# Stock Returns Indicators: Debt to Equity, Book to Market, Firm Size and Sales to Price 

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#### Abstract

Financial variables are useful indicator for future stock returns. In the USA market during the period of 1963-90 the book to market value and firm size have more explanatory power for future stock returns. But some studies argue that sales to price ratio and debt to equity explain future stock returns better than the book to market value and firm size. The main objective of this study is to see which financial variable explains stock returns better than the others. In this study the four financial variables debt to equity, book to market value of equity, firm size and sale to price are used. The study includes 26 companies from pharmaceutical and chemical sector in Pakistan and listed on the Karachi Stock Exchange. The regression technique is used to see the relationship between stock returns and financial variables. We find that the best indicator for stock returns in Pakistani stock market is book to market value of equity for the studied period 2000-2009.


## Introduction

When it came to investing in stocks of a company, analyzing financial statement information was one of, if not the most important element in the fundamental analysis process. But the amount of information presented in a company's financial statement could be confusing and puzzling to many investors. But the analysis of financial ratios allowed the investors to arrange these numbers in an organized fashion. But question was that which ratio helped most the investors in deciding where to invest?

Earning based variables had very little explaining power for stock returns. One of the reasons for poor explaining power of $\mathrm{P} / \mathrm{E}$ for stock returns was that the current earning of a company heavily affected by short lived influences that reduced the reliability of $\mathrm{P} / \mathrm{E}$ ratio as an indicator of long term performance of a company relative to its price based variables. Similarly the BMVE also had limited scope in explaining stock returns because the book value of equity affected by company's age, inventory accounting method and depreciation. S/P was a reliable variable in explaining stock returns because a company's long term performance better indicated by annual sales than the earnings. Sales were more stable than the earnings and could not be affected by temporary occurrences. S/P did not have the negative values, unlike the BMVE and P/E which could not be interpreted easily. Also the company's relative popularity was reflected by $\mathrm{S} / \mathrm{P}$.

Many researches in US markets have shown that the book to market and firm size explained the stock returns better than the other ratios. But recent research has shown that the explaining power of book to market and firm size captured by the sales to price and debt to equity. The purpose of the study to investigate the relation between stock returns and some fundamental financial variables which proved to be having explanatory power for stock returns and then decided which variable explain the stock returns better than the other variables.

## Literature Review

How the investors and academics thought about the risk and return associated with the stocks has been shaped by the Capital Asset Pricing Model (CAPM), proposed by Sharp (1964) and Lintner (1965) and Black (1972). According to CAPM the systematic risk associated with stocks could be measured by the beta. CAPM stated that the stock returns directly proportional to the beta and beta was sufficient to explain the stock returns. But many studies contradicted from the CAPM. Previous researches have shown that the most prominent factor in explaining stock return was the firm size (Banz, 1981). The leverage and stock returns directly proportional to each other, another contradiction of CAPM (Bandhari, 1988). Leverage was a measure of risk associated with stock returns, but in CAPM this risk captured by the beta. Stattman and Rosenberg, Ried and Lanstien (1985) found that the returns and the book to market ratio were positively related with each other in US markets.

Fama and French (1992) demonstrated that the firm size had negative and significant relationship with stock returns. The negative relation always existed no matter which fundamental variable included in the regression analysis. Book to market equity had strong and positive relationship with stock returns; the relationship was stronger than the relationship with size. Many analysts admitted that the cross section of stock returns could be explained by the firm size. First time the size effect explained by the Berk (1981), after the study many researchers studied the same phenomenon and found that the size could explain the stock returns better than the other variables. In a related study Berk (1995) found that the market value of equity of a company related to future cash flows, investor's expectation of the risk of these future cash flows. Following the Berk (1997); Gomez, Hodoshima and Kunimura (1998) studied the effect of firm size on stock returns in Japan. Regression analysis in the study showed that there was an inverse relationship between stock returns and MVE.

