Negative Book to Market Ratio and Stock Market Returns

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STATEMENT BY THE CANDIDATE

This thesis includes no material which has been already accepted for the award of any other degree or diploma in any university and confirms that to the best of my knowledge the thesis includes no material previously published or written by another person, except where due reference is made in the text of the thesis.

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Dedication

I whole heartedly dedicated this thesis to my parents, without their unconditional support, I would not able to achieve this goal.

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Abstract

This study investigates the negative book to market ratio and stock market returns. Sample consists of 100 non-financial sector companies listed on stock exchange of Pakistan for the period of June 2005 to June 2015. Relationship between stock market returns with respect to market premium and value premium is analyzed. Along with the increasing trend of negative earnings, the frequency and the magnitude of negative book value of equity have also grown substantially over time. Although negative-book-value firms are commonly perceived as financially distressed and majority of these firms survive for a long time, and that many continue to report negative book value for several years. To explore joint effect of market premium and value premium on stock returns. Two factor model has been tested. Market Premium and Value premium exist in equity market so decision makers should consider these factors in while making valuations, investments and financing decisions

Key Words: Negative book value, CAPM, Fama and French three factor model, Market Premium, Value Premium

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CHAPTER 01

1. Introduction:

The empirical literature on accounting demonstrates that the frequency of reported losses has increased in recent decades. Number of studies show that traditional earnings based evaluation model are not explaining the value of equity when earnings are negative or extremely low. In such circumstances, book value of equity change earnings to go over a pivotal role in equity valuation. Studies have shown that when earnings are negative, it does not follow future earning expectations. Negative book value firms are natural in loss making firms. Now a day such kinds of firms are claiming more interest for practitioners. Book value of firm's show their common share holder, residual claim and leftover obligation from assets. Despite limited liability they assures that shareholders' value cannot be negative, accounting rules stand in need that a firm must report negative book value on the balance sheet when total liabilities are more than total assets.

Negative-book-value firms mostly evaluated as financially dejected and infrequent chances to survive in business for long time period. While principal chances of negative book cost company capable to perform their tasks for several years even after recording of their negative equity initially. But many companies increase with their negative equity for definite period of time. Negative book value is a complicated process. There is a great explanation for a firm's book value to be negative. Despite most of negative-book-value firms acquire negative retained earnings because of long-term unsuccessful operations and, indeed, are financially distressed. A balance takes into account the reason of each negative book value and prices the firm

accordingly. Perhaps in such situation book value of equity convert a meaningful barometer of value, because it alternate for the conversion value of loss firms that are in desolation and gives knowledge about the future normal earnings of loss firms whose earnings are only temporarily low.

The book-to-market proportion measures the market assumptions with respect to future gain of the stocks and is figured by dividing book value of equity with market price of equity. The greater the proportion the lower are the market assumptions about the future money related execution of the firm. The remaining income valuation demonstrate then again measures the estimation of the firm in light of book value of equity and present estimation without bounds lingering salaries the organization create in long term. Remaining livelihoods independently can be viewed as a measure of market premium which is the distinction of the market treasure and the book estimation of value.

The book-to-market ratio relates to find the value of a company by comparing the book value of firms to its market value. Book value is calculated by looking at the company historical cost, or accounting value. Market value is determined in the stock market through its market capitalization.

Jan and Ou (2012) recommends that companies which possess negative book value are commonly observe as economically distress many of these firms withstand for long period of time. As negative book value becomes more common among loss firms, the valuation of firms whose earnings and book value are both negative emerges as a new challenge. Although book value is negative and also having negative earning but have positive market value of equity so market scrutinize some other valuable characteristic of these firms while pricing them. Although define

liability assures that shareholders' value cannot be negative, according to accounting laws a firm must report negative book value on the balance sheet when total liabilities is more total assets.

Negative Equity firms are dejected firms and they are likely more risky firms. As higher risk leads towards higher return. The scale and book to marketplace capabilities of each price and equal weighted portfolio are check out. A lot of research conducted on such abnormalities but Basu (1977) took initiative to conclude that the firms with low price to earnings ratio have high expected stock returns. They have indirect relationship between them. He was the first person to study about this. Banz (1980) works on size effect anomaly and analyze the significance between value of stock of company and its returns.

A proportion used to discover the estimation value of an organization the book value of its marketplace price, book value can calculate with the aid of taking the organization price, or book keeping. In stock market book value is estimated through market capitalization.

The higher ratio predicts low market estimation about upcoming financial performance of company. The usage of the book-to-marketplace percentage is encourage by way of the discoveries of Fama and French (1992), who display that the book-to-market proportion of particular stocks can make clear pass-sectional range in inventory returns.

1.1 Theoretical Background:

1.1.1 CAPM

The capital asset pricing model (CAPM) is a model that describes the relationship between systematic risk and expected return for assets, particularly stocks. CAPM is widely used throughout finance for the pricing of risky securities generating expected returns for assets given the risk of those assets and calculating costs of capital.

The charter of a valuable optimistic hypothesis depicting how capital markets evaluate and financial risk attain after ten years when Sharp (1964) add two significant pieces to the Markowitz proficient portfolio to create the capital asset pricing model (CAPM). CAPM being the focal thought of finance around "The portfolio hypothesis of Markowitz (1952)" has also become a debatable topic of modern finance. Spearheaded by Sharpe (1964) and Linter (1965), the CAPM determines that normal go back is the full of the threat unfastened charge and the normal chance premium. It demonstrates that the cross-sectional diversity in predicted returns is clarified just by market beta.

CAPM is usually use through portfolio managers, institutional investors, financial managers, and individual buyers to count on asset returns. Beta is used to measure the systematic hazard within the CAPM version and is assumed to be undoubtedly relates to asset returns.

1.1.2 Roll's Criticism:

A hypothesis expressing it is difficult to make a completely differentiated portfolio and consequently the capital asset pricing model (of which expanded portfolio is a critical part) can't be totally perfect. As per Roll's study, an expanded portfolio would incorporate all assets on the planet. In this way the CAPM utilizes an expansive list as intermediary for enhanced portfolio.

CAPM is responsive to initial variables. Small change in market return has great effect on solution set. CAPM provide a structure for additional investment to assorted portfolio but Roll's criticism and many other analysts have broadened to different models.

1.1.3 Fama and French Three Factor Model:

The Fama and French Three Factor Model is an asset pricing model that expands on the capital asset pricing model (CAPM) by adding size and value factors to the market risk factor in CAPM. This model considers the fact that value and small-cap stocks outperform markets on a regular basis. By including these two additional factors, the model adjusts for the outperformance tendency, which is thought to make it a better tool for evaluating manager performance.

Three Factor model uses three factors, including HML, to attempt to explain excess returns in a manager's portfolio. This model builds off of the one factor model associated with the Capital Asset Pricing Model (CAPM), with a factor referred to as beta, by adding the factors of size, also referred to as small minus big (SMB), and value, as defined by HML.

1.2 Problem Statement:

Stock Market return predictability is important for investor as previous studies exclude negative firms. In this study we focus on negative book value firms. This study has a look at recognition on to degree between negative book to market place proportion and inventory. Book value equity is important factor. Negative book value firms are financially distressed firms and majority of firms survive for a long period. So, this study is providing an empirical evidence of negative equity firms. To study that how negative book value firms survive for long term, this research is conducting to focus how negative book value firms survive for long term.

1.3 Research Questions:

Research leads to answer following questions:

- What's the role of negative book to market ratio premium in calculating portfolio returns?
- Is negative value premium priced by market?

1.3 Research Objectives:

This study aims to the following objectives:

- To provide an insight to the role of negative book to market ratio premium in explaining.
- To suggest a model on the basis of negative value premium.
- To assist investors that they can allocate resources on the basis of negative book to market premium.

1.4 Significance:

Many studies have done in this sphere of stock returns with different anomalies in cross section and time series aspects. Each study has its own implications but in this study different features taken side by side, the negative book to market ratio and stock returns.

Fama (1992) excludes such companies which possess negative book to market value. According to Jan and Ou (2012) companies which hold with negative book value are financially distressed firms and majority of firms survive for a long period. So, this study is an attribute to provide empirical evidence of negative equity firms. By including negative book value firm we will find that either they behave like positive book value firm or not. The findings of this research will help investors regarding their decisions of investment. The discoveries of this exploration can

help financial specialists to choose their venture portfolio and supply the benchmark model to assess the stock portfolio returns and the cost of the capital. Study leads to practical implications for parties such as investors, policy makers, and stock market analysts.

1.6 Plan of the Study

This thesis constitute of follows. First chapter of the study is composing introduction and theoretical background, problem statement, research questions, research objectives and significance of the study. Second chapter gives insights into the existing literature and their findings. Third chapter is comprises of the data description, measurement of variables and methodology. Fourth chapter is of empirical results, interpretations and discussion. Finally, the fifth part consists of conclusion.

CHAPTER # 02

2. Literature Review

The Book to market impact turn into first of all said by way of Rosenberg et al. (1985) he notice an appearance premium to shares with high ratio of book esteem to market estimation of value in US securities exchanges. This book to marketplace effect or esteem top rate is verify with the aid of Davis et al (1994) in united states of America and by means of Chan et al. (1991) and Capaul et al. (1993) in out of doors America. Findings exhibit that enterprise magnitude and book to market equity are basically impact on predicted inventory returns, horrific and best, respectively.

Short term charges have an adverse effect on the future stock returns by Fama and Schwert (1977). Similarly, future stock returns are directly related to the slop of the term structure of rate of interest (Keim and Stambaugh, 1986). Brief time period quotes are adversely associated with destiny inventory yields (Fama and Schwert, 1977). Likewise, the slop of the term shape of charge of interest is right away related with future stock returns.

