

“Silence is Golden: The Importance of Stealth in Pursuit of the Perfect Fund Index”

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Abstract

The greatest weakness of the current generation of index funds is that the benchmark indexes they use as templates are created and published for other purposes. Consequently, anyone can buy stocks added to the index or sell stocks removed from the index in competition with the index fund. No active fund manager would accept an investment process that would tell the world what trades her fund would make and approximately when it would make them. With Silent Indexes, index funds can achieve the same kind of trading confidentiality that actively-managed funds enjoy.

Like many index fund users, I have done my share of complaining about the undesirable features of equity benchmark indexes adapted to index fund applications.¹ I find the opportunity to address the construction of a “perfect” index for an equity index fund very welcome.

Most of the principles of fund-friendly indexes apply equally to conventional mutual funds and to exchange-traded funds (ETFs), but I focus on indexes for ETFs. The exchange-traded fund is almost certainly the index fund structure for the 21st Century. Not only is the ETF more tax-efficient than a conventional mutual fund, making it a common choice for intermediate or long-term taxable investors, the ETF usually offers lower expenses than comparable conventional mutual funds.

Of course, creating just one perfect equity fund index is not enough because investors demand a variety of index funds. A few indexing purists may argue for the use of a single, very broad index of U.S. stocks such as the Wilshire 5000 and a single broad market index of foreign stocks to provide appropriate international diversification, but such basic index funds do not meet all investors’ needs.

A broad market foreign equity index, particularly if it is implemented in the form of an exchange-traded fund (ETF), will not create a very good fund. Security clearance, settlement and custody procedures outside the United States are at a relatively early stage of development. The National Securities Clearing Corporation (NSCC) and the Depository Trust Company (DTC) have done such a good job in the U.S. that they have created unrealistic near term expectations for securities operations in other markets. Any ETF that relies on in-kind creation and redemption involving the diverse clearance, settlement and custody systems used in world markets will face extraordinary costs if it covers all major foreign markets. For the most part, these costs will fall outside the fund’s expense ratio, but they will be very real costs to the investors who trade and hold the

¹ See, Gastineau, Gary L., “Equity Index Funds Have Lost Their Way,” *Journal of Portfolio Management*, Winter 2002, pp. 55 – 64, and Gastineau, Gary L., “The Exchange-Traded Funds Manual.” Wiley, 2002, Chapter 6, pp. 127 – 176.

fund. The high transaction costs associated with creation and redemption in a multinational fund assure a wide bid/asked spread in the ETF share price. Transaction costs inside the fund will also be relatively high.

In the U.S. market, there are many reasons why investors might want to own more than a single index fund even if the expenses for a single broad-based index fund are quite low. Most investors with significant accumulated wealth have their most valuable assets in undiversified positions which, for lack of a better term, I will call their “primary holdings.” Whether the wealth represented by primary holdings comes from an inheritance, from the development of a business or from stock ownership accumulated during a career with a single employer, it is often difficult or impossible to achieve adequate diversification by using only broadly diversified index funds to supplement these concentrated positions. Investors often compensate for lack of diversification in their primary holdings with special-purpose funds that provide exposure to sectors or investment styles not represented in their primary holdings and offer a few tax reduction opportunities as well.

Essential Characteristics of a Fund-Friendly Index

The index “universe” for a fund-friendly index should encompass a market that investors want to “buy.” This relatively simple principle should be easy to accommodate in an index design. Without it, the best structured index will not attract investors to a fund. The market covered by the index must be large enough to permit construction of a viable fund and the securities in the fund’s universe, i.e., the population of companies from which members of the index will be selected should consist of relatively liquid securities. To the extent that the index is capitalization or, even better, float-weighted, the smaller companies in the index need not have a great deal of individual liquidity because their positions in the fund will be quite small, however there will be some pricing and index tracking issues if there is not reasonably regular trading in the shares of each index member.

