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A Study on the Impact of Price Earnings Ratio on Stock Returns in Oil sector in Muscat Securities Market

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Abstract

The Value of stock changes in the securities market through selling and buying. Most of the Investors review stock markets and performances of the companies to find out the stock returns as it affects their financial position. Price Earnings Ratio (PE Ratio) shows the potential performance of the stocks returns of the companies if the P/E Ratio is positive Investors feel safe to invest in the company as they expect potential return on their investments from the company whereas negative P/E Ratio can quickly fall in the stock returns. Investment in securities market gives the advantage of liquidity as well as the opportunity to beat the market and earn high returns but it is difficult to predict the share prices as the nature of share price movement is not independent as it effects on both factors (intrinsic and extrinsic) which has been proven to exercise influence over stock price movements (Malhotra, N., Tandon, K. 2013). This study is an attempt to understand if there is any effect of PE ratio on Stock Returns. The PE ratios of the five oil companies listed in the Muscat Securities Market were computed annually from 2009-2018. The companies' yearly return was calculated for the same period. To examine if there existed a

price earning effect, the stock returns was compared with the PE ratio. After conducting Correlation and Regression analysis for the listed oil companies from MSM, the results revealed that PE ratio and Stock Returns had a high positive correlation for only one company and there did not exist relationship between the PE ratio and the Stock Returns for other companies and hence it is concluded that the PE ratio may or may not influence the stock returns.

Keywords: *Price Earnings Ratio, Stock Returns, Muscat Securities Market*

Introduction

One of the investment tools which is used by the investors and financial (securities) analysts for picking up the best stock for buying is the PE ratio. As this ratio is easy to be calculated, it has gained popularity among the investors and securities analysts. It is advisable for investors to buy stocks which have a lesser PE ratio as these stocks are considered to be less valued even though they are of higher value and vice versa. Using the Market price and PE ratio, Arslan and Zaman,R, (2014) confirmed by Kumar (2015) that there is an impact of the PE ratio on the stock returns.

Whereas, some studies found out that there is no significant relationship between PE ratio and stock returns. Sezgin (2010) found out that PE ratio has a negative effect on the Stock returns on the long run. Ahmed (2003) found that there is no significant relationship between yearly return of S&P 500 Index and PE ratio.

The short coming of the previous research and the mixed results of the relationship between PE ratio and stock returns motivated authors to carry out the present research in Muscat Securities Market using five listed oil companies as sample. Therefore this paper attempts to analyse whether there is any significant relationship between the stock returns and the PE ratio.

Literature Review

Review of literature was done to report the studies related to Price Earnings Ratio, Stock returns in Securities Market. The following research examined the underlying phenomena of P/E Ratios, Stock returns in various securities market in different countries. It provides a foundation to identify the research gap for the present study.
(Wulandari, 2017) examined and explained the effect of the stimulant, Partial and dominant P/E Ratio, DY, BMR, AQ which are Independent variables and Stock returns which is Dependent variable with a sample of 35 Banking Companies which are listed in Indonesia Stock Exchange. Results of Classical assumption test and Linear regression analysis showed that the independent variables are simultaneously affected the stock returns. Among all the variables P/E Ratio is considered to have a strong influence on stock returns.

(Herawaty,V., Astuti,H.H, 2016) made an attempt to investigate the factors that has an impact on capital structure and share returns that focused on the companies listed on Indonesian Stock exchange with a sample of 378 taking into consideration the data for a period of 2010-2012 and the findings showed that growth have a positive effect on capital structure, but the variables like dividend yield and profitability (ROE) has a negative effect. It is also found out in the study that only profitability has a positive effect on stock returns.

(Jatmiko,P.D., 2015) aimed to study the relationship between the return for a period of 2009-2011 which is the dependent variable and PER, PBV, Log and Beta which are the independent variables for a period of 2010-2012 from randomly selected 100 companies out of 344 companies listed in JSX. The findings showed that there was only one statistically proven variable to correlate with the return of 2009 for which the notation of PER is

negative. The return of 2010 none of the independent variable correlated with return. In the case of 2011, there was a correlation between return and beta with a significance level of 0.007 and with coefficient of 0. 333. No relationship were found from Pearson Correlation analysis.

