



A REVIEW OF RELATIONSHIP BETWEEN EQUITY PERFORMANCE AND FUNDAMENTALS

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Abstract

In an efficient market, buying and selling securities as an endeavor to beat the market is a game of chance rather than skill. This concept of efficient market simply a statement of the effectiveness with which stock and bonds are priced in financial markets. It implies that stock prices accurately contain every type of information i.e. stock market, public and non-public that is known. Consequently stock prices only change when new information comes to the market. All trading strategies based on past prices and volumes, public available information and insider information are futile. Taking cue from this, the present study examines the empirical evidences reported by studies across the globe. An in-depth analysis of literature shows a relationship among common stock returns, market capitalization and trading activity. Furthermore some studies exhibit relationship between performance of common stocks and their P/E ratios. Nevertheless, the results of various studies indicate that B/M and size are the variables that have the strongest relation to returns. Overall, the empirical evidences reported in the developed and developing markets such USA, U.K., Japan and India confirm the presence of contrarian anomalies such as size effect, value effect and book-to market ratio effect.

In an efficient market all pertinent information is reflected in stock prices. Every share at any point of time is judged to be an equally good candidate for purchase or sale. In such circumstances, buying and selling securities is an endeavor to beat the market is a game of chance rather than skill. This concept of efficient market simply a statement of the effectiveness with which stock and bonds are priced in financial markets. It implies that stock prices accurately contain every type of information i.e. stock market, public and non-public that is known. Consequently stock prices only change when new information comes to the market. However because new information cannot be anticipated, there is no way for the average investor to gain an edge. All trading strategies based on past prices and volumes, public available information and insider information are futile. It is very difficult to detect securities that are incorrectly priced. While there is substantial empirical evidence bolstering the efficient market hypothesis, many still question its validity. The security analysts believe that investment strategies based on the fundamentals (accounting numbers) of financial statements such as price-earning ratio and book to market ratios are indicators of the future investment performance of a security. Investigations of the efficacy of fundamental analysis ask whether the publicly available information beyond the trading history of a security can be used to improve investment performance. The purpose of this paper is to examine the available literature on this semi strong efficient market hypothesis in equity markets across the world.

Review of Literature

Wagner and Lau (1971) examined the relationship between investment performance and portfolio selection strategy based on stock quality ratings. They found evidence in the favour of low quality portfolios. The study revealed that as quality rankings declined, the rate of return increased and the higher the quality of portfolio the lower the systematic risk. Sharpe and Cooper (1972) examined the investment performance of investment strategy which was based on systematic risk. They divided the stocks listed on NYSE in to ten portfolios according to their systematic risk ranking. The study reported that the average annual return for highest risk investment strategy was over 22 percent per year while lower risk investment strategy provided less than 12 percent during the period 1931-1967. By and large the results suggested that when the average market return was large, higher risk class tend to provide higher return on average than lower risk class and vice-versa.

Basu (1977) made an attempt to determine empirically the relationship between investment performance of common stocks and their P/E ratios. The study exhibited that during the period April 1957-March 1971, the low P/E portfolios earned higher absolute and risk adjusted rates of return than high P/E securities. The results reported were consistent with the view that P/E ratios were not fully reflected in security prices in as rapid a manner as postulated by the semi-strong hypothesis. The results suggested the violation in the hypothesis that security price behaviour was consistent with efficient market hypothesis. Reinganum in his two studies which differ in that first (1980) incorporate the capital asset pricing modal to measure risk and second (1981) used the arbitrage pricing theory, reported that the market capitalization is a significant predictor of average return of common equities and the effect was large: about 18 percent per annum in excess return for the decile of smallest firms. Banz (1981) examined the historical monthly returns for NYSE common stocks for the period 1931-1975 and found that the size of the firm had been highly correlated with stocks returns. The study indicated that the larger the market value of firm's common stock, the lower the rate of return generated by the stock. Roll (1981) studied the relationship between investment performance and market-capitalization investment strategy. The study tested small firm effect anomaly and reported that misstatement of risk had the potential to explain why small firms, low P/E ratios firms displayed large excess returns. The study also exhibited positive auto correlation in such firms as a cause of downward biased measures of portfolio



risk and corresponding overestimates risk adjusted average return. Reinganum (1982) tested the Roll's conjecture (1981) that the abnormal returns attributed to small firms were the statistical artifacts of improperly estimated betas. The study used ten portfolios which were constructed using the market capitalization of individual firms and reported that while the direction of the bias in beta estimation was consistent with Roll's conjecture, the magnitude of bias appeared to be too small to explain the firm size effect.

