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The Shift from Active to Passive Retail Investing

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Abstract: This paper discusses the origins of passive investing and the growth of passive investing at the expense of active investing. The paper notes how the shift from active to passive investing benefitted the growth of middle class financial wealth amid a transition from defined benefit to defined contribution retirement plans. This growth in passive investment also sparked concerns among investors about the concentration in ownership and the lack of firm-specific information in equity markets. The paper concludes by discussing the continued advancement of retail trading through creations like robo-advisors and low-fee trading platforms.
Keywords: Equity Investment; Retail Trading; Passive Ownership; Active Ownership; Robo-Advising

1. Introduction

Equity investment has long been an important component of many households' financial portfolios. Over the past 50 years, stock market investments have increased in importance for households, with the share of household financial portfolios and retirement savings invested in equities increasing substantially. From 1989 to 2016, the average household share of assets in the financial market increased from about 17% to about 35% (Jesse (2019)). Alongside the growth in household equity investing, there have also been tremendous shifts in the investment strategies and the types of securities purchased by households.

Traditionally, individuals directly held stock in small numbers of individual companies. However, such a strategy had potential risks: holding only a single stock or similar category of stocks can expose an investor to more volatility. In particular, a fall in the fortunes of that firm or industry can sink a portfolio. Paying an advisor for active management of stock market accounts was one method to help a household diversify their equity portfolio. However, utilizing active management entailed the use of a financial advisor, leading to large fees.

In the face of these downsides, a new means of equity investment gained in prominence. Passive investment involves investing in index funds, which usually track the whole market, or large groups of stocks. This investment method aims to simply mirror the average return of all stocks in an index and has become popular among investors because of its simplicity and low fees. Passive investing allows for diversification across stocks while requiring less work for the investors since they don't have to track individual stocks in their portfolio. Moreover, passive investing doesn't require high fees since investors don't have to pay active advisors.

This paper will discuss the shift of active to passive investing. First, the paper will discuss the origin and history of the shift from active to passive investment. Then it will examine how the shift benefitted the middle class, giving them an opportunity to improve their financial health, especially during a period of increasing individualization of retirement savings amid a decline in defined benefits plans. Additionally, this paper will explore potential negative effects of the shift on equity markets in the present and also concerns for the future. Finally, this paper will discuss the continued evolution of retail trading, such as the appearance of low fee trading platforms and passive investment robo-advisors like Acorn.

2. Origins of Passive Investment

During the mid 20th century, prior to the appearance of passive investment methods, investing in the stock market was mostly done by the rich. According to the NYSE share owner census of 1952, only about 6.5 million citizens held stocks in the United States, which represented only 4.2% of the entire population (Investopedia (2021)).

Passive investment methods began to appear in the latter part of the 20th century. One early proponent of this strategy was John C. Bogle. During his time as an undergraduate at Princeton, he set out to write a senior thesis regarding the mutual fund industry. According to Bogle, "In the case of the half-dozen funds whose performance I did examine with some care, I came to the conclusion that mutual funds can make no claim to superiority over the market averages" (Bogle and Rafalaf (2002)). He realized that even if some of the stocks in the funds are outperforming the market, the management fees charged by actively managed funds reduce the profits to households substantially. After graduating Princeton, he was hired by Wellington Management Company and set out to put passive investing into practice. This effort led to a new fund that is arguably one of the most well known to this day: Vanguard.

Passive investment allows households to easily hold a diversified portfolio while saving time, effort, and especially money. A passive fund mimics the performance of the market (or a broad group of stocks in a sector) with very minimal or even zero fees by simply constructing a portfolio that contains all the stocks in the market. Individuals can just purchase one share of the passive fund and thus hold a diversified portfolio that tracks the entire market with little effort. Such ease of use has helped to keep costs low for passive fund managers, allowing managers to sustain sufficient revenue even while continually lowering fees.