Study conducted by Fama (1990) presents that the earnings of defaulting dispose securities subtracts the earnings of low securities is certainly acknowledged in the upcoming earnings. In This study by Fama (1990) maintained that book to market proportions have the capacity to predict the returns due to the fact that book values proxies for future cash flows. Our research expands on Ball (1978) and Berk (1995). Berk (1995) debates on the lower market capitalization and argues that market capitalization is not influenced by high discount rates rather high markdown rates source an issue to have lower market capitalization.

Over the past decades the association among macro-economic aspects and stock market improvement has been widely researched upon in the academic and practitioner literature. Major

macroeconomic variables such as interest rates, exchange rates, inflation and industrial out are used in determining factors of stock prices. It is highly categorize that fiscal rule of the governments and significant macroeconomics occasions have vital inspiration on common economic activities of an economy such as the stock markets of the country. Such factors and evidences highly motivate a large number of researchers to conduct studies on the dynamic forces that create association between stock returns and macroeconomics variables. In order to explore the association among stock prices and macroeconomic variables, various approaches have been adapted in earlier researches. Miller and Modigliani (1961) developed the highly acknowledged Dividend Discount Model (DDM) which attempts to explain the association among stock prices and macroeconomics variables. This model by Miller and Modigliani (1961) is widely termed to be the best theoretical stock valuation. Dividend Discount Model demonstrates the present day charge of a stock is identical to the existing fee of all of the destiny cash flows of the respective stock. Thereby, this model has the capacity to accommodate any economic factor which may disturb the estimated future cash flow and necessary rate of return, which in turn affect the stock price. Ross (1976) developed the Arbitrage Price Theory, which also hypothesizes association among stock prices and certain macroeconomics variables.

Hamao (1988) investigated that macroeconomic factor such as inflation affects stock returns at Japanese Stock exchange, multi factor APT framework was used in the study. Moreover, emerging stock market returns can be characterized as having higher volatility than return observed in the developed markets. This article explored the ancient association among charge to earnings proportion and their consequent inventory marketplace average overall performance and ponders why statistics might not repeat itself this time. The item has determined substantial ancient proof that excessive price to earning proportions is accompanied through disappointing

inventory market overall performance inside the short in addition to long time. Explicitly, excessive price to profits ratios is accompanied by sluggish long term progress in shares costs. Additionally, it is witnessed that when revenue on shares of high price proportion to income proportion decreases in respect to earnings on other reserves, stock market performance in the short run struggles. In spite of this evidence, this fact that cannot be completely ruled out that historical relationship is of insignificant relevance of today due to the fundamental variations in the present-day economy. The most vital variable applied to forecast stock market performance in this section is the spread between the earning yield and the level of interest rates. Price to earnings ratio (P/E ratio) is simply opposite of earnings yield and depicts common income in step with dollar invested in shares. By means of imparting the connection among stock charges and earnings on this way makes the degree compares as an interest charge, which symbolizes interest profits per dollar invested in bonds.

Book to market proportion encompasses the level of cash flow and current price of the stock. With the fluctuation in the rate of discount, price of the stock changes and along these lines book to market ratio changes. If the cash flow for a particular stock is persistent, rate of discount show increase which delivers a weakening in the market price of stock and this is followed by increments in the book to market ratio. This phenomenon could possibly clarify a positive relationship between current book to market proportions and future returns for a stock. As a part of study by Fama and French (1988) dividend yields are operating an indistinguishable technique from. Our profit yield measure breaks even with aggregate profit installments gathering to the Center of Research in Security Price value weighted index over the past 12 months divided by the level of the index. Different studies have shown that loan fees are identified with future value market returns.

Various studies on corporate expansion is utilize proportion of market to book for measuring of form. Association among market price and book price of the company has likewise broadly utilize as a part of the writing on top administration groups (Murray et all), and on labor hones. Technique researchers have, to put it plainly, every now and again utilize market-to-book ratio as a significant measure of company execution as far as both productivity and development. For hypothetical reasons, as above and in light of observational priority, alongside our deduction in the segment underneath, it anticipates that that the market will book proportion corresponds methodically with proficiency and development measures of firm execution.

Market to book ratio is a hypothetically stable build that gets from the markdown demonstrate which is hypothetically connect with productivity, development and hazard. The association between market price and book value illustrates administrative esteem embrace as establish by the arrival on the value and development rate, is seen that more successful the utilization of book value and quicker the company development rate, higher the market to book ratio of the study specimen. Additionally, it is found that the market to book ratio proportion is contrarily connects to vital hazard, greater this hazard, the lesser is the market to book ratio for the particular firm.

Shockingly, be that as it may, both risk of market, estimated as beta (β), and Business Risk, determined as standard deviation of return on equity (ROE), has a propensity to be categorically relates with the MB proportion. This optimistic affiliation is solid and reliable over a few distinctive relapse models, as well as the full model utilizing the full example Concern emerges as of late that the stock exchange might be set out toward a downturn since firms' share costs is turn out to be high in respect to their profit. Investigators who sticks to this opinion bring forth that, historically high value income proportions have for the most part leaded by slow growth in prices of stock. Different experts oppose this idea. According to them history no more extend a

genuine guide since fundamental changes in the economy has caused shares more appealing to speculators, supporting a greater value income proportion.

As opposed to our desire that the market to book ratio is contrarily connects with hazard (here estimated as beta (β) and unpredictability of profit for value), this results endorses that market compensate organizations with extraordinary variations in marketplace and bookkeeping gives back, greater the inconstancy, the higher the market to book ratio.

The influence of size impact was originally explored by Banz (1981) and Reinganum (1981) who determines an arrival premium on smaller stock t, with sample period of1936-1975 for the stocks listed at New York Stock Exchange (NYSE). Blume and Stambaugh (1983) and Brown et al. (1983) confirm size impact or size premium in USA and Australia markets is separate studies.

This percentage of market esteem to procreation cost adapt from macroeconomics to the business and company standards of exploration, exclusive creators has apply marginally precise information of tobin's q, all with an stop purpose to catch the hypothetical contention that communicates put it on the market esteem to the price of supplanting those blessings. After all writing indicates that equality among a large number of the plans by and large utilized. In an investigation of four hundred cutting-edge companies from 1978 to 1983, for example, Varaiya, Kerin and Weeks (1987) demonstrates that cost of market to book value ratio and tobin’s q are hypothetically and observationally appear as a good measure. In research of ninety steel mining corporations from 1989 through 1996, there are 0.70 correlations between book to market sources and market to book value portion Adam and Goyal (2008) the explanation had a tendency to vary in the system and back literary works.

Inside the method writing, as an example, the percentage is to a first rate extent used to reveal the top rate that the market can pay for the internet resources; a large market to book share demonstrates a high minimal productivity of capital (price of return) and show excessive esteem incorporate by way of the administration over the substitution fee of internet resources. Within the finance writing, where the connection is operational zed in invert, the book to marketplace (BM) percentage is largely found as an middleman for insolvency chance; excessive Book to market percentage (or low MB share) is long gone out on a limb to cost economic specialists and, consequently, better the regular returns.

Studies determine some quantity of estimated returns of shares totally focuses on numerous economic statistics like, brief-time period interest fees is associated with future inventory earnings Fama and Schwert (1977). Campbell (1987) find that time period structure of interest quotes spreads include beneficial information for predicting stock returns. According to Keim and Stambaugh (1986) hazard that escalate among high return corporate bonds and short rates had a few predictive skills.

Once more, even though some monotony prevails, it may react with time varying chance rates and require fees of go back for stock investors in place of inefficiency. Furthermore, it's miles a long way from clear that any of those consequences can use to generate worthwhile buying and selling strategies. Such ancient statistical relationship provides investors with meaningful guide line to suitable asset allotment are a long way from fair. Some of the most powerful results investigators determine the trend above greater time periods for smaller-employer shares to create greater earnings that are explains as a great deal as forty percent of difference of earning yields. Conclusion is that in past equity results are easier to predict to some extent. Take into account, but, the recent enjoy of traders who try to adopt investment techniques primarily focus

both earning price level of a couple of or the earning of dividend to assume long-horizon earnings in future.

Studies determine some quantity of estimated earnings of shares totally relies on numerous economic figures like, Fama and Schwert (1977) discover that brief-time period interest fees are associated with future inventory returns. Structured time period for interest quotes spreads include beneficial information for predicting stock returns by Campbell(1987).

Most studies recommend that value stocks yield high returns as compared to growth stocks. Value stocks can identify by the help of price earnings ratio and price to book value ratios. Low price earning stock yields high return as compared to high price earning stocks, as result by Nicholson (1960) and later confirmed through Ball (1978) and Basu (1983). The results are constant with the opinions of lists of investors are overoptimistic in their potential to undertaking excessive earnings increase and consequently overpay for increase. The result is likewise steady with the perspectives of Graham and Dodd (1934), end result explains of their conventional book on protection examination and far ahead defend with the aid of the legendary American investor Warren Buffett. Comparatively same outcomes are for cash flow multiples, whereas monetary drift is known as income including devaluation and repayment. (Hawawini and Keim, 1995). Share price to Book Value describe as firms total resources excluding its liabilities divided by outstanding shares. It is also forecaster of earning yields. Low book to price ratio is another guarantee to value in security equities and constant with the communicative list that investor have to pay for the stock growth that consequently fail to fulfill anticipations.

Usage of debt to equity proportion as an extra component clarifies the earnings of inventory Bhandari (1998). According to him a spread in the debt to fairness proportion of a company

increases the threat of constant. It deduces in his paper that the Obligation or value proportion is a noteworthy constructive outcome on the normal regular stock returns.

Chan et al (1991) leads a research in Tokyo securities exchange, their results disclose a remarkable relation among the income yield, measure, book to market proportion, and income yield and awaited returns in the market of Japanese. Conclusion confirms the presence of magnitude consequence, small companies has ability to beat larger firms, in the wake of conforming for market danger and the alternative important elements.

