evidence that cash balances were a boon in 2002 is the fact that tracking errors became larger and increasingly negative across the board in 2003, a year in which a strong market environment made holding cash balances a bad idea. While ETF expense ratios are generally low, an astute manager who uses ETFs as portfolio components will understand that it is *his job* to decide with his client what cash and fixed income positions the client should hold. The manager is buying ETFs for their asset class exposure. To the extent that the fund is mixing equity index exposure with cash, performance is not going to provide the exposure the manager is using the fund to obtain.

Exhibit 2 - Comparison of US-based ETF tracking errors - 2002 and 2003

Exhibit 2

Fund type	Median tracking error	Range 2002		Median tracking error	Range 2003	
	2002	Best	Worst	2003	Best	Worst
Large-cap broad market	-9	+1	-13	-30	-17	-38
Mid-cap broad market	-5	+2	-21	-33	-25	-46
Small-cap broad market	-11	-4	-24	-29	-20	-31
Growth style	-11	-3	-24	-31	-19	-43
Value style	-17	-4	-35	-37	-28	-72
Foreign single-country	-33	+193	-269	-128	+573	-238
Foreign multi-country	-11	+136	-42	-54	-5	-358
Sector	-26	+80	-358	-68	+552	-115

Source: Morgan Stanley, Bloomberg

Another issue that the manager of portfolios of ETFs can address more effectively than most individual investors is that some of the indices underlying ETFs are not inherently compliant with the Regulated Investment Company diversification requirements for pass-through of income to investors in the US and the UCITS diversification requirements in Europe. A fund that has to be either RIC- or UCITS-compliant may not be based on an index that is designed to meet the appropriate diversification requirements.<sup>3</sup> If diversification requirements prevent the fund from using the same stock weights as the index, tracking error may not reveal the effect of a specific fund's expense ratio on the one hand and the effectiveness with which the manager is matching or beating the index on the other hand. The use of non-compliant indices may affect the range of tracking errors, but it will usually not affect the medians very much. The use of a non-compliant index makes evaluation of a particular fund manager's performance more difficult and might be a

reason for investors to avoid ETFs based on indices that do not automatically meet their home country's fund diversification requirements.

Analysis of ETF performance will become a much more significant activity than these simple examples suggest. Until better information is available to all investors, fund evaluation is one place where a manager who uses ETFs can add significant value. When one or more of the conventional fund services begins to provide good ETF data and analysis, individual investors will be better able to evaluate ETFs for themselves.

## ETFs VS MUTUAL FUNDS

Some of the managers who use ETFs in their customised portfolios for individual investor clients began by using conventional mutual funds to achieve appropriate asset class allocation and diversification before ETFs came

along. While the degree of sophistication they bring to the fund selection process is far from uniform, many of these managers show considerable understanding of the issues which, in one instance, will make an ETF the obvious choice versus another situation where no adequate ETF is available and a conventional mutual fund is a better choice than a separately managed portfolio.

Much has been written on both sides of the ETFs vs. mutual funds debate. As one who has at times argued for one and at times for the other in specific situations, I feel that there is no universal answer to the question, “which fund is better?” The ETF offers a superior *structure* for most equity portfolios and for a growing range of fixed income portfolios. However, many *implementations* of the ETF structure are not satisfactory. Often a fund issuer does not take advantage of the features and cost savings inherent in ETFs. The most important advantage the ETF offers all investors is the fact that the ongoing investor in ETFs is not penalised by the costs of the fund’s transactions made to accommodate entering and leaving fund shareholders. For more details on some of the relative advantages and disadvantages of mutual funds and ETFs, see Gastineau (2004).

When the tax-efficiency of ETFs (for all taxpaying investors in the US and, in many cases, for non-US investors) is added to the equation, the case for ETFs would appear compelling to many investors. However, the lack of aggressive management in most index ETFs leaves the debate unresolved. Choosing the right fund is a decision that requires the kind of sophisticated analysis a professional investment manager can bring to bear.

#### Notes:

1. See Bernstein (2004).
2. See Gastineau (2002). Other observations along this line include Blume and Edelen (2002 and 2003) and Quinn and Wang (2003).

3. Proposed changes might relax some of the diversification restrictions on UCITS index funds.

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**Gary Gastineau is Principal of ETF Consultants LLC in New Jersey.**

**For further information, please telephone +1 (908) 598 0440 or e-mail: [gary@etfconsultants.com](mailto:gary@etfconsultants.com)**