Bogle found that enthusiasm for this strategy remained low in early years. Part of the reason was that Bogle was breaking tradition and refusing to pay commissions to advisors to advertise the funds, limiting customer interest. Active investing involves a three way relationship between the active funds, advisors and investors: high-fee actively managed funds pay financial advisors a fee, varying from about 0.01% to 0.15% of the total amount invested by the customer, and the advisor then recommends these funds to its customers (Zeig (2019)). This model helped active funds fuel customer growth but came at the expense of households who were steered into funds with much higher fees.

This relationship between active fund managers and financial advisors still exists today and is prevalent in Europe, where passive investment hasn't gained as much popularity as in the United States. According to Ali Masarwah, a member of the European research team for Morningstar, "In Germany and France you still have the big kickback model in place and the situation is worse in Italy, it's outrageous, so this is going to hamper the growth of index funds" (Johnson (2020)). The prevalence of kickbacks is more constrained in the United States, in part due to the existence of the Securities and Exchange Commissions (SEC) which has enacted regulations to curtail fees and limit conflicts of interest among financial advisors.

While Bogle had encountered many obstacles attempting to start his passive fund, its eventual success was partly due to factors that contributed to the growing popularity of passive investments. The country was becoming wealthier and more educated. Moreover, people had the ability to research, understand the benefits of low fee index funds, and make smart financial decisions (Bogle and Rafalaf (2002)). Additionally, the 1982 bull market helped the assets of Vanguard accelerate and gain popularity, causing other companies to follow along and start their own index funds.

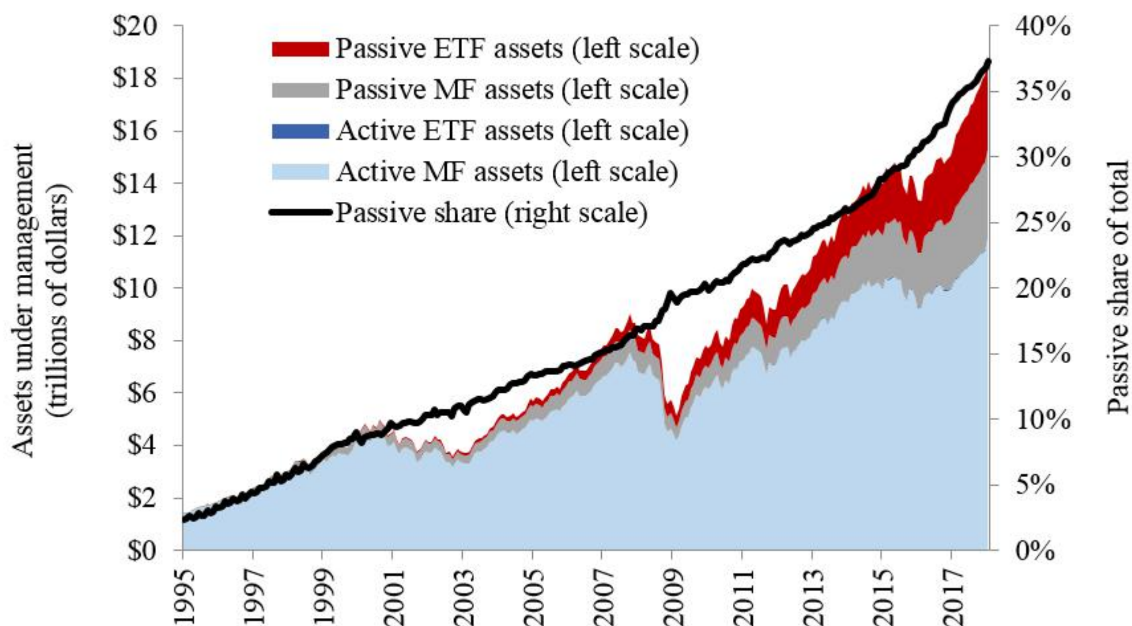

Figure 1: Data from Morningstar, Inc. Figure displays the growth in active and passive mutual fund and ETF holdings since 1995.

