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An Exchange-Traded Fund Or A Conventional Fund—You Can't Really Have it Both Ways

Fund issuers now use at least two different fund models to deal with the fact that some investors prefer exchange-traded funds (ETFs) while others prefer conventional funds. These models are likely to lead to very different results for taxable investors. To state the difference in the simplest possible terms, tax efficiency in an ETF depends on the frequency of in-kind redemptions. Allowing some redemptions to be for cash, at the option of the investor, diminishes tax efficiency.

The more "established" of the two models is epitomized by Vanguard's VIPERs. Vanguard Index Participations Equity Receipts are an exchange-traded share class of some of Vanguard's existing conventional index funds. Vanguard's Total Market Fund, and more recently, its Extended Market Fund, have these ETF share classes. Vanguard will offer similar exchange-traded share classes for most of its other index funds and for ten new sector index funds.

In contrast to the Vanguard model, Fidelity Investments uses separate funds, one conventional and one ETF, that will track the same index. Specifically, Fidelity has licensed the Nasdaq Composite Index for two such separate funds. The two fund portfolios are similar in composition, but the portfolios will not be linked in anyway.[1]

We believe there are important advantages in Fidelity's two-fund structure. To understand these advantages fully, we need to look at the tax characteristics of conventional funds, ETFs and combinations of the two types.

An ETF generally redeems its outstanding shares by delivering out portfolio securities in-kind in a large transaction, typically 50,000 fund shares or some multiple of 50,000 shares. The ETF delivers out its lowest-cost securities first in these untaxed in-kind redemptions, letting the fund increase the average cost basis of its remaining portfolio securities and reducing or even eliminating capital gains realized inside the fund. The key to the widely touted ETF "tax efficiency" is really capital gains tax deferral (from the step-up of average basis inside the fund) until a shareholder sells the ETF shares. In-kind redemptions are harder to implement in a conventional fund, making eventual taxable capital gains distributions much more likely in conventional funds.

The Vanguard-type structure is based on a single pool of portfolio securities underlying both share classes, in contrast to the Fidelity-type's two separate funds, each with either ETF or conventional shares. Any tax efficiency produced by the ETF share class in the Vanguard-type structure is diluted by the presence of the other share class. Barring possible in-kind redemption in the conventional fund to create shares in the ETF, tax efficiency from in-kind redemption in the Fidelity-type products will be concentrated in the separate exchange-traded fund.[2] In the Vanguard-type structure, an investor can enter through either the exchange-traded share class or the conventional share class, but only the conventional share class is exchangeable into the other class. An investor in the exchange-traded share class cannot convert into the conventional share class. The Vanguard-type share class conversion process can go in only one direction.

It is useful to consider why someone might select one share class over another, or one structure over another. Three fund characteristics are likely to determine an investor's preference for conventional versus ETF share classes. They are:

(1) Cost

(2) Ability to trade a fund's shares on an intra-day basis and

(3) Tax efficiency

An investor who decides to buy a fund at 10 a.m. can be readily accommodated with an ETF share class. The market price for the ETF should be close to the intra-day value of the portfolio underlying the fund shares. The ETF investor will typically pay part of a bid-asked spread to buy the shares, plus a commission. The net price paid for the shares will, on average, be above the intra-day value of the securities in the fund portfolio at the time of the purchase. The price realized on a sale will, on average, be below the intra-day value by the amount of similar transaction costs. If the shareholder is willing to commit early in the afternoon and wait for a 4:00 p.m. NAV calculation, a Vanguard index fund's conventional shares can be purchased or sold at NAV with no readily measurable transaction cost. Although the expense ratio on an ETF share class may be lower than the expense ratio on a small position in a conventional share class, the total cost will usually be higher to take and hold the ETF position. Unless an investor values the ability to trade intra-day (or with no advance notice), the conventional share class will be a better deal.[3]

The key feature of an ETF that makes it more attractive to a taxable investor is the capital gains tax deferral that is characteristic of most equity ETFs. In the examples we have been discussing, every shareholder of a Vanguard-type dual share class fund will benefit proportionally from any tax deferral/tax efficiency made possible by the existence of the ETF share class. The Fidelity-type product is two separate funds, however, not a single fund with two share classes. Consequently, tax efficiency from ETF in-kind redemptions in the Fidelity model goes exclusively to holders of the ETF shares. ETF-style tax efficiency will not be available to holders of the conventional fund.[4] If the Vanguard-type exchange-traded share class is large and actively traded, at least in terms of in-kind redemptions, the Vanguard structure may be satisfactory for taxable investors. If the ETF share class is small or, more specifically, if in-kind redemptions are a small fraction of the fund's total redemptions, the fund will exhibit little of an ETF's characteristic tax efficiency. Other things being equal, any combined fund with this structure will have fewer opportunities for redemptions-in-kind and less inherent "tax efficiency" than a fund that can require redemptions to be in kind.