The study also showed that the addition of beta not reduced the explanatory power of MVE. Jensen, Johnson and Mercer (1997) found that in an expansive monetary environment the small size firms earned higher returns than the large firms. In restrictive environment, there was no increase in return when moving from large to small firms. Kiem (1990) demonstrated that the small sized firms earned higher returns than the large sized firms. Similarly the firms with high earning to price ratio earned higher returns than the firms with low earning to price ratio. Dennis, Perfect, Snow and Wiles (1995) studied the 26 year sample period. The study reconfirmed the previous findings that the return for the portfolios formed on the basis of similar firm size increased as book to market increased and return for the portfolios formed on the basis of similar book to market value decreased as size increased. Cahn, Hamao, and Lakonishk (1993) found that the beta had no significant explanatory power for stock returns in Japanese Stock Markets. Book to market and cash flow yield had the most significant and reliable correlation with the stock returns. Harris and Marston (1994) found that the book to market and beta related inversely to each other. Also the forecasted growth and beta positively correlated. Daniel, Titman and Wei (2001) found that the book to market effect was strong in Japan especially for the firms with high book to market value. The study rejected the Fama and French (1993) three factor model but not able to rejected the characteristic model. From the study it was concluded that in Japan characteristics book to market and size explained the stock returns and three factor models was not able to do so. Bhandhari (1988) found that debt to equity had significant relationship with stock returns both including and excluding January; however the correlation was higher in January. The study showed that stock returns were positively related to debt to equity both in January and the remaining months. Leledakis and Davidson (2001) found that when D/E regressed simultaneously with the BMVE and MVE, D/E had a significant and positive relationship with stock returns. When S/P and D/E regressed simultaneously with any of the BMVE and MVE the S/P and any of the two other variables were related significantly with returns but not the $D / E$. When all the four variables regressed simultaneously the $\mathrm{S} / \mathrm{P}$ found to be more significant than any of the other three variables. From the study it was concluded that D/E and S/P had more significant relationship with stock returns than BMVE and MVE. It was also concluded that the explanatory power of $D / E$ absorbed by the $S / P$. In a related study Barbee, Mukherjee and Raines (1996) found that all four variables Debt-Equity, Sales- Price, Book-Market and Firm Size had significant relation with stock returns. From all the four variables the $\mathrm{S} / \mathrm{P}$ had the strongest relation with stock returns. From the study it was concluded that the $\mathrm{S} / \mathrm{P}$ had prominent and consistent role in explaining stock returns. It was also concluded that when used in combination with other variables the $\mathrm{S} / \mathrm{P}$ absorbed the explanatory power of all the other variables.

Emerging markets attracted considerable attention of investors and researchers in the recent years. The reason for the interest was the extraordinary returns offered by the emerging markets. Many researchers attempted to explain the stock returns by various variables. Book to market, firm size, leverage, earnings were the variables which became helpful in explaining stock returns better than the beta. In a related study Mukherjee, Dhatt and Kim (1997) demonstrated that the BMVE, D/E and S/P directly and MVE were inversely related with stock returns in Korean Stock Exchange. E/P and beta were not significantly related to stock returns. BMVE and S/P were more reliable indicator of stock returns than E/P in Korean Stock Exchange.

The debate on the performance of the CAPM widened the industry's understanding of important factors of CAPM. Practically the Fama and French (1993) three factor model of market factor, size proxy and proxy of book to market now considered the most significant. Although the model was successful in mature stock markets, analysts had little knowledge about the application of the model to emerging capital markets. Because of difference in politics and culture the investment environment may also differ in various capital markets. The risk factors and price information process may also differ. Thus emerging capital markets were important environment for studying the asset-price model. In a related study Wang and XU (2004) found that the two unique features of the Chinese market suggested that the factors other than the Fama and French (1993) three factor model might be existed in China. First, the investment policy and the accounting information quality might be affected the information generated from the book to market. Second the two third of the equity held by the state. . The study showed that the portfolios sorted by size had a negative relationship between size and average return. The portfolios sorted by beta showed no pattern. Portfolio return increased with book to market. Portfolios sorted by book to market had less clear behavior than the portfolios sorted by size. It means that the book to market had less explanatory power for stock returns in China. Similar to US the beta when used alone or used in combination with other variables was insignificant. Size variable was highly significant similar to US experience. Size variable stayed significant when used with beta. So the problem associated with beta and size seemed to be universal, independent from the nature of the market. Opposite to the US market the book to market was insignificant in China.