Chan and Chen (1991) found that due to the distinction underway effectiveness, contrast in influence, and maybe the resultant contrast in availability to outer financing, little firms have a tendency to be more dangerous than huge firms. The proof likewise proposes that speculators who are ready to put resources into little minimal firms are remunerating with higher normal returns after some time.

Fama and French (1991) reveal that beta explains the variance in results but the ratio of book value to marketplace price efficiently describes the deviations. These explanations bring our interest to scrutinize the theoretical soundness of Price to Book ratio as an evaluation model. Difference among price of market and book value of share brings the variation in company's value. This relates to value enhancement concepts. On union both the price-to-book-value ratio specifies that the market value and book value both are similar, an increase in ratio declares that company has value addition and similar if it decreases.

Chan et al. (1991) find that there is important positive relationship among the Book to market proportion and assets normal returns from 1971 to 1988 in the Tokyo Stock Trade. Chan et al. utilizes 64 portfolios to check the relationship between four factors (profit yield, magnitude, Book to Market proportion and income yield) and the profits of portfolios. The results depict that

the high positive BTM proportion firms were around 1.1% higher than the low positive BTM proportion firms. Results depict that enterprises with high positive Book to Market ratio are 1.1% higher than low positive. They report that the constants of the Book to Market proportion variable have a huge positive sign. Moreover there is no particular impact in January when Book to Market proportion is use to foresee stock returns. At the end, the researcher observes the CAPM and the results are beta is not able to clarify the cross-area returns of stocks in the Japanese securities exchange in their challenging period. They presumes that the Book to Market proportion considerably affects the estimated stock returns

Fama and French (1992) reports that along with calculated beta, earnings are extraordinary for small stocks, while normal profits for large shares are very less. This research deduces that magnitude and beta of size portfolio associates with each other about -0.988. So point is too distinct the consequence of magnitude and betas on earnings. When portfolios are shape on size basis then inverse relation exists between size and normal return.

Average return is calculated by market equity and ratio of book equity to market equity by Fama and French (1992). Variation in risk is because of variation in earnings, when stock is priced sensibly. Consequently, with logical pricing, size and Book to equity or market to equity should be substitute for sensitivity to basic risk factors in yield.

Fama and French (1993) endorse that portfolios formulate to imitate risk factors associated with size and Book to equity or Market to Equity includes significantly to the difference in stock returns which is described by a market portfolio. Furthermore, asset-pricing model which incorporates three factors a market factor and risk element which is linked to size and Book to Equity appears to obtain the random sample of regular yield stocks of U.S. The proof that magnitude and book to market equity is an alternative for consciousness to risk features in

earnings are constant with logical pricing for the role of size and book to equity or Market to equity in normal earnings. Size and Book to Equity or Market to equity still subjective variables that describe risk factors in earnings. Objective here is to fill this economic emptiness. If the action of stock prices, in association to magnitude and book-to-market-equity, is similar with the action of yields. Size is one factor with contributes to earning yield. Regarding book to equity, small stocks show low returns on book equity as compared to large stock. Effect of size in yield is because of little earnings from small stocks after 1981. Till 1981, earning indicates small alliance to size but the downturn of 1981 and 1982 becomes extended earnings dejections for small stocks. For a few purpose, which remains undercover, small stocks do now not take part within the growth of the center and late Eighties.

Firms which possess highest value of brand and commercial status obviously have high book to market ratios as compared to firms with low value of brand and status. When an individual admits that high market to book values shows that resources not show the full picture then results indicates that firm's balance sheet with highest values of brand and status is not full illustration of balance sheet.

Fama and French (1993) deduce that collectively magnitude book to price value offer significant descriptive strength for future earnings, and when they are entitled, small change attribute to Price to Earnings ratio. Fama and French (1997) also confess that Price to Book Value result is significant in share market other than United States.

These observations brings questions over competency of the market as argue by Lakonishok, Shleifer and Vishny (1994) that if individual agrees with capital asset pricing model. However such result does not automatically leads to incompetency of market. This leads to incompetency of the capital asset pricing model to cater all risk factors. Fama and French (1993) propose that

price to book value also indicates other risks price to market and this is not focus by capital asset pricing model. Firms in sorrow are used to trade at relative less pricing as recorded in values of books.

Three-factor asset-pricing model which includes price-to-book-value and magnitude one of methods of risk is the suitable standard in contrast to them abnormalities are dignified Fama and French (1993). We should remember that outcomes of researches which were previously done still reliant on time and questioned if earnings are produce with actual money. Normal earnings produced by common resources categorized by their development purpose of value. Resources values are categorized that if they purchase share with earning to price ratio they are under normal category for whole share market. Even from 1930s, it does not seem that shareholders grasped higher yield from shared stock focusing in value share. However Fama and French (1993) define a specific period in which value shares earns the highest earnings than normal. This period is from 1960s to 1990.

The proficient market assumption is related to the concept of a random walk, which used in finance to describe price structure where price changes constantly. The good judgment of the arbitrary wander clue is that if the drift of data is unlimited and facts is right now meditated in share prices, then the next day's rate alternate will reflect most effective the following day's information and might be impartial of the fee adjustments these days. But news is by means of definition is unstable so resulting price changes in unstable. At end, result costs completely replicate all recognized facts, or even unaware traders shopping for a varied portfolio on the tableau of prices provides by mean of the marketplace will gain a rate of go back as beneficent as that done by way of the professionals.

So size of company is not the single hazard which relates to assets earnings, practitioners find that Book to Market is one of the factor for hazard. Stock which possesses high Book to Market proportion yields bigger returns as compared to stock with low Book to Market proportion. This variation is called as value premium.

Fama and French (1993) observe five risk factors which are associated with earnings of shares and bonds. They examine five factors that is representation of entire market. However other elements are associated with magnitude and book to market ratio are related to bond marketplace. NYSE and AMEX inventory prices are investigated through descriptive information cut up pattern check and series regression. According to them ratio of book to market is concerned with benefit of company, having inverse association among proportion of book to market and profitability of company. Company size has indirect relationship with return, one increases other decreases and vice versa.

Firms which are weak and thus having low earnings are inclined to have elevated book to market equity and High Minus Low (HML) also known as value premium slopes are positive for such firms, whereas strong firms which have high earnings tend to possess low book to market equity and HML slopes are negative. Dennis, Perfect, Snow, and Wiles (1995) have furnished evidence that backs Fama and French's findings and approve results for provided magnitude category, average earnings of assortment are directly proportional to Book to market equity and, for and given Book to Market equity category, yields are inversely proportional to size. The Book to market equity effect has been found to influence significantly various holding periods as well as trading strategies which focused on Book to market equity and size have more earnings. The implication of their finding focuses that stockholders can quite efficiently outclass the market if

they are able to choose lower magnitude of high book to market equity securities for their respective portfolio during the period.

It is contended by the studies carried out by Fama and French (1995,1996) that Book to Market factor and Extraordinary subtracted from small is due to the market pricing associated with financial dejection. The authors recommend that most important sign of financial dejection is high book to market ratio and retail requires an exposure premium for this added systematic risk. In contrast, it is argued by Chan and Chen (1991) that effect of size depicts premium for distress risk. Financially dejected firms are formed by an excessive great sum of small firms, which have cash flow issues as well as high financial leverage.

In order to study the behavior of earnings, the working of stock prices and connation with size and book to market ratio is stimulated by Fama and French (1995). The authors adapted split example relapse and full specimen relapse to illustrate the adjustments in the central of each of the six portfolios. They determine the careful establishments to understand the observational association between normal proceeds and magnitude and book to market proportion and normal proceeds that is study by Fama and French (1992). The perception of profit in market and size cares to elucidate the magnitude and marketplace reflects earnings. Realistically they locate no confirmation that profits reflects to book to market considers income.

The studies exploring the application of Market to book proportion as needful variable have been flourished since the mid-1980s. It can widely be observe that in the system writing is currently engrained to apply showcase methods and predominately market to book proportion as a method for company. A few specialists up to this point endeavored to give a clarification for the magnitude (SMB) and Book to Market Equity (HML) factor the 3FM and mostly what are the

reasons that cause little high-BE/ME stocks attain the maximum high returns. Recommendations are given Fama and French (1993) through their examinations that a connotation's book-to-market proportion and magnitude are in inevitability intermediaries for the company's stacking on evaluated chance components. To begin with, they determined that the costs of extraordinary book-to-market and shares of little magnitude incline to go high and low in such a way that is evocative of a typical hazard figure. Additionally, they provided evidence that on zero cost calculate collections in view of magnitude and book-to-market proportions alongside an esteem subjective market selection describe the surplus earnings of complete arrangement of book-to-market and magnitude based groups. Summering up, they claim that the relationship among these qualities (size, BE/ME) and revenues emerge in light of the fact that the attributes are intermediaries for non-diversifiable hazard factor.

Study conducted by Jan and Ou (1995) aimed to discover the affiliation among yields and market value of negative earnings enterprises and decides that, in contrast to income corporations, the association among these two measures is negative. Their study also illustrates that book value is a significant explanatory variable for the market value when the earnings are negative.

Prior studies conducted by Fama and French (1995) are dependent on factors that consider returns identified by the firm properties such as firm size, firm gaining to cost, income to value, book to advertise and so on. Just the same, in such studies the regular inventory returns are not represented with the aid of CAPM named as oddities. On this have a look at 25 portfolios sorted on magnitude and book to market cost which can be relapsed through three element relapse on the month to month abundance returns with a pattern period of 366 months.

