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THE INDEX FUND WEIGHTING CONTROVERSY: IS FUNDAMENTAL OR CAPITALIZATION-BASED BETTER?

“If a stock price falls for reasons unrelated to changes in its fundamental value, then it is likely—not certain—that overweighting such a stock will yield better than normal returns.....there is a simple way that investors can capture these mispricings, and achieve a return superior to cap-weighted indexes...”.

Jeremy Siegel
Wall Street Journal
14 June 2006

“....These analysts have all argued that fundamentally-weighted indexes represent the ‘new paradigm’ for index fund investing. Are they correct? We think not....Intelligent investors should approach with extreme caution any claim that a ‘new paradigm’ is here to stay....”.

Jack Bogle and Burt Malkiel
Wall Street Journal
27 June 2006

Index Fund Food Fight?

The *Financial Analysts Journal* published an article titled “Fundamental Indexation” in its March-April 2005 edition. In it, authors Robert Arnott, Jason Hsu, and Philip Moore report on their investigation into the question of “whether stock market indexes based on an array of cap-indifferent measures of company size are more mean-variance efficient than those based on market capitalization”. Their study found that passive portfolios constructed with weightings based on such fundamental factors as book value, cash-flow, sales, total employment achieved a statistically significant average 2% per annum excess return vs. the S&P500 and their own cap-weighted reference portfolio. The return volatilities of the fundamental-weighted portfolios and the cap-weighted portfolios were both about 15%. These results were achieved over a 43-year period (1962-2004).

Is there a theoretical explanation for these findings? The authors postulate that cap-weighted portfolios suffer from a return-drag if prices are

noisy relative to movements in company fundamentals. Indeed, a subsequent *FAJ* article by Jack Treynor (“Why Market-Value Indifferent Indexing Works”, Sept-Oct 2005) uses mathematics to derive the conclusion that “using market values for indexing gives more portfolio weight to stocks with positive price errors, and less portfolio weight to stocks with negative price errors”. This ‘return-drag’ problem can be avoided by “investing randomly with respect to the market’s pricing errors”. Fundamental indexation achieves this goal. Treynor calls the idea of a better index fund “mind-boggling”. In his recent *WSJ* article titled “The ‘Noisy Markets’ Hypothesis”, Jeremy Siegel trumps Treynor by comparing this ‘better index fund’ discovery to Copernicus’ discovery that our planet is not the center of the universe. Gushes Siegel: “As with Copernicus, there is now a new paradigm for understanding how markets work...”.

Two weeks later, Bogle and Malkiel respond to Siegel with their own *WSJ* article titled “Turn on a Paradigm?”