

## Question of Interest

I want to explore how the growth of passive investment management has affected the volatility of individual stock prices in the U.S stock market.

More specifically, this question of interest asks whether stocks that are more heavily owned by passive investment management, like for example, through exchange-traded funds (ETFs) or mutual funds, experience a higher or lower standard deviation of daily and annual returns than stocks that have a higher concentration of ownership by active management.

Over the last 20 years, investment management has shifted further away from active management (particular mutual funds, hedge funds, and active retail ownership) and more towards passive management. This has meant a lower influence on stock prices by groups picking individual stocks, and a higher influence by groups investing passively, where money is automatically invested in large baskets of stocks that track major stock indices. As a result of this, many retirement and savings accounts rely on these passive investment vehicles, which has led to larger passive and cross corporate ownership.

Because passive funds buy and sell stocks automatically based on rules rather than fundamental analysis and judgment, some worry that this could cause stock prices to move more sharply, especially during periods when many investors are buying or selling at the same time. On the flip side, some argue that passive investing may reduce volatility by encouraging longer-term holding and less rapid selling during market events.

Understanding how passive investing affects U.S stock price volatility matters because it affects:

- How risky stocks are for everyday investors.
- The stability of the U.S stock market and its indices.
- How companies experience changes in their stock prices, which matters for the incentives of company executives and employees.

The relevant stakeholders of this question of interest would be:

- Individual investors, as they would be investing in the relevant securities.
- Asset management firms, as they would be investing in the relevant securities.
- Public companies, as they are the underlying businesses of the securities in question.
- Regulators and policymakers, as they need to uphold the stability of the market.

In reference, there have been numerous groups that have discussed the risk of passive investing:

- Asset managers, such as [JPM](#) and [Artisan](#).
- Large media publications, such as [Forbes](#) and [WSJ](#).
- Large research organizations, such as the [National Bureau of Economic Research](#).

## **Dataset**

At the time of this proposal, a formal dataset for use has not been created or finalized, but the data needed for this proposal is identifiable and sourceable from legitimate sources.

Each row of the dataframe would represent one stock over one time period. For example, one company over one quarter. The dataframe would ideally include the following variables:

- Stock identifier (ticker symbol).
- Time period (preferably quarter).
- Stock return (in % terms).
- Stock price volatility (standard deviation).
- Percentage of shares owned by passive funds.
- Company size (market capitalization).
- Average daily volume (in \$ terms).
- Overall index / market return (in % terms).

To answer the research question, the dataset would be constructed by combining information from the following legitimate sources on stocks that have and have not had high concentrations of passive ownership:

- Stock price and return data from the Center for Research in Security Prices (CRSP).
- Passive ownership data, sourced from individual stocks' Form 13Fs.
- Index membership data, which identifies the stocks that have been included in indices.