As indicates by Fama and French (1995) if stocks are valued normally, transformation in normal returns are because of contrasts in risk. In this manner, with objective evaluating, magnitude as calculated by the marketplace estimation of value and book to market value essential intermediary for affectability to basic hazard considers yields. The proof that magnitude and book to market value is intermediary for affectability to hazard figures revenues that are constant with a reasonable evaluating section for the part of magnitude and Book to Market equity in normal earnings.

In any case, the Fama and French model is absolutely exactly propelled magnitude and Book to Market equity stay discretionary marker factors that, for unexplained financial reasons, are identified with hazard figures returns (Fama and French, 1995) fantastic relationship has been decided among inventory returns and income yield, profit yield and book to marketplace proportion, whereas negative association has been observed between inventory returns and size. Most of the research focus on magnitude and earning patterns and that use to resolve two factors Fama and French (1992, 1993) oppose that magnitude and Book to market equity assume a predominant part in clarifying cross-sectional contrasts in estimated returns for non-budgetary companies and they recommend an option ideal that incorporates separated as of the market calculate, a component identified with size, and an element identified with Book to market equity. Consequently, Fama and French recommends that three element displays clarifies the variety of anticipated returns of shares in the Japanese securities exchange superior to the CAPM evaluating model. The proof that magnitude and Book to market equity intermediary for affectability to hazard figures earnings is steady with a sound evaluating story for the part of magnitude and Book to Market equity in normal earnings. Magnitude may intermediary for defaulting hazard and Book to market equity might be a marker of the comparative projections of

companies. Anyhow, Fama and French model is not a harmony show as like CAPM model. There is no hypothesis letting us know what offers go up to SMB and HML elements. Model by Fama and French is simply observationally propelled. Magnitude and book to market equity stay self-assertive marker factors that, for unexplained monetary reasons, are identified with hazard figures returns.

Theoretical framework develops by Fama and French (1995), upon this framework following two propositions are devise first is that Book to Market ratio with high proportion link to insistently less proportion of earning to book equity, but both Book to Market Equity and earnings to book equity have solid association among them. Second preposition defines that Book to Market equity associates with characteristics of revenues. Irrational pricing story is encouraged by LSV (1994) that explain the characteristic of conduct of revenues and share earnings of high and low Book to Market shares. He argued that market place is not providing the conjunction of revenue after many times of formulation of portfolios.

It was hypothesizes in the study that formulation of year's groups, the market place specifies the solid pre-designed revenue development of low Book to Market shares and thee weaker pre-designed revenue of high Book to Market shares. It is observe that stocks with low Book to Market equity have poor average returns due to the fact that profit development is feebler than expectations of market place, while shares with great book to market ratio yields better returns attributed to the fact earnings growth is stronger than the market expectations. Similar to the study conducted by Fama and French (1995), it is observed the conduct of earnings to price proportion around portfolio formation years. In actual, it shall be examined if the LSV irrational pricing story holds in the Japanese market. This was determine in the years around the revenue

of high book to market equity shares surge comparative to profits of trading place. Earning to Book equity decreases earlier than formulation of groups because of factor that book to equity elevates swiftly as compared to revenues. Moreover increase in earning to book equity after formulating group then revenues increase faster than book equity. Exploring extraordinary Book to market equity US shares, Fama and French (1995) determines proportion of Earning to book equity to be immense and the behave exactly in similar passion as in Japanese market but for exactly the opposite reasons. On average, firm specific and macro-economic distress is significantly related to high book to market and small capitalization equities, moreover, they provide significant excess returns.

A suggestion of Barth and Kallapur's (1996) study is that book estimation of value assumes a part as a regulator for scale modification. An important but not necessary condition for this econometric (scale) clarification of why book estimation of price is imperative in condition is that our example illustrates cross-sectional contrasts in scale. If the book estimation of value is a regulator for scale contrasts, then other consequences it is ought to serve this part similarly for profit firms and nonprofit firms similarly. Then again, if book esteem is a significant assessment property, it ought to play a moderately more conspicuous part in evaluation of nonprofit enterprise as compare to revenue earning enterprise, while income ought to get less weight (Ohlson 1995; Burgstahler and Dichev 1997; Jan and Ou 1995). This is on the grounds that present losses ordinarily are not a helpful wellspring of data about expected future income; thus, speculators can be relied upon to depend more on book esteem for that reason. Additionally, since misfortunes can't be maintained indefinitely, the probability of surrender is without a doubt greater for misfortune enterprise as comparable to enterprise reports profitable tasks and book esteem can intermediary for deserting esteem.

Bayesian structure was adapted by Kothari and Shanken (1997) to determine that the book-to market proportion of the Dow Jones Industrial Index (DJIA) forecasts yields over the period 1926-1991. It was found in this study that the book-to-market proportion forecasts negative estimated yields, in spite of the fact that this closure is not powerful to the last 50% of their specimen. Book-to-market proportion takes data about estimated future revenues because a book value proxy for expected money streams.

Kothari and Shanken (1997) explored the proof that book to market proportion and profit yield pathway in time series method expect regular stock returns for the sample period of 1962 - 91 and the time frame for the sample period of 1941-91. The information examines by descriptive statistics, time series regression, OLS regression and traditional tests. Solid proof was discovers by them in book to market proportion and profit earnings in time series variety by regular stock earnings and they determine that the book to market affiliation is more grounded in full period while the profit yield affiliation is more durable in sub period.

Fama and French (1998) apply their three factor models in thirteen different marketplaces for sample period of 1975 to 1995 and provides additional valuable out of sample evidence. Their results tell that 12 out of 13 markets investigate record a premium of at least 7.68% per annum to value shares. Seven markets in the sample depicted statistically significant Book to market equity beats. Although, Daniel and Titman (1997) disagree with the findings presented by Fama and French (1992, 1993 and 1996).

Fama and French (1996) opposes in research that the small shares have a tendency to produce high revenue as compared to larger share and high-book-to-market shares have significant yields in comparison with less book to market equity shares. In addition, equities which possess fewer

yields for great time period have a tendency to possess positive SMB and HML slants and higher future normal yields.

Daniel and Titman (1997) explore the influence of elements loading on stock earnings for the sample period of twenty years and report that projected returns are not a purpose of loadings on the Fama and French risk factors. The author's present argument based on their findings that association among high book to market proportion shares that causes same characteristics rather than common risk elements.

Chui and Wei (1998) choose Pacific Bowl five developing markets in their study including Hong Kong, Korea, Malaysia, Taiwan and Thailand and analyzed the affiliation among normal stock returns, market beta and book to market proportion and size. They connect Fama-Macbeth regression (1973) model to break down the information. No encouraging relationship between market beta and stock return was found. However, in this study significant impact of magnitude on all business sectors of Pacific Basin and critical effect of book to market influence in Hong Kong, Korea and Malaysia. Moreover, the authors investigated the turn impact and January impact and found that the magnitude irregularity is in sum positive in Hong Kong and negative in Korea. They argue that as the organization move towards more generous on their control on the capital stream then more negative will be the size impact.

Dichev (1998) used bankruptcy as a proxy for distress to explore the relationship between distress risk, size, Book to Market and returns. The results of this study were against the expectations as observed for Book to Market premium related to distress risk. Dichev (1998) determined that equal weighted portfolio of the most distressed firms have low Book to Market ratio as well as low returns. Moreover, the study provides evidence on trading strategy which works by taking long position in an equal weighted portfolio of firms with low bankruptcy risk

(70 percent of all firms with lowest probability of bankruptcy) and taking short position on high bankruptcy risk firms (10 percent of the firms with the greatest probability of bankruptcy) gives a positive mean monthly return of 1.17 percent. Dichev (1998) present that the book equity of most of the distressed firms are frequently scrubbed by losses, and probably come negative. Fama and French (1993, 1995, 1996) dismissed negative book equity (Negative Book to equity) firms from their sample under investigation, whereas it is to be noted that Dichev (1998) includes them in their study. It is practical to accept that the majority of firms have high level of distress risk because these firms with negative book equity have accumulated losses over a sustained period. Hence, a great part of firms in the high distress risk portfolio of Dichev would have negative book equity. There is a good possibility that firms with positive book equity and high distress risk have a high Book to market ratio, however this relationship is concealed in Dichev's results due to the fact the study aggregates positive and negative Book to market values.

Chen and Zhang (1998) claims that Book to market ratio may have capacity to comprehend stock returns. Though, the authors indicate that the Book to market ratio might be insufficient to elucidate the stock expected return in a high growth market.

In the study carried out by Collins et al. (1999), they illustrated that misspecification in the simple earnings capitalization model results from the negative coefficient on earnings for loss firms. The issue of negative earnings coefficient removes by inclusion of book value in the valuation model.

Hull (1999) observes whether the stock esteem affects by how a firm change its influence proportion in association to its industry influence proportion standard. He discovers that the stock returns for firms moving "far from" obligation to-value standards are fundamentally more negative than profit of companies which are being "nearer to" these standards.

Defective capital market hypothesis predicts altogether different consequences for little and vast association's risk with the varying credit economic situations. Gabriel and Timmernannn (2000) examine the ramifications of magnitude in setting of an adaptable econometric action and determine that the little companies have shown the most astounding level of irregularity in their hazard in retreat and development federations. The research present that budget in subsidence is unequivocally influence the little company's hazard by more terrible credit economic situations. The small firm's comprises of low securities as compared to large firms, so their capacity to raise external assets are not same, that's why small firms are highly influenced by increase in short term interest rate.

According to Piotroski (2000), inside high Book to price stocks, those with lower monetary wellbeing, as measure, win bring down returns while Mohanram (2005) finds that inside low Book to price stocks, those with powerless development qualities win bring down returns. The estimates of trouble or wellbeing in few of these studies are adhoc, and in actual fact the proof in regards to the relationship with returns is blended.