Since the appearance of Vanguard and other low fee index funds, people realized the benefits of passive investment and began abandoning the traditional active investment methods. In the figure above, we can see that since 1995, as total equity investments increased from about $1.5 trillion to roughly $18 trillion, the passively managed share has increased from 3% to about 37%. This shift from active to passive investment wasn't just limited to the United States. Similar trends can be seen in other parts of the world, though generally lagging the passive growth in the United States. For instance, the market share of passive index funds doubled from 2010 to 2020 in Europe, with passive investment growth rates over four times higher than active investment growth (9.5% v. 2.1%) (Johnson (2020)).

3. Benefits of Shift to Passive Investing

For most people, the benefits of active investing are outweighed by its costs. Rather than paying high fees in an attempt to outperform the market, households are better off obtaining the average market return while paying the lowest fees possible for long term investments such as their retirement accounts. Individuals who actively buy and sell individual stocks generally pay higher fees and transaction costs, negating any outperformance of the market. For instance, according to research utilizing data from a large discount broker, from 1991 to 1996, those who traded frequently earned an annual return (net of fees) of about 11.4% while the market returned about 17.9% (Barber and Odean (2000)). Other research found that Canadian households participating in active investing achieve similar returns but pay around $1,500 (Foerster et al (2017)) more per year in fees than individuals who use passive vehicles.

As noted above, growth in passive investments has dwarfed growth in active investments, driven by low fees and higher net returns. The top panel of the figure below, using data from the Investment Company Institute, displays the stark comparison between fees for passive investing and those for active investing. In 2017, the expense ratio for actively managed equity funds was nearly 0.8% while the expense ratio of passively managed funds was only 0.16%. This discrepancy is mirrored in other sources. The bottom panel gives a similar picture using Morningstar data, demonstrating that the average expense ratio for active funds was 0.62% in 2020, while the average for passive funds was just 0.12% (Gobler (2021)). This trend has continued, with some passive funds even moving to a zero-fee model. For most individuals, the goal of maximizing net-of-fee returns has increasingly been best served by choosing passively managed funds over actively managed funds.

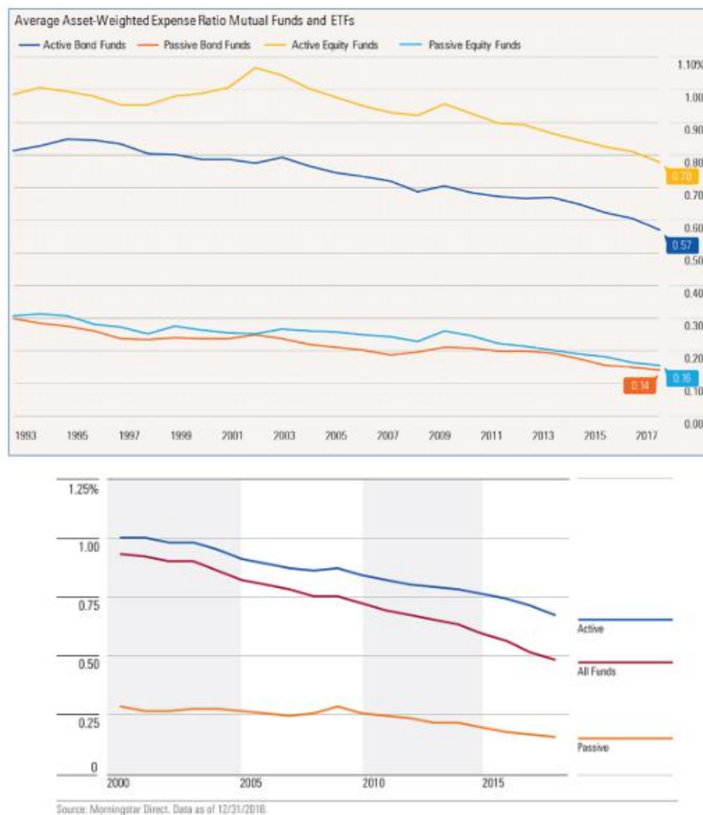

Figure 2: Data from Investment Company Institute (top) and Morningstar, Inc. (bottom).
Figure displays the path of fees for active and passive equity and bond funds over time.