In a related study Michailidis, Tsopoglou and Papanstasiou (2007) found that the portfolios formed on the basis of beta had no significant relationship with stock returns in Athens Stock Exchange. Similarly no relation found between beta and return and between size and return when portfolios formed on the basis of size. Beta, size, earning to price and book to market value of equity showed no significant relation with sock returns.

Portfolios formed on the basis of size showed no significant relation with stock returns when used with the combined variables. When earning to price included in the regression model the explanatory power for stock returns of the entire variable increased. The positive relation between stock returns and earning to price due to the fact that earning to price and book to market positively related with each other. When all the variables combined together explained the stock returns better than the individual variable. Most significant results found when portfolios formed on the basis of book to market value of equity. The reason for the insignificant relation of these variables with the stock returns in Greek stock markets was due to high volatility in some of the years covered in the study.

The study of selected Indian companies showed that when portfolios formed on the basis of size the same behavior observed as in the developed stock markets, small sized firm earned higher return than the large sized firms (G.Senthilkumar, 2009). In contrast to the same explaining pattern of size, book to market had less consisting explaining power for stock returns in India.

The study on Tehran Stock Exchange showed that in single variable model debt to equity showed no significant relation with stock returns in any single year (Rahmani, Sheri and Tajvedi, 2006). The relation between stock returns and size, sales to price and earning to price found to be more consistent than the other variables. Results of the study dispersed. The inconsistency in the relationship between these variables and stock returns showed that investors should not paid greater attention to some of the studied variables.

In a related study Samarakoon (1998) found that the portfolios formed on the basis of size had no significant relation ship with returns in Srilankan stock markets. Also there was no relationship between beta and return. Contrast to the previous studies (Fama and French, 1992) stock returns were negatively related to beta in Srilankan markets. The study showed the positive relation between returns and book to market value of equity but it was insignificant. No evidence found for the relation between returns and leverage in Srilankan markets. Earning to price was the variable which explained the stock returns in Srilanka. The firm with high earning to price resulted in higher return. Beta and earning to price were the independent variables which explained the stock returns in Srilanka. The results showed that the risky stocks in Srilanka were not produced higher results. The stock with high risk earned low return. So the market risk in Srilanka was not compensated in the form of higher return. The results of the study invited the investors and analysts to find out other risk factors which were compensated in the form of return.

## Data and Methodology

To reward shareholders with a return that corresponded to a company's return on capital on a stock that was held by shareholders the market often take a long time. To understand the return it was important to separate the return on capital from return on stocks. Return on capital measured a company's profitability. On the other hand the sum of dividends and increase in stock price represented the return on stock. Both the returns could be calculated by the following formulas:

## Return on Capital = Profit / Invested Capital

Return on Stock: Shareholders Total Return = Capital Gains + Dividends
No significant relationship found between two types of returns. The shareholders of a company could suffer if company's stock price decreased in the same period when company earned a higher return on capital. On the other hand a terrible company in terms of low return on capital earned a higher return on stock if price of company's stock increased in the same period. In other words for short period of time no connection existed between how a company performed and how a company's stock performed. Because a company's stock price reflected the market perception of company's future profit, sometimes it got right and sometimes not. But for a long period of time company's stock prices reflected the performance of the company. It means that a relation existed between stock returns and fundamental financial variables, because these financial variables reflected the company's performance in quantitative form. Many studies also showed that the stock returns could be predicted by fundamental financial variables.