According to Griffin et all (2000) the Market-to-Book (MB) proportion is broadly utilized as a part of the writing yet in two exceptionally particular ways. From one perspective, it is taken to demonstrate the esteem that the commercial centers on the basic value or net resources of an organization or as an impression of the capacity of directors to utilize resources adequately and to develop the firm then again, the ratio of market to book proportion is connected to risk. Both translations are installed for writings of technique and back, separately, and utilization of them in study is determined by inquiries specific to both controls. The teamsters of them benefit hazard are critical for system researchers, obviously, as directors activities to amplify the one variable

and regulates other one are viewed as fundamental in making esteem (Bettis, 1983, Schendel and Hofer, 1979)

Sehgal and Tripathi (2002) in research decide that the impacts of little organization in the way of functioning, monetary and liquidness qualities about Indian securities exchange. They inspects hazard element of little organization as compared to substantial organizations. Above four hundred organizations were selected that is also included in BSE-500 index for the 1990 - 2002 period. Uni-variate investigation, multivariate examination, t statistics, and Pearson's relationship constant run on figures. Results deduce that small organization possess little solvency and low earnings and high It presume that small organizations are less liquid and low working profit and high leverage disregarded by stockholders as compared to big organizations.

According to Hahn and Lee (2003) both the dimensions and book to market functions of Fama and French and three element version possibly will used as intermediate of danger associated with enterprise cycle. Statistic analyzed through t statistics and basic regression methods. Results concludes that varieties in the evasion extent and in term spread catch the majority of the organized hazard swap by Fama and French size (SMB) and book to market fundamentals (HML). They confirm that when a minor company gives excessive earnings and sizeable compensates for high risk is not occupied by market beta.

Fama and French (2003), this research decides the highest value by utilizing profit yield and income degree of development to quantify the predictable amount of capital yield. The information is observes by regression method and differences impact. Two levels of assessment evaluation are made for original desired yield. Results were found that growing facts for dividend and earnings produce comparative outcomes for value premium and expectation for dividend growing facts are higher exact on the facts that it has some error of standard.

Clive Gaunt (2004) focus on book to market impact and magnitude of three component standard by Fama and French developing change in resource estimating capacity of CAPM and it requires delay than past analysts from the period of 1991 to 2000. Amplified concentrate so having a similar strategy like Halliwel et all. Data collects from 1991 to 1997, stocks from Australia trade (ASX) and of 1998 to 2000 from IREES. Regression is utilized to test earnings of Twenty five varieties of cases. Concentrate just expands that era and outcomes are steady with Halliwel and variable model by Fama and French similarly betas by and large are short of what one. Prove is found that High minus Low assumes vital part of resource estimating ideal. Inference is deduced that Fama and French scale provide a larger number of particulars of earning yields from Australia as compared to CAPM.

Maroney, Naka and Wans (2004) led a study with regards to 1997 Asian budgetary emergency, includes six Asian nations (Indonesia, South Korea, Malaysia, the Philippines, Taiwan, and Thailand), they consider debt as a key component for money related emergency that the organizations is exceedingly debt with dollar named obligation. The degrading in money brought about increment in influence and premium installments. Influence expands with swapping scale devaluation make value betas rise, financial specialists endured capital misfortunes on the grounds that the value they hold turn out to be more hazardous. The positive connection between trade rates and nearby returns is predictable with influence connects to swapping scale. The limited yields have optimistic connection between swapping scale variations since they connect with investment increases and misfortunes in nearby marketplace. The enlarge debts adds to ascent in value of beta and increase estimated yields.

The Market to book ratio fuses both authentic bookkeeping and forward-looking business sector markers of firm execution gives a hypothetical method of reasoning to utilizing the Market to

Book proportion as a degree of execution (Lee et all 2009). Book esteem a monetary record constant diminishes that issue since it is a total constant and hence to some degree less helpless to control by administrators who are normally more worried about the main issue reported profit. In light of its combined nature, the book esteem is likewise generally steadier than yearly income and money streams. Obviously, being a leftover registered remaining benefits and obligations is powerless to estimation mistakes in a critical position. However, to the degree that such mistakes are not precise, they tend to counterbalance in substantial specimens.

The Market to Book ratio is smart measure of achievement because it shows the gap among left over assets of company and the estimation that provided them by arcade. The proportion reveals that the quality (or markdown) that is provided by traders for the company on overall resources and, all things consider, mirrors the effectiveness by them the traders sees the company is supervised. Great reward recommend that each extra dollar put resources in disposable resources of company brings appealing yields for financial specialists, on the other hand, low premiums show that the profits on extra ventures are probably not going to be alluring. All things consider, steady by rationale in Tobin's unique research, the Market to Book proportion show the motivating forces for extra capital savings for well bein of company (Goranova, Dharwadkar, and Brandes, 2010, Lenox, Rockart and Lewin, 2010, Tong and Ruer, 2006). Thus, Market-to-Book is characteristic of proficiency in resource usage as well as of future development potential.

The association among the company’s market charge and book equity has lengthy been of interesting to authors. The market-to-book proportion is extensively used in writing but in wonderful approaches. One, it signify the fee that the marketplace locations at the shared fairness or property of a firm (Ceccagnoli, 2009; Lee & Makhija, 2009), or as a mirrored image of the

capacity of managers to use assets efficiently and to raise the company, then again, the market-to book ratio is related to threat (Griffin & Lemmon, 2002; Liew & Vassalou, 2000). Both the clarifications are implanted in writing of finance and strategic planning, and their utilization in study raised questions regarding two categories. The initiative of gain and loss are significant for policy maker's researchers as well as executives activities to increase the regulator and further to enhance value (Bettis, 1983; Schendel & Hofer, 1979).

The Market to Book Ratio is striking measure to analyze performance as it shows the distinction among total assets of company and category that was given to them by market. It show value that is provided by market to companies on basis of their worth and effectiveness due to which company is recognized as succeeded. Greater value of firm represents that on each particular investment total resources of company earns high yields for people, who invest similarly low bonuses shows that yield for investment show they occur loss.

Market to Book ratio is degree of company's achievement as well as in productivity and development. Because of theoretical motives as already discuss, and due to empirical priority, the assumption is made that the market to book ratio relates significantly correlates systematically with productivity and boom actions of company overall evaluation.

Market to Book ratio and other two components discuss above are now more in accounting reaction. Related to investment, the Market to Book ratio show increasing trend and have direct relation with investment. Some other empirical pointer of unconditional traditionalism is elevated devaluation inside the experience that the beneficial lifestyles of a company are working property is classed conservatively relative to the tests of the company's industry peers. Such expanded devaluation is certainly related to higher market to book ratios.

Frost and Cooke (1999) and Low and Kalafut (2002) study reveals that comparative value of trademark and comparative corporate status ranking marks are different methods. Numerical outcomes shows that both actions are noteworthy in explanation of difference in market to book values, and that comparative commercial standing assessment degree increase value above than value of trademark.

Chen et al. (2007) focus on new technique to check that Book to Market ratio on Stock Market of China. Regression test was tested by reorganizing hazard variable into different primary factors. Result shows that cross-section share earnings are positively associated to Book to Market Ratio on stock of China. Though Book to Market proportion consequences exchanged by others aspects that foresee the returns of shares precisely as compared to Book to Market ratio. According to previous writing Book to Market proportion is a negative aspect, but there is lot of supporters regarding Book to Market proportion as hazard substitution. Daniel and Titman (1997) claimed that Book to Market ratio consequences are company hazard attributes relatively as a feature of hazard in producing earning yields of company. Fama and French (1993) used on data and earnings of selected range and result are high Book to Market proportion yields great earnings that is not determined by earnings arrays. It shows that forecasted earnings based on the company not associated with the earnings of Book to Market. CAPM theory was abandoned by Daniel and Titman. They claimed that beta is not able to explain shares earnings even by selected range or Book to Market proportion.

Lakonishok et al. (1994), provides another deviance of Book to Market proportion as hazard component. They claimed that extraordinary Book to Market proportion abnormality is because of strange behavior of stockholders. He said that stockholders are confident regarding good outcome of stocks and not sure about shares with bad outcomes of last year performance. The

Book to Market proportion took organized mistakes in shareholders, prospects regarding earnings of future. So Lakonishok et al stated that Book to Market ratio can't be substitute as hazard factor.

Studies reveals that the provision of added regular essential charge of income by method of vibrant mission processes in mild of different company issues, for instance, length (Banz, 1981), impact (Bhandari, 1988), price income share (Basu, 1977). All evidences contradict with CAPM, and referred as CAPM peculiarities. Length effect is via protracted blast and generally inspects on CAPM oddity in US and different increase markets.

Banz (1981) take initiative for first time and study the length factor in marketplace of U.S (NYSE). He symbolizes company magnitude by trading prediction of company's shares and assumes destructive association among magnitude of company and its earning yields. Magnitude effect on Indian stock analyze by Sehal and Tripathi (2005), magnitude quality builds by using six different methods of company magnitude, that are sale capitalization, mission esteem, differential assets, every year trades, upload as much as resources and internet running wealth.

Results deduce that irrespective of the matter that magnitude value is great when capitalization is used, but it is optimistic and become complex by use of non-marketing focus on magnitude for instance established assets, The study infer that despite the fact that the exceptional magnitude is considerably at high level when market capitalization is utilized, yet it stays optimistic and measurably critical with the utilization of other non-advertise grounded measures of magnitude, for example, net settled resource, remaining transactions, additional income and running wealth.

Guan et al (2007) observes in United States and assumed the effect of peculiar features (degree, book-to-market and cost obtaining) establishes that normal pass-sectional yields become

contradictory with authentic CAPM. Results say that unusual features also associated with earning yields.

Negative book to equity firms has increased since 1980 because the incidence of firm losses has increased (Givoly and Hayn 2000).