Some Desirable Characteristics of Fund-Friendly Indexes

1. Meet RIC requirements for a U.S. fund or UCITS requirements for a fund distributed outside the U.S. at low cost either (1) naturally, (2) by special weighting rules, (3) with custom structured instruments, or (4) by representative sampling. (1) and (2) are vastly preferable to (3) and (4).
2. Re-balancing and replacement rules minimize portfolio turnover.
3. If the index or a related index does not include large cap companies in its universe, the index and the fund retain exposure to the best performing companies in some way.*
4. Style indexes (growth/value) should not cover all the companies in the corresponding broad market aggregate index because many companies are not distinctly growth or value.
5. The index creates a fund that makes investment sense and appeals to investors.
6. The resulting fund has multiple uses and useful derivatives.
7. The index is rules based. A back up decision-making entity is only used for emergencies not anticipated by the rules.
8. The fund is inherently tax efficient.
 - a. low turnover, but some stocks will be completely removed from the index each year.
 - b. no loss of foreign withholding tax credit or other passthrough benefits due to structure or portfolio composition.
9. Index license fees are modest relative to benchmark index licensing fees unless the licensed name or other features promise to bring in enough assets to lower total fund costs.
10. The index fund structure must recognize the limited integration of clearance, settlement and custody systems across international borders. Improvements are underway but multi-country funds can be costly to manage in the open-end ETF format.

Issues:

Handling of float: Float is rarely an issue for a fund-friendly index that is designed for a single fund. It can be very important if an index is designed for use by a number of funds. A minimum capitalization percentage requirement on float or a delay on IPO entry into an index past the lockup period is okay, but staged additions to weighting as float increases should be avoided.

Modularity: It is harder to create and redeem in kind if the index has a large number of issues, so funds of funds can be useful in creation and redemption of funds with a large number of issues.

* For example, a conventional small cap index might be linked to or, even better for some investors, combined with a larger cap index in a single fund to preserve exposure to successful companies.

Alternatively, the index could retain companies that may otherwise “graduate” out of the index as they grow. Retaining these companies would let the fund capture the impact of large gains.

Silence is Golden

The fund-friendly index must be a Silent Index. A Silent Index is an index developed and maintained for the use of a single exchange-traded fund or a single traditional mutual fund. It is not designed to serve as a benchmark or as an underlying index for multiple funds or for stand-alone derivative securities trading. The fund itself may have derivatives or there may be derivatives on an index developed from the fund’s sequence of net asset value calculations, but the template index for the fund portfolio is used almost exclusively as a template index for that single fund, and we would expect the index to have little licensing value beyond that application. Changes in the Silent Index are not made public until after its fund has had an opportunity to act on the index changes, i.e., to change the composition of the fund portfolio.

The Silent Index fund is superior to an index fund based on a benchmark index because benchmark index funds incur unnecessary transaction costs. The multiple licensees of benchmark indexes, together with speculators and other investors who acquire knowledge of benchmark index changes, impose a transaction cost penalty on funds using benchmark indexes. These funds are forced to make portfolio changes amid a flurry of market activity caused by the announcement of changes to an index – and are often forced to buy high and sell low during the blizzard of rebalancing and related speculation. Transaction costs associated with index changes are increasingly embedded in the benchmark index’s performance.

A Silent Index is based on many of the same rules as a good benchmark index – but the Silent Index rules are not subject to use by multiple funds or by speculators attempting to front run trades by one or more funds using the index. As a result of the delayed disclosure of index changes, the Silent Index fund should outperform a comparable benchmark index fund by a few basis points to a few hundred basis points

per year depending upon the benchmark index's rules and popularity. The Silent Index will be less well known than similar benchmark indexes and, consequently, it may have a fund marketing penalty associated with it. In most cases, however, the performance of the popular benchmark indexes is so adversely affected by embedded transaction costs that the Silent Index (and its fund) are relatively certain to outperform the benchmark over any reasonable time interval. Even a small but consistent performance advantage based on the easily understood principle of confidential treatment of planned fund transactions should overwhelm any cachet attached to a branded index fund.

Occasionally, someone too immersed in the minutia of today's benchmark index funds will be shocked by the suggestion that a Silent Index could be created and managed by the same organization that advised the fund. Who has the interests of the fund more in mind than the fund manager? Indeed, with actively-managed funds, a single organization or even a single individual is responsible for the whole investment process. One reason equity indexes and equity index funds are so widely criticized today is that when indexing was in its infancy, the market impact of index funds trying to match index changes was not significant.² These market impact costs have risen significantly but without much fanfare.