Debt to equity ratio included two components outsider funds and internal equities. All debt, liabilities short term or long term came under the heading of outsider funds. The internal equities included equity share, preferred share capital reserves and revenue reserves.

Debt to equity $=($ Total Assets-Total Liabilities $) /$ Market value of common equity
Debt to equity ratio represented the claim of owner and outsider against the assets of firms. The main purpose of debt to equity ratio was to have an idea about the cushion available outsiders if the firm gone to bankruptcy. However the ratio depended upon the company policy. The owner wanted to operate the business with maximum funds of outsiders to lower the risk of owners own investment and to increase the earning by paying a lower amount of fixed interest to outsiders. In contrast the outsider wanted owner to invest and bare the risk of the investment. A ratio of $1: 1$ is considered to be a good one. Theoretically if owner invested more in the business of their own the financial position of the company is considered to be highly solvent. The higher the amount of outsider funds the company became more risky. The outsider could pay before the shareholders
(owners) if a company gone to bankruptcy.
Hypothesis 1: Debt to equity is the best indicator for stock returns.

## Model 1:

$\mathrm{SR}=$ Stock Return
$\alpha=$ Regression Constant
$\beta=$ Regression Coefficient
$\mathrm{DE}=$ Debt to equity
$€=$ Error term
A book to market ratio represented a comparison between book value and actual value of company to its market value. The book value of company measured by the company's internal accounting data. On the other hand the market value of a company measured by its market capitalization. The ratio can be used by analyst and investors to determine whether the company was undervalued or overvalued. The book to market ratio could be calculated by dividing the book value of a company by market value of that company.

Book to Market = Book value of company / Market value of company
Book value could be obtained by the company's earning announcements and market value could be obtained by multiplying a company's common shares outstanding to its market price.
A company having a book to market ratio grater than one considered to be an undervalued company and investors think that it was a good investment opportunity. Because a ratio greater than one means that book value exceeded the market value and the investors not given the attention a company deserve. Similarly a company having a book to market ratio less than one considered to be an overvalued company and indicated that it was a time for investors to cash in their stocks. Because the market value exceeded the book value and investors had given a company too much attention.
Opportunities for investors could be created by the earning announcements of a company because it resulted in the adjustment of the book to market ratio. The announced earnings were added to previous book value and resulted in increased book to market ratio. If a company's book to market ratio increased the investors thought that the company doing well and investing in the company a worthy decision. The investment increased the market value of company and brought the ratio closer to one.
Hypothesis 2: Book to market value of equity is the best indicator for stock returns.
Model 2:

$$
\mathrm{SR}=\alpha+\beta \mathrm{BMVE}+€
$$

$\mathrm{SR}=$ Stock Return
$\alpha=$ Regression Constant
$\beta=$ Regression Coefficient
$\mathrm{DE}=$ Book to market value of equity
$€=$ Error term
Firm size often referred to market capitalization measured the size of an enterprise, obtained by multiplying the share price with outstanding shares of a company. Capitalization represented the public opinion of the company net worth and a determining factor in valuation of stock.
A public corporation included all assets which may be bought and sold freely through the selling and purchasing of stocks which may be reflected in the company's stock prices. Market capitalization an estimation of market about the company's value based on future prospects perceived by the market, economic and monetary policy. Because stock prices could be moved by speculation for changes in expectation about mergers and acquisition and profits, capitalization not a true measure of the size of a company.
Hypothesis 3: Firm size is the best indicator for stock returns.
Model 3:

$$
\mathrm{SR}=\alpha+\beta \mathrm{FS}+€
$$

SR = Stock Return
$\alpha=$ Regression Constant
$\beta=$ Regression Coefficient
Firm size = Firm Size
$€=$ Error term
The effect of a firm's sales on its stock prices could be measured by the sales to price. As the prices of stocks could also be affected by the market and economic conditions sales to price could not be accurate all the time. If sales of a company increased and price of stock also gone up, then the investors had expectations about the sales less than the actual sales. On the other hand if sales of a company increased and price of stock remained same or gone down, then the investors had expectations about the sales greater than the actual sales. Sales to price could be calculated by the following formula:

Sales to price $=$ Annual sales per share $/$ Market price of common stock

Increase in sales to price ratio generally a negative sign indicated that the sales of a company increased but the stock price did not increase.
Hypothesis 4: Sales to price is the best indicator for stock returns.

## Model 4:

$\mathrm{SR}=\alpha+\beta \mathrm{SP}+€$
SR = Stock Return
$\alpha=$ Regression Constant
$\beta=$ Regression Coefficient
$\mathrm{SP}=$ Sales to price
$€=$ Error term
The financial data to calculate the financial ratios taken from the State Bank of Pakistan' Balance Sheet Analysis of Joint Stock Companies listed on KSE for the year of 2000-08. The data to calculate the stock returns taken from the Karachi Stock Exchange web site.

The sample used in this study included the Pharmaceutical and Chemical sector companies listed on KSE. 42 chemical and 9 pharmaceutical companies listed on KSE. But in this study 27 companies used because of the unavailability of necessary data for the excluded companies. The period covered in this study from 2000 to 2009.

Regression technique was used in the study to see the relationship between stock returns and debt to equity (DE), book to market value of equity (BMVE), firm size (FS) and sales to price (SP). Each variable regressed individually with the next year's stock returns.

## RESULTS

## Data Analysis and Findings

Table. 1 shown the average values of all the variables. In this table standard deviation represented the variability of values of all the variables and N represented the number of observations. The average value of return for all the companies included in this study was 0.265560 . The average values for book to market value of equity, sales to price, debt to equity and firm size were $1.158941,2.123259,1.350749$ and 20.735450 respectively for nine years period from 2000 to 2009 for all the companies.

Table. 2 has shown the correlation of stock returns with independent variables used in this study. Correlation represented the relationship between two or more variables. The value could be ranging from +1 to 1. The positive and negative sign representing the direction of relationship between variables whether the variables related to each other directly or inversely Table.4.2 depicted that the return was significantly and positively related with book to market value of equity and sales to price at $5 \%$ significant level. Other two variables debt to equity and firm size were not significantly related with return.

Table. 3 has shown the R, R square, Adjusted R square and Standard error of the estimate for the all the models in the study. R was the correlation coefficient and it represented the relationship between two or more variables. The value of R could be ranging from +1 to -1 . The positive or negative sign indicated the direction of relationship. The +1 indicated a positive relationship between two or more variables, 0 indicated no relation and -1 indicated a negative relation. In the model 1 the positive value of R indicated that a positive relationship exist between independent variable debt to equity and dependent variable return. The same positive relationship existed between dependent variable and the other independent variables namely book to market value of equity, firm size and sales to price which were used in the models 2, 3 and 4 respectively.

R2 the coefficient of determination measured the proportion of dependent variable which is explained by the independent variables. The value of R2 could be ranging from 0 to 1 . Table.4.3 has shown that the value of R2 was very small for all the models which mean that the dependent variable can not be predicted by the independent variables used in the study. The explanatory power of all the independent variables for dependent variable return was very weak. Similarly the value of R2 not changed significantly it means that very small proportion of independent variable could be explained by the dependent variables.

Table 4 has shown the estimated equation for all the four models in the study. From the table 4 it was depicted that the significant relation found between book to market value of equity and stock returns and between sales to price and stock returns because the significant values for both the models were smaller than the 0.05 . Debt to equity and firm size had no significant relationship with stock returns because the significant values for both variables greater than the 0.05 .
The estimated equation for model 2
$\mathrm{SR}=0.128+0.119 \mathrm{BMVE}+€$
One unit increase in the value of book to market value of equity increased the stock return by 0.119 .
The estimated equation for model 4
$\mathrm{SR}=0.141+0.059 \mathrm{SP}+€$
One unit increase in the value of sales to price increased the stock return by 0.059 .

