DOCTORAL THESIS

The performance of non-index individual stocks and stock portfolios relative to the index

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ABSTRACT

Extensive empirical evidence shows that passively managed index-tracking mutual funds and exchange-traded funds (ETFs) outperform actively managed portfolios. On the other hand, there are abundant findings that stocks admitted to an index outperform those deleted from the index. This study tests an issue that has been largely ignored in academic studies but is highly related to the above two seemingly disparate areas of researches. The paper examines the long-term performance of non-index individual stocks and stock portfolios relative to the index. The study proposes that the inclusion and maintenance criteria for index component stocks are long-term performance indicators. Therefore, an index can be regarded as a passively managed and highly diversified portfolio of expected outperformers. Using a complete set of H-shares listed on HKEx for the period 2001 to 2017, the study finds that 44.25% (55.75%) of individual stocks have positive alphas (negative alphas) relative to the index. The average alpha for the family of all non-index stock is negative but statistically insignificant, i.e., 77 positive alphas and 97 negative alphas. Most alphas are statistically insignificant, but only 5 are positive, and 2 are negative at 5% significance level. From the risk and return perspective, the index dominates two-third of the non-index H-shares. Regression analyses show that H-index outperforms non-index H-shares in general and the market capitalization and turnover ratio play an important role in determining the long-term performance of H-shares, which are the major factors for the admission and maintenance criteria of H-index. The findings strongly support our conjecture that the index admission and maintenance criteria are the quality assurance of individual constituent stocks of an index. The paper provides incremental evidence on the widely documented result that index trackers outperform actively managed portfolios. Nevertheless, the study extends the recent literature on the long-term performance of stocks that are admitted to (or excluded from) an index. The findings of the study have significant implications for securities markets participants, including index providers and ETF issuers.

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