Cai, Zhang (2008) estimate that share price of company behave different in resource organization. The research proves that importantly deleterious effect of modification have impact on earnings of portfolios, however a pathetic impression for modification in transient commitment impact. Research defines that an enhancement in impact factor leads to decrease interest in future which show a deteriorated impression on upcoming projects.

J. Choi (2009) states that full-size nice alpha from book to market arrangements arises from monetary associated impact. At this stage where risk factor was at highest level, book to market value of firm's beta lean towards to figure greater than that of lesser book to market organization. At the point when the hazard premium was high, book to market company's value beta tends to build more than those of low book to market firms. Study reports that book to market variations are due to variation in trading factors.

Negative book value admirations become very common between financially dejected company, evaluation of such companies where earnings and book reverence both are adverse bring a challenge for researchers. Such companies not only focuses on methods related to earning yield which oversight efforts, moreover standards were taken from Ohlson (1995) According to him value admiration as a factor of present earnings and book admiration. By day end, both the summary of income statement and balance sheet are condensed admirations pointers of firms. Irrespective of low earnings and book appreciation, companies with encouraging trading market

approximation of consistent price. The marketplaces subsequently, most possible not ponder additional regard abilities of such companies while appreciating them.

A company book assessment of price expresses to its usual stock holders, remaining shares, the differential obligations are withdrawn from assets. Constrained legal responsibility sure that stockholder esteem cannot be bad, accounting agrees that a company need to document negative book honor on the bookkeeping document whilst its combine obligations exceed upload up to assets. Terrible book esteem companies are typically in financial problems and a long way-fetched to remain in commercial enterprise for lengthy time period.

Though a tremendous level of negative-book-esteem companies continue their activities for great time period even after showing their destructive equity. Moreover, a large variety of such firms e book values stay negative for quite some time. Ultimately, it seems to be premature to assume that each one terrible-e book-esteem firms are in financial trouble. Terrible book value is a complicated occurrence. There is an extensive range of explanations for a company book value to be negative.

Even most of negative book value companies collect negative reserved profits due to lengthy-time period failed processes and, certainly, are financially worried a few report bad book values for different motives.

Omission of negative book to equity stocks is a mistake. Firstly, indeed, negative book to equity stocks were rare prior to 1980. However, since the mid-1980s, their numbers have gradually increased and stabilised to approximately 5% of all traded stocks (Brown, Lajbcygier, and Li 3 (2008), Givoly and Hayn (2000)). Their sheer number warrants a study in their own rights. On top of that, negative BE stocks are genuinely expected to constitute a much greater percentage of

stocks that fall into the extremes of the value-growth spectrum. Consequently, these stocks inevitably exert significant influence on any value-based asset pricing models,

Further, a few recent studies (Brown, Lajbcygier, and Li (2008) and Jan and Ou (2012)) find that the new value premium with inclusion of negative book to equity stocks is significantly different from the old value premium with exclusion of them. Their finding highlights the importance of inclusion of negative book to equity stocks in the modern asset pricing modeling.

Negative Book to equity stocks with the highest default risk has higher returns than all positive BE stocks. They also note that negative BE stocks group into value–growth portfolios in a way that enhances HML returns, which implies an increase in the default premium. They conclude by stressing the importance of including default risk screens in investment strategies that are designed to exploit observed risk premiums. Stephen Brown, Paul Lajbcygier, and Bob Li(2009).

Frms with low distress risk, a positive relation does exist between distress risk and B/M. However, rational pricing is not unequivocally supported. The highest distress-risk firms that are small and those that accumulate large losses display low Book to market values. Also high distress-risk firms predominantly earn comparatively low or negative value-weighted returns and do not, on average, earn a positive return premium. Zaretzky and Zumwalt(2007)

CHAPTER 03

3. Data Description and Methodology

The study uses monthly closing prices of 100 stocks recorded at Karachi Stock Exchange (KSE) for the period from 2005 to 2015, which satisfy the accompanying criteria:

- Sample consists of companies (100 in total) from non-financial sector.
- These firms are categorized on the basis of media Book to Market ratio.
- 50 firms have positive Book to Market ratio.
- 50 firms having negative book to market ratio are selected on the basis of high market Capitalization.

Sample only comprises of companies from non-financial sector. The reason to consider only non-financial sector is that in case of financial sector, accounting period closes at December but in non-financial sector, accounting period closes at June.

Monthly stock prices and KSE index data has been obtained from websites, business recorder and yahoo finance respectively.

CAPM captures only one factor as a measure of risk that is market factor. In this study a new factor has been incorporated that negative book to market premium to see whether it explains the cross section of returns on stock. The explanatory power of conventional CAPM and new factor negative book to market has been explored through regression method.

The construction of portfolio is as follow:

3.1 Portfolio Construction:

i. In order to capture the effect of book to market ratio portfolios have been formed. For this purpose value of book to market equity ratio is taken from different firms of non-financial sector i.e Textile, woolen, Jute, Cement and Vanaspati and Allied Industries.

ii. Now from these companies 50 firms are selected having positive Book to Market ratio named as Positive "P" and 50 firms with negative Book to market ratio have named as Negative "N". Firms are selected on the basis of high market capitalization.

iii. Next the sample of 50 positive "P" stock are arranged in descending order on the basis of high and low Book to Market ratio (BTM ratio = BPS/MPS). First 25 stocks are named as High Positive "HP" and remaining 25 are named as Low Positive "LP".

iv. Similarly the sample of 50 negative "N" stock have also been sorted on the basis of High Book to Market ratio. 25 firms with high Book to Market ratio named as High Negative "HN" and 25 firms with low Book to Market ratio named as Low Negative "LN".

v. The above stated method has been repeated for every year from 2005 to 2015 and portfolios have been created.

3.2 Variable Construction:

Value premium is calculated by subtracting low book to market stock from high book to market stock.

Value Premium (HML) = H – L

Where 'L' stands for negative book to market stock and 'H' stands for positive book to market stock.

HML = R (high BTM, t) – R (Low BTM, t)

Market premium is calculated by subtracting risk-free rate from market returns as shown below:

Market Premium (MKT) = (R_{mt}-R_{ft})

Where

$R_{mt} = \ln (I_t/I_{t-1})$

R_{mt} stands for market return for month "t". I_t and I_{t-1} are the closing values of KSE -100 index for the month t and t-1 respectively. R_{ft} is the risk free for 6 months T-bill rates, used as a proxy for risk-free rate.

3.3 Model Specification:

This study is using Fama Mac Beth one pass regression methodology.

Expected return is examined in the presence of market premium by using following equations:

$R_{pt} - R_{ft} = \alpha + \beta_1(R_m-R_f) + e_t$ .....(i)

$R_{pt} - R_{ft} = \alpha + \beta_1 MKT_t + e_t$ ……(ii)

$R_{pt} - R_{ft} = \alpha + \beta_1 MKT_t + \beta_2 HML_t + e_t$……..(iii)

where HML = H - L

Where R_{pt} is Return of Portfolio " i " for period " t " and R_{ft} is Risk free rate and "HML" is High Book to Market Value minus Low Book to Market Value.

This formula will capture the following dimensions:

- R_{ft} = Risk Free Rate
- MKT = Market Premium = R_m- R_f
- HML = Value Premium = H - L
- α = The management's impact (Alpha)
- e = Term of random error

Chapter 04

4. Empirical Results and Discussion

4.1 Descriptive Statistics:

Descriptive Statistics are used to show the critical characteristics of information which includes central tendency and variability of statistics. An easy degree of the relevant tendency of the statistics is mean and standard deviation reveals both the deviation from the mean.

Fig 4.1 (a) Descriptive Statistics

	HML	**MKT**
Mean	0.015152	0.004343
Median	0.016372	0.010402
Standard Deviation	0.084937	0.041287
Kurtosis	0.024126	0.739505
Skewness	-0.09035	-0.63323
Minimum	-0.20394	-0.13606
Maximum	0.2301	0.098956

Notes: HML means High Minus Low & MKT means Market Premium

Table 4.1(a) exhibits the statistical behavior of the data for the period of 2005-2015. The mean is range from 0.015 HML (Value Premium) to 0.004 MKT (Market Premium). Standard deviation which is the measure of dispersion or deviation from mean is range from 0.084 (HML) to 0.041 (MKT). Skewness indicates the value of MKT and HML is negatively skewed. In case of Kurtosis, if the value is equal to 3 then normal distribution and pattern is called mesokurtic. If the value is > 3 then pattern is called leptokurtic that are associated with simultaneously peaked and fat tail. But when value of kurtosis is less than 3 it is called platykurtic and is associated with simultaneously less peaked and have thinner tail. All the values in the table 4.1 are showing the platykurtic behavior that is less that 3 with the maximum value of 0.739 and minimum value of 0.024. Furthermore, kurtosis shows that the data is flat and have thinner tail.

Minimum Values of HML and MKT is -0.203 and -0.136

Maximum Value of HML and MKT is 0.230 and 0.098

Fig 4.1 (b) Descriptive Statistics of all Portfolios for the period 2005-15

	P	**N**	**LP**	**HP**	**HN**	**LN**
Mean	0.017	0.002	0.014	0.022	-0.004	0.008
Median	0.015	-0.003	0.015	0.016	-0.005	0.001
Standard Deviation	0.083	0.079	0.090	0.095	0.081	0.101
Kurtosis	-0.113	2.615	1.439	0.037	2.992	0.933
Skewness	0.083	0.728	0.353	0.176	0.511	0.336
Minimum	-0.181	-0.212	-0.214	-0.204	-0.260	-0.247
Maximum	0.223	0.289	0.353	0.264	0.326	0.341

Notes: P stands for Positive Portfolio, N stands for Negative Portfolio, Lp stands for Low Positive,

Hp stands for High Positive, Hn stands for High Negative, Ln stands for Low Negative Portfolio

Statistical properties of portfolios sorted on positive and negative book value of equity are reported in Fig 4.1 (b). Results show that Mean value of Positive Portfolio, Low positive and High positive is 0.017, 0.014 and 0.022 whereas for negative, high negative and low negative is 0.002, -0.004 and 0.008.