If investors do not value the intra-day trading feature highly, we would expect most Vanguard-type fund investors to use the conventional share class and hope that enough ETF traders will show up to provide taxable investors with tax efficiency. Active trading in the ETF share class seems unlikely. If intra-day trading and tax efficiency are both important reasons to use ETFs, they are widely available in ETFs unburdened by a conventional share class diluting the benefits of the ETF share class's redemptions-in-kind. The Fidelity type of stand-alone ETF, without the redemption deadweight of a conventional share class, would appear to be a preferred instrument for taxable investors. There is no advantage to the ETF user of having the conventional share class appendage, except the possibility of modest economies of scale) Any taxable investor who values capital gains deferral would likely choose the Fidelity model—or some other model that requires all shareholders to enter and leave the fund through the ETF share class.

We cannot resolve any conflict between the desire to trade intra-day and the desire for capital gains tax deferral until fund shares are sold, but we can offer some figures to help the reader assess the relative probability of achieving tax efficiency with the Vanguard-type ETF shares. The ETF share class of the Vanguard Total Market Fund had assets of nearly $2.44 billion in late 2003.[5] The total assets of the fund as of November 30, 2003, were $39.8 billion,[6] making the ETF share class less than 6% of the fund's capitalization. In the first half of 2003, the small exchange-traded share class was turning over about three times a year in the secondary market. Considering that in-kind redemptions are usually a small fraction of ETF share trading volume, it is hard to imagine this ETF share class contributing materially to the tax efficiency of the Vanguard Total Market Fund. While the numbers will vary, all of the existing Vanguard funds adding ETF share classes will face similar tax efficiency obstacles.

A Vanguard-type auxiliary ETF share class even has an important competitive disadvantage relative to some other ETFs. Vanguard conventional index funds have fund share purchase and redemption policies that protect ongoing conventional fund shareholders from the transaction costs associated with the entry and exit of fund shareholders. Specifically, Vanguard discourages late arriving orders or holds them until the following day. This means that portfolio managers can equitize net cash flow efficiently before the market closes. This shareholder protection makes Vanguard's conventional index fund shares more attractive relative to Vanguard's ETF shares than most conventional open-end fund shares might be relative to shares in a similar ETF.

Vanguard plans to introduce a series of sector funds with dual share classes. Unlike the existing Vanguard funds that are adding ETF share classes, the ETF share classes of these sector funds will not be linked to large conventional funds from the first day they trade. The ETF and conventional share classes will be introduced at essentially the same time. Furthermore, Vanguard's plan to exclude small investors from the conventional share class in the new dual class sector funds may encourage more use of the ETF share class.

We see some significant obstacles to success for the Vanguard sector fund ETF shares, however:

- the paternalistic argument that Vanguard's small investors need to be protected from themselves and cannot be permitted to buy small positions in conventional sector fund shares deserves the adverse media attention it will almost surely receive;
- the applications for sector ETFs focus on tax issues more frequently than applications for broad-market ETFs;
- the apparent relative transaction cost advantage of conventional index fund shares is generally greater on large

purchases and holdings; and

- the sector categorizations used in Vanguard's MSCI sector indexes are identical to the categorizations used by Standard & Poor's in the indexes underlying the established Sector SPDRs ETFs, which had assets of nearly $6 billion in pure ETF funds in late 2003.[7] The Sector SPDRs combine the Technology and Telecommunications sectors in a single fund and include only 500 companies, versus the 2,500 companies planned by Vanguard. But the 500 companies in the Sector SPDRs account for more than 80% of the capitalization covered by the 2,500 companies in the Vanguard funds, assuring that ETFs covering similarly named sectors will track closely. The Sector SPDRs' larger capitalization portfolios should have tighter trading spreads than the Vanguard baskets.

