Financial Analysts Journal ›

Volume 76, 2020 - Issue 4

Perspectives

The Shift from Active to Passive Investing: Risks to Financial Stability?

Kenechukwu Anadu, CFA , Mathias Kruttli, Patrick McCabe & Emilio Osambela

Pages 23-39 | Published online: 06 Aug 2020

Cite this article https://doi.org/10.1080/0015198X.2020.1779498 Check for updates

Abstract

The past two decades have seen a significant shift from active to passive investment strategies. We examined how this shift affects financial stability through its impacts on (1) funds' liquidity and redemption risks, (2) asset market volatility, (3) asset management industry concentration, and (4) comovement of asset returns and liquidity. Overall, the shift appears to be increasing some risks and reducing others. Some passive strategies amplify market volatility, and the shift has increased industry concentration but has diminished some liquidity and redemption risks. Evidence on the links between indexing and comovement of asset returns and liquidity is mixed.

Disclosure: The authors report no conflicts of interest.

Editor's Note

Submitted 23 January 2020

Accepted 22 May 2020 by Stephen J. Brown

We thank Keely Adjorlolo and Sean Baker for excellent research assistance. We are grateful to Steffanie Brady, Darrell Duffie, Pawel Fiedor, Jill Fisch, Michael Gordy, Diana Hancock, Kevin Henry, Yesol Huh, Petros Katsoulis, Roni Kisin, Robert Macrae, Kitty Moloney, Steve Sharpe, Christof Stahel, and Tugkan Tuzun for valuable suggestions. Special thanks to Chae Hee Shin for her contributions to the first draft of this paper. We received helpful comments from seminar participants at the Board of Governors of the Federal Reserve System, the Federal Reserve Bank of Boston, the Central Bank of Ireland, and the conference on Paying for Efficient and Effective Markets at the London School of Economics. The views expressed in this paper are ours and do not necessarily reflect those of the Federal Reserve System.

Notes

[1] Moreover, the creation of some strategies, such as “factor” and “smart-beta” strategies, requires “active” choices about which factors to track and how to track them, but once rules are set, the strategy is executed passively (see, for example, BlackRock 2017). In addition, “active” decisions are needed to implement some indexing strategies, particularly for bonds.

[2] The empirical analysis in this article uses Morningstar’s delineation of active and passive strategies.

[3] Although the passively managed segments of the MF and ETF industries are smaller than the active segments, passive funds have attracted the bulk of net inflows (share purchases) from investors over the past two decades. From January 1995 to March 2020, cumulative net flows to passive MFs and ETFs totaled $5.2 trillion, compared with $1.8 trillion to active funds (source: authors’ calculations based on data from Morningstar).

[4] These figures are based on the authors' calculations using data from Bloomberg, Morningstar, and the Securities Industry and Financial Markets Association (SIFMA).

[5] On the underperformance of actively managed funds, see, for example, Johnson and Bryan (2017).

[6] Some of the commentary on the active-to-passive shift has been quite colorful. For example, a 2016 AllianceBernstein note was titled "The Silent Road to Serfdom: Why Passive Investing Is Worse than Marxism."

[7] The Investment Company Act of 1940 requires that MFs and SEC-registered ETFs offer daily redemptions.

[8] As of March 2020, 97% of ETF assets were in passive funds (see Figure 1; source: Morningstar).

[9] Among the ETFs that do offer cash redemptions, only about one-third of AUM (2.6% of the aggregate ETF total) is in funds that offer only cash redemptions; the rest is in funds that also offer in-kind redemptions. (We are grateful to our colleague Tugkan Tuzun for providing these figures, which are based on data from IHS Markit and his analysis.) ETFs that allow both cash and in-kind redemptions may revert to using only in-kind redemptions when liquidity is scarce (see, for example, Dietrich 2013).