The manager of a benchmark index fund is not permitted to know about changes in the index or to implement changes in the portfolio until the changes have been announced to the world. The benchmark index fund is the only type of fund that operates under such an information handicap. No one seems able to explain why such publication of a fund's trading plans makes sense for investors. Indeed, full advance disclosure exposes long-term index fund investors to the profiteering of short-term speculators. We should always adjust procedures to better serve the investor rather than simply accept tradition. Market impact costs are hurting benchmark index fund investors – and the more assets invested in funds tracking a benchmark index, the greater the transaction cost penalty associated with using that index.

² Gastineau (2002a). Criticism of the indexes and the operation of funds based on them is growing. See, for example, Blake, Rich, "Is Time Running Out for the S&P 500?", *Institutional Investor*, May 2002, pp. 52 – 64, and Madhavan, Ananth, "Index Reconstitution and Equity Returns," ITG Inc., April 24, 2002.

RIC Compliance

The fund-friendly Silent Index should be regulated investment company (RIC) compliant (or UCITS compliant for European investors). The template index for a fund serves as just that – a template. There is no need for an index fund manager to take a non-RIC-compliant index, change its rules in any of several ways and “manage” the index to create a fund that may show little or no tendency to track the theoretically underlying index because of changes the manager had to make to achieve RIC-compliant diversification. If RIC compliance is obtained at the index provider level rather than at the fund level, there is a clearer basis for evaluating the performance of both the index structure methodology and the index fund portfolio manager.

Tax Efficiency

The index rules should insure that the fund is inherently tax-efficient. The term “tax-efficiency,” as used in discussions of funds, is a measure of the extent to which capital gains are not realized by the fund’s shareholders until they sell their fund shares. Obviously, this kind of tax-efficiency means little or nothing to the short-term trader in ETFs, but it can be extremely valuable to long-term buy and hold investors. This kind of tax efficiency is one of the reasons ETFs have become so popular with long-term investors and investment advisors in recent years. A Silent Index can help insure the tax-efficiency of the fund through reductions in unnecessary portfolio turnover. Intelligent handling of stocks which depart the index is important in maintaining a tax-efficient fund. The timing of periodic rebalancing or reconstitution of the index and implementation of rules designed to insure RIC diversification compliance are also important in insuring the tax-efficiency of a Silent Index fund.

Trouble Abroad

As noted previously, an exchange-traded fund that encompasses more than a few foreign country markets is unlikely to be an efficient fund because country diversification means high costs for multi-country clearance, settlement and custody. Many changes are

under way, led by the Depository Trust and Clearing Corporation (DTCC) and its subsidiaries NSCC and DTC. It seems likely that these changes will improve the efficiency of multinational ETFs over the next few years. If this process takes more than a few years, however – and in many countries major legislation is necessary before appropriate changes can be made – the multi-country ETFs that exist today may prove to be very costly investments.

Gold Standard for Liquidity

Given the importance of portfolio liquidity in keeping transaction costs for any fund as low as possible, the gold standard for index construction should be float weighting on top of capitalization-based stock selection as the best readily available proxy for underlying market liquidity. While definitions of float are not always consistent, a conscientious effort to incorporate float will have a desirable effect on the liquidity of a fund index and the likely cost and performance of its fund.

Rules Designed to Minimize Turnover

There are a variety of ways indexes can be constructed and reconstituted to minimize portfolio turnover costs in a fund based on the index. If, for example, an index is based on mid-cap stocks or small-cap stocks, turnover can be reduced by putting a buffer range above or below – or possibly at both ends of the capitalization range – to limit changes in the membership of the index that are likely to be reversed on the next rebalancing date. If a stock gets far enough outside the index's desired company size range, a quick reversal is unlikely and the stock can be dropped from the index with little likelihood of its reentering the index at the next rebalancing.

Turnover in growth/value style indexes, to the extent that one or a relatively small number of style criteria are used, can be controlled by rules that require a specific degree of change in measured style characteristics before a stock moves from one classification to another. Changing an index on the basis of small changes in size or style characteristics can lead to extremely high rates of turnover. The resulting indexes may be truer reflections of the features the index is designed to show, but the transaction costs a

fund will incur making the changes are likely to more than offset any advantage from size or stylistic purity. A truly fund-friendly set of growth and value indexes has not yet been devised.