The positive and significant relationship between stock returns and BMVE is similar to the findings of Fama and French (1992). In a study Fama and French (1992) found that the stock returns have strong and positive relationship with BMVE in United States. Similar positive relationship between stock returns and BMVE found in Japan by Chan, Hamao, and Lakonishok (1991, 1993). These results are also consistent with the findings of Mukherji, Dhatt, and Kim (1997) for Korean Stock Returns.

Risk captured by the BMVE possibly the relative distress factor of Chan and Chen (1991). They postulate that the risk factor in returns associated with the earning prospects of the firms. Firms for which market assessed have poor earnings prospects, indicated low stock prices and high BMVE; have higher future stock returns than the firms with strong earnings prospects. A high BMVE also indicated that a firm's book leverage is higher than the firm's market leverage. Because of this market judges that the firm have poor earnings prospects and discount prices of firm's stocks relative to firm's book value. .

The positive and significant relationship of stock returns with $\mathrm{S} / \mathrm{P}$ also consistent with the recent studies. In a related study Mukherji, Dhatt, and Kim (1997) found that in Korean Stock Exchange the stock returns positively and significantly related with S/P. Similarly Barbee, Mukherjee, and Raines (1996) found that the S/P captured the explanatory power of $\mathrm{D} / \mathrm{E}$ and explain the stock returns in London Stock Exchange.

BMVE and firm size influenced by the accounting practices and the age of the company (e.g., inventory valuation methods, depreciation policy) than the S/P. Furthermore sales of a company provided a real picture of company's profitability than the earnings which are affected by the variation in the short term cost. Finally, in circumstances when a company losing money $\mathrm{S} / \mathrm{P}$ provide a meaningful valuation measures relative to meaningless earning to price ratio because $\mathrm{S} / \mathrm{P}$ cannot have negative values unlike other variables namely earning to price and BMVE.

The negative relation of firm size with stock returns consistent with the previous studies of Fama and French (1992), Berk (1981), Jenson, Jhonson, and Mercer (1997) and Kiem (1990). But this relationship is not significant which is inconsistent with these studies. This insignificant relation consistent with Samarakoon (1998) who found that the firm size had no significant raltionship with stock returns in Srilanka.

The negative and insignificant relationship between $\mathrm{D} / \mathrm{E}$ and stock returns are not consistent with the Bandhari (1998), Leledakis, and Davidson (2001), Barbee, Mukherjee, and Raines (1996) and Mukherjee, Dhatt, and Kim (1997). In all these studies the D/E related positively and significantly with stock returns. The same insignificant relation between $\mathrm{D} / \mathrm{E}$ and stock returns was found in Athens Stock Exchange (Michailidis, Tsopoglou, and Papanstasiou, 2007).

## Discussions, Limitations, Future Research and Conclusion

The objective of the study to perform a comparison between four independent variables and on the basis of this comparison draw a conclusion that which variable is the bets indicator for stock returns in Pakistani stock markets. The two variables which had a significant relation with stock return were book to market value of equity and sales to price. Similar results were found by Fama and French (1992), Chan, Hamao, and Lakonishok (1991, 1993), Mukherji, Dhatt, and Kim (1997) and Barbee, Mukherjee, and Raines (1996) in different studies and in different countries around the world. Other two variables namely debt to equity and firm size had no significant relation with sock returns (Samarakoon, 1998 and Michailidis, Tsopoglou, and Papanstasiou, 2007). From the two variables which had significant relation with stock returns the book to market value of equity explain the stock returns better than the sales to price. Fama and French (1992) and Chan, Hamao, and Lakonishok $(1991,1993)$ found that the book to market value of equity was a better indicator for stock returns than the other financial variables. From this it was concluded that the best indicator for stock returns was book to market value of equity in Pakistani stock markets. Although the relation was not strong but amongst the studied variables it was the variable which explained the stock returns better than the other variables used in the study.