Standard deviation for Positive Portfolio, Low positive and High positive is 0.083, 0.090 and 0.095 whereas for negative, high negative and low negative 0.079, 0.081 and 0.101.

Kurtosis shows relative peskiness or flatness of a data distribution as compared to normal distribution. Kurtosis results indicate that data distribution is platykurtic for all portfolios which means too flat or having thin tail.

Skewness shows distribution of data. For normal distribution, skewness must be zero means data is symmetrical and has bell shaped graph. But, exactly zero skewness is quite unlikely for real world data. If skewness is positive it means that data is positively skewed or skewed at right means right tail is longer than left side. If skewed is negative it means that data is negatively skewed means left tail is longer than right. Skewness results in Fig 4.1 (b) shows data is positively distributed in all portfolios.

Minimum value for Positive Portfolio, Low positive and High positive -0.181, -0.214 and -0.204 while minimum value for negative, high negative and low negative is -0.212, -0.260 and -0.247.

Maximum value for Positive Portfolio, Low positive and High positive 0.233, 0.353 and 0.264 while maximum value for for negative, high negative and low negative is 0.289, 0.326 and 0.341.

4.2 Regression Analysis:

Explanatory power of CAPM and two factor model has been explored and results of multivariate regression analysis performed to capture the relationship among portfolio return and market premium and value premium are reported in Table 4.2

Fig 4.2 Regression Analysis for all Portfolios for the Period 2005-2015

	P	P	N	N	HN	HN	LN	LN	HP	HP	LP	LP
Intercept	0.015	0.009	0.000	0.001	-0.006	-0.007	0.006	0.004	0.021	0.013	0.014	0.005
T value	2.358	1.473	0.023	0.089	-0.896	-0.852	0.698	0.494	2.581	1.850	1.692	0.711
P value	0.020	0.143	0.981	0.929	0.372	0.396	0.486	0.622	0.010	0.067	0.093	0.478
MKT	0.612	0.013	0.484	0.479	0.437	0.438	0.545	0.533	0.089	0.030	0.035	-0.03
T value	7.234	0.149	5.669	5.566	4.864	4.838	4.839	4.711	0.776	0.291	0.320	-0.35
P value	0.000	0.882	0.000	0.000	0.000	0.000	0.000	0.000	0.439	0.772	0.750	0.725
HML		0.544		0.049		-0.013		0.112		0.527		0.597
T value		7.488		0.658		-0.163		1.143		5.988		7.575
P value		0.000		0.512		0.871		0.255		0.00		0.00
Adjusted R square	0.286	0.300	0.196	0.192	0.150	0.144	0.149	0.151	-0.00	0.213	-0.00	0.303

F stat	52.325	28.420	32.139	16.214	23.656	11.751	23.419	12.392	0.602	18.31	0.013	28.77
Significance F	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.439	0.000	0.750	0.000

Note: P stands for Positive Portfolio, N for Negative Portfolio

HN stands for High Negative, LN stands for Low Negative

HP stands for High Positive, LP stands for Low Positive

When P (Positive Portfolio) is regressed alone with Market Premium it is found highly significant with T value of 7.234. Adjusted R square value indicates that market premium has 29% effect on return.

When Value premium is added then MKT is found insignificant having t value of 0.149 while value premium is highly significant with the t value of 7.488. Adjusted R square is 0.30, which shows that 30% of variations in Positive portfolio are due to Value Premium.

When N (Negative Portfolio) is regressed alone with MKT it is found significant with t value of 5.669. Adjusted R square is 0.196 which shows 19% variation in return is due to market premium.

When value premium is added then MKT is significant with t value of 5.566 while value premium is found insignificant with t value of 0.658. Adjusted R square is 0.192 which shows 19% variation in negative portfolio is due to value premium.

When HN (High Negative) is regressed alone with MKT then it is found significant with t value of 4.864. Adjusted R Square is 0.150 which means 15% variation in return is due to high negative portfolio.

When value premium is added then MKT is significant with t value of 4.976 while value premium is found insignificant with t value of 1.668. Adjusted R square is 0.162 which shows 16% variation is due value premium.

When LN (Low Negative) is regressed alone with MKT then it is found significant with t value of 4.839. Adjusted R Square is 0.149 which means 14% variation in return is due to high negative portfolio.

When value premium is added then MKT is significant with t value of 4.780 while value premium is found negatively insignificant with t value of -1.343. Adjusted R square is 0.154 which shows 15% variation is due value premium.

When HP (High Positive) is regressed alone with MKT then it is found insignificant with t value of 0.776. Adjusted R Square is -0.003 for high positive portfolio.

When value premium is added then MKT is insignificant with t value of 0.29 while value premium is found significant with t value of 5.998. Adjusted R square is 0.213 which shows 21% variation is due value premium.

When LP (Low Positive) is regressed alone with MKT then it is found insignificant with t value of 0.32 Adjusted R Square is -0.007 of Low positive portfolio.

When value premium is added then MKT is insignificant with t value of -0.352 while value premium is found significant with t value of 7.575. Adjusted R square is 0.302 this shows 30% variation is due value premium.

It is clear from the calculated betas of value premium that they do not have significant relationship with portfolio returns. More adjusted R^2 show that value premium explains 30% of portfolio returns others 70% is the effect of other macroeconomic factors. Market Premium also explains 29% contribution to return of portfolio.

F Significance tells that model is highly significant at the confidence level of 95% that shows goodness of fit and reports that model is fit to explain the relationship between independent and dependent variable. These results indicate that market premium have significant relationship with positive and negative all portfolios while value premium is significant for only positive portfolios while insignificant for all negative portfolios. Only positive portfolio is significant while negative portfolio shows insignificant results. Negative portfolio is insignificant because negative book value firms have less trading in trading in market as these firms have hype about their negative return. Due to such circumstances negative book value firms have less investment as compared to positive book value firms. So investors should consider these factors while making valuations, investments and financing decisions.

Value premium is insignificant for overall negative portfolio, high negative portfolio and low negative portfolio while show significant results for low positive and high positive portfolios. Market Premium is found significant positively related to all portfolio returns this is consistent with conventional capital asset pricing model, Value Premium indicates significant results to positive portfolio while insignificant results to all negative portfolios so market factor is not able

to explain equity results overall as Value premium captures results that are not explained by market premium.

There is contradiction to Fama and French views that firms consisting of high distress risk also having high negative book to market ratio leads to high return as risk is directly related to returns. Negative book value firm shows low returns as compared to positive book value firms. This is due to market value of these firms; when large positive returns are earned then market identify that firm. According to Zaretzky and Zumwalt (2007) the most distressed firm have low or negative book to market values. Financial distress measure is calculated for each firm and deciles are formed on this measure. Negative Equity firms are distressed firms and distress firms are risky firms. As higher risk leads towards higher return. Results contradict with their opinion.

Negative book value firms even after low returns survive in market because of high investment in Research and Development in particular market.

CHAPTER 05

5.1 Conclusion:

The research explores the negative book to market ratio and stock market yield of 100 non-financial sector companies listed in stock exchange for the period of June 2005 to June 2015 Relationship between stock market returns with respect to market premium and value premium is analyzed. To explore joint effect of market premium and value premium on stock returns, one pass regression model has been tested.

Market Premium is found significant for Positive portfolios as well as all kind of negative portfolios so it is deduce that book to market ratio effect is present here. But when Value premium is added then it is only significant for positive portfolio while it is insignificant for all negative kind of Portfolio either high negative or low negative. Positive book to market firm outperform negative book to value firms. So CAPM is declared here best model for explaining negative stocks.

The findings reveal that Book-to-market equity has a significant role in expected stock returns. The distress firms on average have low or negative returns, so returns found inconsistent with book value of equity. One possibility is that market recognizes negative book value firms for downward or negative returns. Chen and Zhang (1998) claims that Book to market ratio may have capacity to comprehend stock returns but focusing positive book to Market ratio stock. As negative book to market stock was not included.

The book-to-market ratio is a proxy for risk and returns because a negative ratio shows that a firm has low returns and found insignificant. Investors are therefore more reluctant to have equity of firms with negative book-to-market ratio. So investors should consider these factors while making valuations, investments and financing decisions.

Fama and French (1992) calculate average return by market equity and ratio of book equity to market but excluding negative book to market equity. A new driver negative book to market ratio has been chosen to investigate the impact on stock returns which are providing in significant results. Market to Book does not help in explaining negative stocks.

The findings of study further reveal that negative book to market ratio firms are considered as most distressed firms. While making investment in Pakistani equity market negative book to market ratio is important factor which should be analyzed for greater yields. While explaining negative stock book to market equity is not a best choice. For such purpose conventional CAPM is providing better results.

5.2 Recommendation and Policy Implementation

While making investment and resource allocation decision the investor should consider about positive and negative book value of equity. In this way they can form stylized portfolios to better estimate the returns. The significant relationship between positive book value of equity and stock returns in Pakistani stock market should instant policy makers to think about the implementation of such policies that enhance stock returns. Portfolio managers should also explore market premium and value premium features while making investment strategies.

5.3 Direction for Future Research

For further improvements other proxies should be taken in order to identify their impacts on stock return. Similarly new work is required to fully understand and better capture the book value of equity on financial sector of Pakistani stock Market as this study only focuses on non-financial sector of Stock Market. Beside Pakistani Stock Market Negative book to market ratio with respect to stock market returns can also be check on international stock market what trends are prevailing over there. How international market respond to negative book to market ratio.

References:

Adam, T., & Goyal, V. K. (2008). The investment opportunity set and its proxy variables. *Journal of Financial Research*, *31*(1), 41-63.