[10] Our discussion of ETF liquidity transformation focuses on primary-market activity, where financial institutions that serve as "authorized participants" (APs) interact with the fund to create and redeem ETF shares. For other ETF investors, such as retail investors, sales and purchases of ETF shares are secondary-market transactions with similar investors (not with the ETF itself) executed on stock exchanges. A fund's liquidity transformation is less relevant for these transactions, which do not pressure the ETF to buy or sell its underlying securities. Some observers have raised concerns about conditions that may cause APs to curtail their primary-market activity, which can allow widening of deviations between ETF share prices and their net asset values. We discuss this issue in the section "Changes in Asset Valuations, Volatility, and Comovement."

[11] In September 2019, the SEC adopted a rule that facilitates launches of new ETFs by allowing them to operate without obtaining exemptive orders from the SEC (see www.sec.gov/rules/final/2019/33-10695.pdf). The new rule helps standardize regulation of ETFs (Hu and Morley 2019). In addition, it could pave the way for faster ETF growth,

although the number of ETFs has declined slightly since the rule went into effect, from 2,085 in November 2019 to 2,079 in March 2020 (source: Investment Company Institute; see www.ici.org/research/stats/etf).

[12] Amid the financial turmoil associated with the coronavirus outbreak, MFs experienced significant outflows in March 2020. At the time of this writing, it may be too early to assess coronavirus effects on active and passive fund flows, but the experience is mixed so far. In the domestic equity sector, active funds had larger outflows in March (0.7%) than passive funds (0.4% inflows), but in the corporate bond sector, outflows were larger for passive funds (6.9%) than for active ones (2.5%).

[13] The full set of explanatory variables for the regressions reported in columns 1, 2, 4, and 5 of Table 1 includes three lags of net flows, contemporaneous returns, and three lags of net returns. We winsorized net flows of the funds at the 1% level before aggregating. In our analysis, net flows are expressed as percentages of lagged aggregate assets.

[14] Table 1 reports a selection of the estimated coefficients. Not reported in the table are coefficients on lagged flow, which generally are statistically significant, and those for the second and third lags of returns, which are not.

[15] The interdependence between flows and returns complicates interpretation of the estimated coefficients on contemporaneous returns. Although endogeneity confounds inference about causality between contemporaneous flows and performance, the coefficient on contemporaneous returns is still quite relevant to financial stability. Fund flows might be destabilizing whether flows cause returns or vice versa, so the significantly smaller coefficient on returns for passive funds indicates some financial stability benefit.

[16] The significant positive estimated coefficient on the Passive indicator (line 2) shows that passive stock funds grew faster than active ones during the 19-year sample period.

[17] Moreover, adjusted R^2 for the active-fund regression is about triple that for the passive-fund regression.

[18] The literature on mutual fund redemptions and liquidity risks highlights the importance of nonlinearities in the flow response to performance; see, for example, Chen, Goldstein, and Jiang (2010) and Goldstein et al. (2017). We examined the

possibility that aggregate flows respond differently to positive and negative performance but found little evidence of any difference.

[19] To be sure, these strategies are not typical passive strategies, because they require high-frequency rebalancing and often the use of derivatives—features that distinguish them from most plain-vanilla ETFs and index funds. Nonetheless, we characterize these strategies as “passive” because their daily rebalancing is rule based rather than based on an active decision.

[20] For example, when stock prices rise, a leveraged equity ETF’s net assets increase in even greater proportion, and the LETF must purchase stock or futures (or otherwise increase exposure) to keep its leverage on target. Meanwhile, an inverse ETF’s net assets fall, but its short position rises in value, so the fund must reduce the size of its short position (that is, increase net exposure) to stay on target.

[21] Some nonregistered vehicles, such as leveraged and inverse exchange-traded notes, mimic the investment objectives of LETFs and also trade in the same direction as recent market moves. However, unlike their investment fund counterparts, these notes are debt obligations of financial firms rather than passive investment vehicles.