Conclusion

Only superior performance expectations and dominance of a very actively traded ETF share class for some of the smaller (and new) Vanguard index funds might make the Vanguard structure as attractive to taxable ETF share class investors as the separate ETFs proposed by Fidelity and already offered by other issuers. Even more attractive to many investors would be a different (not strictly "conventional") share class inside an ETF, with all entry and exit through the ETF share class. Of course, fund structure is only one feature of a successful fund. Fidelity's choice of the Nasdaq Composite as the index for its first ETF has been widely criticized. We agree with much of the criticism and feel that Fidelity could have made a much better choice. We also prefer the index change process used by MSCI to the index change process used by other index providers.[8]

Appendix

Exceptions To Redemption-In-Kind—A Pertinent Digression

After the material which precedes this appendix was submitted to the editor, I received a copy of Sauter (2003) which states that conventional index funds "have an *additional* technique ... which enables them to select the highest cost lots to apply to sales ... Traditionally, ETFs do not have a mechanism to harvest capital losses since all redemptions are made in-kind." (Emphasis added.)

I have always tried, particularly in tax-specific discussions, to avoid oversimplifying the ETF redemption process.[9] However, in explanations of the value of in-kind redemption, it should not be necessary to state that tax-efficiency is enhanced if shares carried by the fund at a loss are removed from the redemption basket and sold for cash to realize that loss in the fund.

To the best of my knowledge, all ETF disclosure documents contain clauses that permit the fund manager (1) to remove some securities from the redemption basket and (2) to sell securities for cash. Stating this repeatedly and explaining how it can enhance tax efficiency over 100% in-kind redemption would turn investor explanations of the creation and redemption process into a portfolio management manual. While early ETF capital gains distributions suggested that some ETF portfolio managers were slow to learn, I believe that most ETF managers now have learned not to waste opportunities to harvest losses. These managers routinely pull high-cost shares out of redemption baskets and sell them for cash. Well-managed ETFs and conventional funds do not differ in this respect. The advantage ETFs have always had over conventional funds is that ETFs are more likely to be able to step up their portfolio tax basis by redeeming low-basis securities in-kind. In-kind redemption opportunities are infrequent for most conventional funds. Many ETF managers still have some things to learn from their colleagues at conventional index funds,[10] but selling portfolio securities at a loss for cash is something they have already learned.

Endnotes

1 We do not rule out the possibility that Fidelity might develop a mechanism for asset transfers between the two funds through the creation and redemption process at sometime in the future. For example, Fidelity might permit Authorized Participants (APs), the market makers who create and redeem shares in exchange-traded funds, to buy shares in the conventional fund for cash and deposit the conventional fund's shares or, more interestingly, an in-kind redemption of the conventional fund's shares into the exchange-traded fund as part of an ETF creation transaction. The net effect of such a creation would be similar in some respects to a creation feature of the Vanguard product – with the possibility of improved tax efficiency and a small arbitrage profit for the conventional fund. By this suggestion, we are not offering tax or investment advice to Fidelity or anyone else.

2 See Footnote 1. A third combination of conventional fund and ETF is even more interesting in some respects than the Vanguard and Fidelity models. This third structure would have an exchange-traded share class as the only way into or out of the fund with something approximating a conventional fund share class offered to holders of the ETF shares. This structure has probable tax, cost and flexibility advantages over both Vanguard and Fidelity models, but it has not yet been offered. This structure would make the exchange-traded share class the dominant class and would require everyone to enter and exit through the exchange-traded share class but permit conversion to and from other share classes "inside" the core ETF class.

3 For sizeable orders brokerage firms could both profit and serve their clients well by offering ETF shares at the closing price of the shares or at closing NAV for orders placed early in the day. This would let investors exchange their ability to trade at intra-day prices for a fill at the price they would pay or receive for a conventional fund share trade.

4 Barring the hypothetical transaction discussed in Footnote 1.

5 Source: American Stock Exchange. As of December 12, 2003, was $2,375.091,420, (making it the 9th largest U.S.-listed ETF by total net assets).

6 Source: The Vanguard Group. Data as of November 30, 2003

7 These global categorization standards were developed jointly and are maintained jointly by Standard & Poor's and MSCI.

8 See Gastineau (2002a.)

9 For example, in the tax chapter of Gastineau (2002b) I stated that, "All ETFs now trading redeem most fund shares in-kind under ordinary circumstances." P. 91.

10 See Gastineau (2004).

Bibliography

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