



The Hidden Cost of Index Fund Rebalancing

When you buy an "index fund," you probably think you're just passively owning the market. But Sammon and Shim (2026) suggest that index funds do more than track the market. Their automatic rebalancing rules can cause them to buy some stocks after companies issue new shares and reduce exposure to others, creating an unintended form of market timing — and not the good kind.

The authors develop a simple yet powerful framework for describing how any value-weighted index fund operates: it holds a fixed percentage of each constituent company's outstanding shares. A value-weighted index fund only needs to trade for one reason — changes in the composition of the stock market, such as new share issuance, buybacks, or IPOs, not because of daily price movements.

Using this framework, the authors show that the rebalancing trades index funds are forced to make are not neutral: they systematically buy into stocks that have recently issued equity and sell out of stocks that have recently bought back shares. Because firms tend to issue equity when their stock is relatively expensive and repurchase shares when it is relatively cheap, index funds can end up buying at higher prices and selling at lower prices unintentionally. In other words, your index fund has a bit of a shopping problem — it only shows up when prices are high and leaves when there's a sale.

One of the paper's most striking findings is that the hidden cost of index rebalancing may be much larger than the costs investors usually worry about. An index fund's expense ratio is often only 0.03% to 0.09% per year (3 to 9 basis points). However, the authors estimate that these rebalancing decisions may reduce investor returns by roughly 0.46% to 0.69% per year. That's like bragging about your cheap gym membership while accidentally leaving hundred-dollar bills on the treadmill every week.

To show that this cost isn't simply an unavoidable part of index investing, the authors test a series of hypothetical "sleepy" indexes. These indexes work much like traditional market-cap indexes, but

Johnny Tung
Junior Quant Analyst
Quantphemes

Ho Law
PhD
Quantitative Researcher
Quantphemes
mark.law@quantphemes.com

Prof Alfred Ma
PhD, CFA
Director
CASH Algo Finance Group
alfred.ma@cshalgo.com

make one important change: they react more slowly when companies issue new shares or buy back existing ones. Indexes that delay these adjustments by about 500 trading days — regardless of rebalancing frequency — outperform the standard approach by roughly 0.4% to 0.5% per year. Importantly, most of this benefit does not come from reducing trading activity. Lower trading costs contribute only a small amount. Instead, the gains come from avoiding poorly timed trades. Sometimes, doing nothing really is a strategy.

One of the paper's strengths is that it tests whether its main result could be a side effect of trading activity. A skeptic might argue that index funds earn poor returns on their rebalancing trades because large buy and sell orders temporarily move stock prices, which later reverse. If that were true, the negative performance would not reflect bad market timing. To check this, the authors examine a different type of index-fund trading: the routine buying and selling driven by investor money flowing into or out of funds. These trades can also move prices, but should not contain any information about which stocks will do well or poorly in the future. The authors find that these flow-driven trades do not generate the same negative returns. This makes it much less likely that simple price pressure is the whole story.

That said, there are some limitations worth noting. The authors' estimate of a 46–69 basis-point annual cost relies on a key assumption about the share of an index fund's assets involved in rebalancing trades. They assume rebalancing activity equals roughly 10–15% of AUM, based mainly on Vanguard's Total Market Index Fund (VTI). Using VTI as a reasonable real-world benchmark is reasonable, but it is only one fund, and the estimated cost is directly proportional to that assumption. If the typical fund's rebalancing activity were closer to 5% of AUM rather than 10–15%, the estimated performance impact would be roughly half as large.

The authors' trading-cost estimates also rely on a parameter, β , set to 0.2. Rather than estimating this value from their own data, the authors borrow it from a prior study by Frazzini, Israel, and Moskowitz (2018). As a result, the paper's estimate that trading costs amount to roughly 4–9 basis points per year inherits some uncertainty. This doesn't affect their main finding — the market-timing cost, which is estimated differently — but it does affect the trading-cost side of the story.

A more fundamental limitation is that delaying updates to shares outstanding by about two years may be difficult for real-world index funds to adopt in practice. While the strategy is mechanically simple, most index funds are marketed as tracking a specific benchmark, such as the S&P 500 or Russell 3000, rather than creating their own rebalancing rules. Telling a fund to "just be lazier" is a tough sell in an industry built on precision tracking — even if, ironically, a little laziness might make everyone richer.

Bibliography

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