[22] For an LETF with daily return r and leverage L, same-day rebalancing flows, as a fraction of assets, must be $(L^2 - L)r$. Hence, for an LETF that promises either double the return of an index (L = 2) or the inverse of its return (L = –1), a 1% return on the underlying index would require same-day rebalancing flows equal to 2% of assets. In comparison, empirical analyses of the flow–performance relationship for mutual funds typically show that returns of the same magnitude lead to much smaller mutual fund flows in the same month. For example, in the regressions reported in Table 1, 1 percentage point increases in returns for active domestic equity funds and active corporate bond funds are estimated to result—putting aside the possibility of reverse causality—in additional same-month inflows to those funds of only 0.03% and 0.4% of assets, respectively.

[23] To be sure, other investing strategies—including commodity trading advisers, risk-parity hedge funds, and managed volatility funds—probably exacerbated volatility in early February 2018 (see Gray and Wigglesworth 2018; Wigglesworth 2018). However, these vehicles generally have more discretion than truly passive strategies to avoid transactions in dislocated markets.

[24] See www.sec.gov/news/press/2010/2010-45.htm.

[25] As we have noted, in September 2019, the SEC finalized a rule that streamlined the process of bringing ETFs to market. In November 2019, the SEC issued a proposed rule on the use of derivatives by mutual funds and ETFs (see www.sec.gov/rules/proposed/2019/34-87607.pdf). The proposal would lift the 2010 moratorium on the creation of new LETFs and allow sponsors of LETFs to use the new streamlined registration process set forth in the September 2019 ETF rule.

[26] The HHI is one of the most commonly used measures for market concentration. A rule of thumb is to regard HHI values of 2,500 or higher as indicating high concentration.

[27] The high concentration for passive funds is also reflected in the combined market share of the 10 largest passive-fund asset managers, which has averaged about 90% of total passive-fund industry AUM since 2004.

[28] Similarly, in 2014, outflows from PIMCO funds triggered by Bill Gross's departure appear to have benefited other asset managers.

[29] To be sure, index-inclusion effects may arise from activities other than passive (index) investing. For example, as we have noted, some nominally active investors engage in closet indexing, and this activity likely contributes to index-inclusion effects. Further complicating matters is the fact that investors have so many indexes to choose from; the Index Industry Association reports that there are more than 3 million stock indexes.

[30] Similar results have been reported in the academic finance literature since Shleifer (1986) appeared. For example, Harris and Gurel (1986), Beneish and Whaley (1996, 2002), Lynch and Mendenhall (1997), Wurgler and Zhuravskaya (2002), and Petajisto (2011) all showed effects of inclusion in the S&P 500 on stock prices. Researchers have found evidence of price effects for inclusion in other indexes, too. For example, Madhavan (2003), Cai and Houge (2008), and Petajisto (2011) found inclusion effects for the Russell 2000 Index; Kaul, Mehrotra, and Morck (2000) studied inclusion effects for the Toronto Stock Exchange 300 Index; and Chakrabarti, Huang, Jayaraman, and Lee (2005) found inclusion effects for the MSCI country indexes.

[31] Some mitigation of this pressure probably would come from high-yield bond mutual funds, which presumably would purchase the downgraded bonds. This offset could be

sizable, given that mutual funds own a larger share of high-yield corporate bonds outstanding than investment-grade corporate bonds (Barclays 2018). However, outflows from high-yield bond funds, which might accompany widespread bond downgrades, would reduce those funds' bond-purchasing capacity.

[32] In the section "Growth of Specialized Passive Investment Strategies That Amplify Volatility," we discussed specialized passive investing strategies that can amplify volatility by forcing portfolio managers to trade in the same direction as same-day market moves, even in the absence of investor flows. Here, we discuss the broader effects of ETF ownership on asset prices and liquidity, whether those effects are due to trading by portfolio managers or investors.

[33] See Sullivan and Xiong (2012) for detailed analysis of the vulnerabilities associated with excess comovement. Parsley and Popper (2020) focused on a related question: They studied how financial stability (among other factors) affects stock return comovement in a cross section of countries.

[34] See, for example, Vijh (1994); Barberis, Shleifer, and Wurgler (2005); and Sullivan and Xiong (2012).