James and Edmister (1983) explored the relationship among common stock returns, market capitalization and trading activity. The study documented that small size firms produced a significant higher mean daily return (.13 percent) than large firms (.053 percent). The same was true in case of mean risk adjusted return and systematic risk. The study also reported that the smaller firms traded less frequently than did larger firms and this bias was not large enough to explain the difference between the mean daily return of large firms and small firms. Rosenberg et. al (1985) provided empirical evidences against the CAPM by showing that stocks with high B/M ratios had significantly higher returns than stocks with low B/M. Bhandari (1988) found that firms with high leverage (high debt/equity ratios) had higher average returns than firms with low leverage for the 1948-1979 period. This result persisted after size and beta were included as explanatory variables. Chan et. al (1991) found significant relationship between fundamental variables and common stocks returns in the Japanese market. The book to market and cash flows had the most significant effect on expected return. Fama and French (1992) brought together size, leverage, E/P, B/M, and beta in a single cross-sectional study. They compared the explanatory power of size, leverage, E/P, B/M, and beta in cross-sectional regressions that spanned the 1963-1990 period. Their results indicated that B/M and size were the variables that had the strongest relation to returns. The explanatory power of the other variables vanished when these two variables were included in the regressions. Deb et al. (2006) explored the evidences of magnitude of value premium and its pattern in India during the 1990 to 2005. The study also exhibited that the value stock were riskier to justify the value premium. Bodhanwala (2006) focused on accounting numbers that were recommended by fund managers. The study reported higher B/M and lower P/E securities beat their respective counterparts.

Sahgal and Tripathi (2007) found statistically significant value affect using alternative measures such as book to market, earning to price, cash flow to price and dividend to price. The study also discovered three important sources of value affect-operating profit, size and financial leverage. Dhankar and Kumar (2007) empirically examined the relationship between the investment performance of common stocks and their price earning ratios. The study questioned the efficient market hypothesis but supported the capital asset pricing model. Taken as a whole, the results of previous studies are inconsistent with efficient markets hypothesis and capital asset pricing model. On the whole these studies noted the existence of efficient market anomalies as the alternatively investment strategies were able to generate excess abnormal return. Penman & Reggiani (2010) report that book to market equity and earnings to price ratio have a significant relation with average returns in the Iranian equity market. Santos and Silva (2011) examine the performance of value investment strategies based on the P/B and P/E ratio and exhibit P/E ratio as the best indicator of portfolio construction in Brazil. Tornau (2011) investigate the profitability of value strategies in the Indian equity market. The study exhibit the superior performance of value strategies based on Price to Earnings (P/E) ratio, for the holding periods of one, two and three years. Overall, the empirical evidences reported in the developed and competitive market such USA, U.K. and Japan; confirm the presence of contrarian anomaly deep-rooted in risk and behavioural-based explanations.

Conclusions

In an efficient market, buying and selling securities as an endeavor to beat the market is a game of chance rather than skill. This concept of efficient market simply a statement of the effectiveness with which stock and bonds are priced in financial markets. It implies that stock prices accurately contain every type of information i.e. stock market, public and non-public that is known. Consequently stock prices only change when new information comes to the market. All trading strategies based on past prices and volumes, public available information and insider information are futile. Taking cue from this, the present study examines the empirical evidences reported by studies across the globe. An in-depth analysis of literature shows a relationship among common stock returns, market capitalization and trading activity. Furthermore some studies exhibits relationship between performance of common stocks and their P/E ratios. Nevertheless, the results of various studies indicate that B/M and size are the variables that have the strongest relation to returns. Overall, the empirical evidences reported in the developed and developing markets such USA, U.K., Japan and India confirm the presence of contrarian anomalies such as size effect, value effect and book-to market ratio effect.

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