These graphs also display a side effect of the appearance of passive investing. As passive investing grew in popularity and continued to take market share from high-fee active fund managers, active fund fees also began to fall significantly. Actively managed funds were forced to lower their fees in order to compete with the new passively managed funds. The figure above shows the expense ratio of active funds fell from about 1% to below 0.7% from 2000 to 2015. According to the head of manager selection at Morningstar Grant Kennyway, “The good news for global fund investors is that in many markets, fees are falling, driven by a combination of asset flows to cheaper funds and the repricing of existing investments” (Klasa (2022)). This competition lowered overall fees and helped the middle class to benefit tremendously from increases in their financial incomes.

The demand for equity investments among households was rapidly growing at the same time as passive investments were increasingly common and fees were declining. In part, the shift from active investment to passive investment coincided with a change in retirement plans, shifting from defined benefits to defined contribution plans. Traditional pensions, or defined benefit plans, allowed the individual to receive a fixed amount of payment every month or year in retirement after working for a minimum amount of time in the company. While passive investing experienced a surge in growth, a new type of retirement plan began to emerge, the defined contribution plan. Many employers canceled defined benefit plans due to longer retiree lifespans and rising costs, switching from defined benefit plans to defined contribution plans to which the firms did not have to contribute.

These defined contribution plans provide more freedom than defined benefits plans in that the account belongs to the individual and is not forfeited when changing employer. These plans created a class of tax-advantaged investment accounts where an individual puts a percentage of their paycheck into the account and chooses an investment vehicle for those funds. This trend led to a massive increase in the fraction of households who owned and controlled the investment of stocks and index funds. For instance, data from the Survey of Consumer Finance shows that the fraction of households who own stocks has increased by around 30 percentage points since 1989 (SCF (2019)).

This increase in equity ownership has mostly been driven by an increase in passive index fund and ETF investment rather than active or direct share holdings. One study shows that the percentage of individuals that have indirect ownership of stocks increased from about 32% to 53% from 1989 to 2019 while the percentage of individuals that have direct ownership of stocks actually decreased from 16% to 15% during the same time period (SCF (2019)). Overall, passive investing substantially enhanced the ability of households to participate in the equity market and take advantage of new retirement plans.

4. Concerns About Growth in Passive Investments

As passive investment methods gained in popularity among investors, worries began to develop about potential impacts on the market and economy as a whole. One of the main concerns driven by the growth of massive passive investment funds relates to common ownership. The passive market is currently dominated by three main institutions: Vanguard, BlackRock, and State Street. Remarkably, one study found that one of these three companies is the largest shareholder in 88% of the S&P 500 firms (Fichtner et al (2017)). Since these passive fund managers hold such a large part of the equity market, researchers worry that this may drive a lack of competition between firms.

In particular, passive fund managers may be less likely to encourage price competition between companies. When two companies are competing with each other for customers, they often lower the price of their products to attract more customers. Price cuts may win business for one firm, but drive a reduction in profit in an industry as a whole. Since these large passive investors own large portions of all of the competitors, they may prefer that total industry profits remain high. These fears were analyzed in one study that focused on the airline industry where the authors found that the impact of common ownership may have increased the cost of airline tickets by 3-7% relative to normal, fully competitive pricing (Azar and Tecu (2018)). Moreover, this anti-competitive effect may grow in the future as passive share of investment continues to grow and the largest passive fund institutions increase in size.