Indexes Should Be Integrated Whenever Possible to Reduce Fund Transaction Costs

Perhaps the best example of this principle is to consider how the major Russell Indexes might have worked. If the weighted utilization of the Russell 1000 as an index portfolio template was between seven and eight times the fund use of the Russell 2000, the annual Russell re-balancing – which has become increasingly chaotic in recent years – would be an almost tranquil event. With a seven or eight-to-one portfolio size relationship, the changes in composition in the Russell 2000 and the Russell 1000 across the interface between the two funds/indexes would be easy and cost efficient to execute. Russell 1000 funds would need to sell approximately the same number of shares of stocks dropping into the Russell 2000 as Russell 2000 funds would need to buy.

Correspondingly, Russell 1000 funds would need to buy approximately the same number of shares of stocks graduating from the Russell 2000 as Russell 2000 Funds needed to sell. There would still be some dislocations on the lower end of the Russell 2000, but the total transaction cost penalty to shareholders using these indexes, particularly the Russell 2000, would be substantially reduced by balanced use of the indexes as fund templates. Unfortunately, Russell has not succeeded in marketing index fund usage of the 1000 extensively enough to achieve this cost dampening effect. The result is a high annual reconstitution cost for the Russell 2000.

What Kinds of Indexes Cannot Qualify As Perfect Fund Indexes?

Benchmark Indexes will never qualify as perfect fund indexes because changes in the composition of the index are always public before the fund can act. The appropriate index for a fund, while it may lack the benchmark brand, is always a Silent Index. Funds using Silent Indexes will benefit from the lack of publication of the fund's need to trade. Only benchmark index funds have their trading plans announced to the world before they can act. The only investment manager of any kind who cannot trade until after his trading plans are broadcast to the world is the manager of a benchmark index fund. When stated this way, the pre-trade publication of index changes is obviously unacceptable.

Multi-country Indexes, particularly those covering entire regions or hemispheres cannot create efficient ETFs until substantial changes are made in clearance, settlement and custody systems outside the United States. ADR indexes can be an interesting exception.

Global Indexes, except by accident, cannot be good fund indexes. Apart from the multi-country clearing, settlement and custody issues, a tax problem with global indexes highlights another feature of funds that should be considered in any index adoption.

The Internal Revenue Code has a number of notable features with respect to regulated investment company diversification rules. The diversification requirements for equity funds are relatively well known. Less widely known is the rule that a fund which has less than half its assets invested in foreign securities cannot pass through credit for the dividend withholding taxes it pays on foreign stocks as tax credits to its U.S. shareholders. It must pass them through as a tax deduction, which is often less valuable to these shareholders. Taxable holders of global funds, which often consist predominantly of U.S. stocks, will find that converting the foreign dividend withholding tax credit to a tax deduction reduces the fund's after-tax return materially. Similar provisions can affect the passthrough of the tax-exempt nature of municipal bond interest and even, in some states, the ability to deduct the Treasury interest component of fund dividends from state taxes, though these do not create problems for equity index funds.

The Changing Role of the Index Fund Manager

Most of the fun of being a benchmark index fund manager has been meeting the challenge of outperforming your fund's benchmark index. Index funds have attracted some excellent managers who demonstrate their skill by nearly always beating the benchmark before the fund's costs and occasionally beating it after costs. This has been possible because the definition of a good benchmark index fund manager has become the ability to trade better than the other market participants who attempt to profit from index changes. These managers simply recapture some of the transaction costs embedded in the benchmark index.

Competitive traders will not have advance notice of the target time for Silent Index changes. There will not be a competitive trading frenzy surrounding Silent Index changes. Consequently, it may be harder for Silent Index fund managers to beat their indexes. Managers of funds based on Silent Indexes may beat their indexes occasionally, but their funds should perform better than comparable benchmark index funds – even if the manager simply matches the Silent Index – because most of the embedded transaction costs of the benchmark index can be avoided. In fact, simply matching the index was one of the fundamental principles the pioneers of indexing advocated.

Conclusion

Creating a perfect equity fund index requires some thinking and planning, some knowledge of the RIC diversification and tax rules – and some golden silence. When you examine the indexes currently used as index fund templates in light of these comments, you will see huge opportunities for index improvement. The investment industry can easily develop better fund indexes; hopefully, we will.