A high book to market ratio gives an indication that investing in this company a good investment opportunity. A ratio greater than one means that the company not gaining attention of investors. So as the ratio increased the stock returns also increased. Sales of a company was a more reliable and permanent indicator of long term performance of company. Because sales could not be affected by short term events, a high sale means a company gaining good profits and performed well. The reason for weak and insignificant relations could be volatility in the stock markets during the period covered for this study.

Figure 1 indicates that the average stock returns decreased sharply in 2004 and then increased sharply and extraordinarily in 2007. But again Pakistani stock markets crashed in 2008 and average stock returns decreased sharply ant turned negative.

The study also had some limitations. Firstly the covered period had some irregular pattern for stock returns in Pakistan. As stated above the volatility found in the Pakistani stock markets. Previous researches have shown that the insignificant relation found between studied variables in the highly volatile markets (Michailidis, Tsopoglou and Papanstasiou , 2007). Also the Pakistani stock markets were not mature and just behave like emerging markets. The previous researches have shown that insignificant relation existed between studies
variables (G.Senthilkumar, 2009, Rahmani, Sheri and Tajvedi, 2006 and Samarakoon, 1998).
From the study it was concluded that the best indicator for stock returns in Pakistan was book to market value of equity, although this relationship was not strong. So it was recommended to investors, students and researchers that they should not paid greater attention to studied four independent variables. There should be some other factors in Pakistani stock markets which play a significant role in explaining stock returns.
Researchers should find those factors which can be helpful for investors before investing in a particular stock for earning a good above average returns.

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| Table1: Descriptive Statistics |  |  |  |
| :--- | :--- | :--- | :--- |
|  | Mean | Std. Deviation | N |
| RETURN | 0.26556 | 0.57787 | 189 |
| DE | 1.35075 | 2.46663 | 189 |
| BMVE | 1.15894 | 1.59448 | 189 |
| LNFS | 20.7355 | 2.18254 | 189 |
| SP | 2.12326 | 2.21029 | 189 |


| Table 2: Correlations |  |  |
| :--- | :--- | :--- |
| Pearson Correlation |  |  |
| Return | Return |  |
|  | DE | 1 |
|  | BMVE | -0.013 |
|  | LNFS | 0.328 |
|  | SP | -0.096 |
| Sig. (1-tailed) | Return | 0.225 |
|  | DE | - |
|  | BMVE | 0.432 |
|  | LNFS | 0.000 |
|  | SP | 0.095 |
|  |  | 0.001 |


| Table 3: Model Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Earning prospects of firms. Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .096 | .009 | .004 |  |
| 2 | .328 | .108 | .103 | .5473665 |
| 3 | .013 | .000 | -.005 | .5793680 |
| 4 | .225 | .050 | .045 | .5646216 |


| Table 4: Stock Returns |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Unstandardized Coefficients |  | Standardized Coefficients Beta | t | Sig. |
|  | B | Std. Error |  |  |  |
| 1 (Constant) | . 270 | . 048 |  | 5.606 | . 000 |
| DE | -. 003 | . 017 | -. 013 | -. 172 | . 863 |
| 2 (Constant) | . 128 | . 049 |  | 2.594 | . 010 |
| BMVE | . 119 | . 025 | . 328 | 4.747 | . 000 |
| 3 (Constant) | . 792 | . 402 |  | 1.971 | . 050 |
| LNFS | -. 025 | . 019 | -. 096 | -1.317 | . 189 |
| 4 (Constant) | . 141 | . 057 |  | 2.471 | . 014 |
| SP | . 059 | . 019 | . 225 | 3.151 | . 002 |

Figure: 1 Yearly Stock Returns


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