Amit, R., & Wernerfelt, B. (1990). Why do firms reduce business risk?.*Academy of Management Journal*, *33*(3), 520-533.

Ball, R. (1978). Anomalies in relationships between securities' yields and yield-surrogates. *Journal of Financial Economics*, *6*(2), 103-126.

Banz, R. W. (1981). The relationship between return and market value of common stocks. *Journal of financial economics*, *9*(1), 3-18.

Basu, S. (1977). Investment performance of common stocks in relation to their price-earnings ratios: A test of the efficient market hypothesis. *The journal of Finance*, *32*(3), 663-682.

Basu, S. (1983). The relationship between earnings' yield, market value and return for NYSE common stocks: Further evidence. *Journal of financial economics*, *12*(1), 129-156.

Berk, J. B. (1995). A critique of size-related anomalies. *Review of Financial Studies*, *8*(2), 275-286.

Bettis, R. A. (1983). Modern financial theory, corporate strategy and public policy: Three conundrums. *Academy of Management Review*, *8*(3), 406-415.

Bhandari, L. C. (1988). Debt/equity ratio and expected common stock returns: Empirical evidence. *The Journal of Finance*, *43*(2), 507-528.

Blume, M. E., & Stambaugh, R. F. (1983). Biases in computed returns: An application to the size effect. *Journal of Financial Economics*, *12*(3), 387-404.

Burgstahler, D., & Dichev, I. (1997). Earnings management to avoid earnings decreases and losses. *Journal of accounting and economics*, *24*(1), 99-126.

Campbell, J. Y. (1987). Stock returns and the term structure. *Journal of financial economics*, *18*(2), 373-399.

Ceccagnoli, M. (2009). Appropriability, preemption, and firm performance.*Strategic Management Journal*, *30*(1), 81-98.

Chan, L. K., Hamao, Y., & Lakonishok, J. (1991). Fundamentals and stock returns in Japan. *The Journal of Finance*, *46*(5), 1739-1764.

Chan, K. C., & Chen, N. F. (1991). Structural and return characteristics of small and large firms. *The Journal of Finance*, *46*(4), 1467-1484.

Chen, N. F., & Zhang, F. (1998). Risk and return of value stocks*. *The Journal of Business*, *71*(4), 501-535.

Chui, A. C., & Wei, K. J. (1998). Book-to-market, firm size, and the turn-of-the-year effect: Evidence from Pacific-Basin emerging markets. *Pacific-Basin finance journal*, *6*(3), 275-293.

Collins, D. W., Pincus, M., & Xie, H. (1999). Equity valuation and negative earnings: The role of book value of equity. *The Accounting Review*, *74*(1), 29-61

Daniel, K., & Titman, S. (1997). Evidence on the characteristics of cross sectional variation in stock returns. *The Journal of Finance*, *52*(1), 1-33.

Dichev, I. D. (1998). Is the risk of bankruptcy a systematic risk?. *the Journal of Finance*, *53*(3), 1131-1147.

Fama, E. F., & Schwert, G. W. (1977). Asset returns and inflation. *Journal of financial economics*, *5*(2), 115-146.

Fama, E. F., & French, K. R. (1992). The cross-section of expected stock returns. *the Journal of Finance*, *47*(2), 427-465.

Fama, E. F., & French, K. R. (1993). Common risk factors in the returns on stocks and bonds. *Journal of financial economics*, *33*(1), 3-56.

Fama, E. F., & French, K. R. (1995). Size and book-to-market factors in earnings and returns. *The Journal of Finance*, *50*(1), 131-155.

Fama, E. F., & French, K. R. (1997). Industry costs of equity. *Journal of financial economics*, *43*(2), 153-193.

Fama, E. F., & Gibbons, M. R. (1982). Inflation, real returns and capital investment. *Journal of Monetary Economics*, *9*(3), 297-323.

Fama, E. F., & French, K. R. (1988). Dividend yields and expected stock returns. *Journal of financial economics*, *22*(1), 3-25.

Fama, E. F. (1991). Efficient capital markets: II. *The journal of finance*,*46*(5), 1575-1617.

Fama, E. F., & French, K. R. (2004). The capital asset pricing model: Theory and evidence. *The Journal of Economic Perspectives*, *18*(3), 25-46.

Fisher, F. M., & McGowan, J. J. (1983). On the misuse of accounting rates of return to infer monopoly profits. *The American Economic Review*, *73*(1), 82-97.

Frost, A. R., & Cooke, C. (1999). Brand v reputation: Managing an intangible asset. *Journal of Brand management*, *7*(2), 81-87.

Gaunt, C. (2004). Size and book to market effects and the Fama French three factor asset pricing model: evidence from the Australian stockmarket.*Accounting & Finance*, *44*(1), 27-44.

Griffin, J. M., & Lemmon, M. L. (2002). Book–to–market equity, distress risk, and stock returns. *The Journal of Finance*, *57*(5), 2317-2336.

Goranova, M., Dharwadkar, R., & Brandes, P. (2010). Owners on both sides of the deal: mergers and acquisitions and overlapping institutional ownership.*Strategic Management Journal*, *31*(10), 1114-1135.

Hahn, J., & Lee, H. (2006). Yield spreads as alternative risk factors for size and book-to-market. *Journal of Financial and Quantitative Analysis*, *41*(02), 245-269.

Hamao, Y. (1988). An empirical examination of the arbitrage pricing theory: Using Japanese data. *Japan and the World economy*, *1*(1), 45-61.

Jan, C. L., & Ou, J. A. (2011). Negative-book-value firms and their valuation.*Accounting Horizons*, *26*(1), 91-110.

Jan, C., & Ou, J. (1995). The role of negative earnings in the valuation of equity stocks. *Unpublished manuscript, New York University and Santa Clara University*.

Keim, D. B., & Stambaugh, R. F. (1986). Predicting returns in the stock and bond markets. *Journal of financial Economics*, *17*(2), 357-390.

Kothari, S. P., & Shanken, J. (1997). Book-to-market, dividend yield, and expected market returns: A time-series analysis. *Journal of Financial Economics*, *44*(2), 169-203.

Lakonishok, J., Shleifer, A., & Vishny, R. W. (1994). Contrarian investment, extrapolation, and risk. *The journal of finance*, *49*(5), 1541-1578.

Lee, S. H., & Makhija, M. (2009). Flexibility in internationalization: is it valuable during an economic crisis?. *Strategic Management Journal*, *30*(5), 537-555.

Lenox, M. J., Rockart, S. F., & Lewin, A. Y. (2010). Does interdependency affect firm and industry profitability? An empirical test. *Strategic Management Journal*, *31*(2), 121-139.

Lee, S. H., & Makhija, M. (2009). Flexibility in internationalization: is it valuable during an economic crisis?. *Strategic Management Journal*, *30*(5), 537-555.

Liew, J., & Vassalou, M. (2000). Can book-to-market, size and momentum be risk factors that predict economic growth?. *Journal of Financial Economics*, *57*(2), 221-245.

Liew, J., & Vassalou, M. (2000). Can book-to-market, size and momentum be risk factors that predict economic growth?. *Journal of Financial Economics*, *57*(2), 221-245.

Lakonishok, J., Shleifer, A., & Vishny, R. W. (1994). Contrarian investment, extrapolation, and risk. *The journal of finance*, *49*(5), 1541-1578.

Lintner, J. (1965). The valuation of risk assets and the selection of risky investments in stock portfolios and capital budgets. *The review of economics and statistics*, 13-37.

Miller, M. H., & Modigliani, F. (1961). Dividend policy, growth, and the valuation of shares. *the Journal of Business*, *34*(4), 411-433.

Morck, R., Shleifer, A., & Vishny, R. W. (1990). Do managerial objectives drive bad acquisitions?. *The Journal of Finance*, *45*(1), 31-48.

Mohanram, P. S. (2005). Separating winners from losers among lowbook-to-market stocks using financial statement analysis. *Review of Accounting Studies*, *10*(2-3), 133-170.

Nicholson, S. F. (1960). Price-earnings ratios. *Financial Analysts Journal*,*16*(4), 43-45.

Ohlson, J. A. (1995). Earnings, book values, and dividends in equity valuation. *Contemporary accounting research*, *11*(2), 661-687.

Odit, M. P., & Chittoo, H. B. (2008). Financial Leverage And Investment.*The Case Of Mauritian Firms*.

Piotroski, J. D. (2000). Value investing: The use of historical financial statement information to separate winners from losers. *Journal of Accounting Research*, 1-41.

Ross, S. A. (1976). The arbitrage theory of capital asset pricing. *Journal of economic theory*, *13*(3), 341-360.

Reinganum, M. R. (1981). Misspecification of capital asset pricing: Empirical anomalies based on earnings' yields and market values. *Journal of financial Economics*, *9*(1), 19-46.

Schendel, D., & Hofer, C. W. (Eds.). (1979). *Strategic management: A new view of business policy and planning*. Little, Brown.

Sehgal, S., & Tripathi, V. (2007). Value effect in Indian stock market. *The ICFAI Journal of Applied Finance*, *13*(1), 23-36.

Schendel, D., & Hofer, C. W. (Eds.). (1979). *Strategic management: A new view of business policy and planning*. Little, Brown.

Sharpe, W. F. (1964). Capital asset prices: A theory of market equilibrium under conditions of risk. *The journal of finance*, *19*(3), 425-442.

Varaiya, N., Kerin, R. A., & Weeks, D. (1987). The relationship between growth, profitability, and firm value. *Strategic Management Journal*, *8*(5), 487-497.

Zaretzky, K., & Kenton Zumwalt, J. (2007). Relation between distress risk, book-to-market ratio and return premium. *Managerial Finance*, *33*(10), 788-797.