Another concern of investors as growth in passive investment continues is the extent to which stocks "co-move". When a company decides to join an index fund, its stocks tend to mirror the aggregate index fund, in large part because of passive ownership of index fund constituent firms. One study noted that the correlation of the companies before joining the S&P 500 index was 0.45 with the S&P 500. In the year after joining the index, these stocks had a correlation of 0.52 (Sushko et al. (2018)). As the stocks move more similarly, individual information regarding the performance of that firm decreases, a reduction in the "informativeness" of the stock price. Such reductions decrease the efficiency of market-wide capital allocation and make it harder for firms to raise capital even if they have worthwhile investment opportunities.

While these concerns seem to manifest themselves in the market, the effect sizes are still limited. In other words, there is still sufficient active trading such that fluctuations in stock prices contain accurate individual firm-level information and firms within industries remain active competitors. However, as seen in Figure 1 above, the growth of passive investing is still increasing rapidly, so these effects may grow further in the future. In such a case, the government may be forced to develop regulation to curb the growth of passive investments or to encourage competition among firms.

5. Evolution of Passive Investments within Retail Trading

New ways of retail investing have continued to emerge in recent years, partly driven by the reductions in fees caused by passive investment. The creation of robo-advisors is one such development. Robo-advisors are algorithmic financial advisors that can form passive and diversified portfolios for their customers after gathering information about their customers such as risk tolerance, preferences, and retirement goals. The algorithm then uses this information to create an investing plan that best fits the desires of the customer. A few of the popular Robo-advisor platforms are apps like Acorn, Betterment, and WealthFront.

Robo investing is widely popular among investors because it offers customers the ability to have a financial advisor with extremely low fees. In Philippon (2019), the author argues that robo-advisors will increase accessibility of financial services for a majority of the population due to the increase in scale and ability to spread fixed costs over a wide range of individuals. Partly as a result of these newly appeared trading apps, direct ownership of stocks began to decrease. The temptation of

having the ability to trade with low fees and having a financial advisor for almost no fees has caused many investors to switch from direct holding accounts to the Robo-advisor apps.

Not all growth in fintech or new consumer trading has favored passive investments in index funds and ETFs. New apps like Robinhood allowed its customers to actively trade stocks and charged extremely low or no fees for trading. With the appearance of these zero fee trading platforms, other platforms were forced to also lower their fees in order to compete with these newly appearing platforms. This competition from Robinhood has forced large trading platforms such as Charles Schwab and E-Trade to lower their commissions (Curry (2022)). Moreover, it encouraged users to participate in higher risk bets on individual stocks as well as options trading on volatile companies (Kalda et al (2021)). Research such as Hong et al (2021) has also shown that daily exposure to such apps can help build trust and reduce psychological barriers against the risk of investing in stocks.

The newly appeared retail trading apps also allowed for new capital to enter the market. They have allowed people to have automated and diversified investment portfolios for low fees. It also required no minimum investment amount which made it cheap and easy to participate for individuals with any amount of income.

6. Conclusion

While stock market investments have been a major component of household financial wealth for over 100 years, there have been radical changes in the types and methods of purchasing these securities. One of the most dramatic has been the shift among households from actively trading stocks or buying actively managed funds to purchasing passive funds that track large groups of stocks. This paper discusses the origin of passive investing and some factors that drove a shift from active to passive investing.

This paper demonstrates that the middle class benefited from this shift, primarily driven by much lower fees paid to fund managers. Reductions in fees and increases in diversification were compounded by the concurrent growth in direct equity holdings that stemmed from a shift in the retirement plans towards defined contribution plans.

While households have benefited substantially from the shift to passive investments, this paper also analyzes the potential concerns from investors about this shift. For instance, increases in concentration of ownership by large passive fund managers may stifle competition or reduce the amount of information contained in individual firms' stock prices. Finally, this paper discusses the continued evolution of retail trading and appearance of new fintech platforms and products such as robo-advisors that continue to lower costs and participation thresholds among households.

Notes: Guojie Ni, bobplayj@gmail.com; I would like to thank Professor Baker for advising this research paper.

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