(Arslan, M., Zaman,R, 2014) analyzed using econometrics techniques and fixed effect model, "the impact of dividend yield and price earnings ratio on stock returns and the relationship between the size and stock price for the year 1998-2009" for 111 non-financial KSE listed firms in Pakistan. They found out that there is a significant positive Price earnings ratio and size of the firm has a strong positive influence on stock prices and dividend yield had adverse effect on the stock prices.

(Malhotra,N., Tandon,K, 2013) Attempted to determine the factors that influence on the stock prices among 95 companies from NSE for a period of 2007-2012 and the findings revealed that there is an indicative positive link of firm's stock price with that of firm's book value, earnings per share and price earnings ratio. Dividend yield has a reverse association with the market price of the firm's stock.

(Fun Pei, L., Basana, R.S, 2012) examined the predictability of stock return using PE Ratio for a sample period of 2005-2010 based on the historical relationship between PE Ratio and subsequent stock return of 45 companies and found out that there is significant difference between the low PE and High PE stock return in stocks held for short term period of 6 months and the vice versa if they were held for longer periods that is a period of one to four years.

(Sezgin, 2010) Identified the relationship between long run and short run among market stock return, dividend yields and price to earnings ratio affect for the period of 2009-2010 of ISE 100 index the results of descriptive statistical values revealed as high Price Earnings ratio. Counteraction test and ECM results revealed that RE effects negatively on PE in long run

Objectives of the Study

To study the Impact of Price Earnings Ratio on Stock Returns of listed oil companies quoted in Muscat Securities Market.

Scope of the Study

This study has been made for the period of ten years from 2009-2018 among five oil companies listed in Muscat Securities Market.

Hypothesis of the Study

Ho: There is significant impact of Price Earnings Ratio on Stock Returns.

Research Methodology

The purpose of this study was to determine the impact of PE ratio on stock returns and therefore in this study the PE ratio is the independent variable and Stock returns is the dependent variable. Computation of PE ratios for each year was done by taking the EPS obtained from the company annual reports for the year divided by the market price of the share. The stock return was computed by taking the closing price at the end of the year less the initial price at the beginning of the year plus the dividend per share paid by the company during the year. The study is exploratory in nature. Five listed oil companies (National Gases, Oman Oil Marketing Company, Muscat Gases, Shell Oman Marketing Company and Al-maha Petroleum Products) from MSM were taken as sample for this study. The period of study is ten consecutive financial years from 2009-2018. Financial data were collected from secondary sources i.e. the Muscat Securities Market. Correlation and Regression analysis was used to determine the relationship between the dependent and the independent variables.

Findings and Discussion of the study

Table 1: Results Correlation Analysis

Companies	Correlation Values
National Gas	0.374
Muscat Gases	0.323
Oman Oil Marketing	0.786
Shell Oman	0.109
Al Maha	0.410

Source: Authors Calculations

From the above table 1 it is inferred that Oman oil marketing is the only company which showed a strong positive correlation between the PE Ratio and Stock Returns, while the other companies is lowly correlated.

Regression Analysis of National Gas (NGCI)

Table 2.1: Model Summary of National Gas (P E Ratio with Stock Returns)

Model	R	R Square	Adjusted R Square	Std. Error of the estimate
1	0.375	0.141	0.033	1.192

a. Predictors: (Independent), PE ratio

Table 2.2: ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	1.859620947	1.859620947	1.308022744	0.285819254
Residual	8	11.37363065	1.421703832		
Total	9	13.2332516			

a. Dependent Variable: Stock Returns
b. Independent Variable: PE Ratio

Model summary reported in Table 2.1 showed a linear relationship between price earnings ratio and stock returns from National Gas. As per the value of adjusted R square which was reported as 0.033 it can be inferred that the predictive ability of the proposed model is not so strong and the price earnings ratio is not affecting the stock price in National Gas. The significance level reported p=0.285 in Table 2.2, which is more than 0.05 so it can be concluded that the linear relationship between PE Ratio and Stock Returns is not significant based on the significance value.

Regression Analysis of Muscat Gases

Table 3.1: Model Summary for Muscat Gases

Model	R	R Square	Adjusted R Square	Std. Error of the estimate
1	0.0651	0.004	-0.120	1.577

a. Predictors: (Independent), PE ratio

Table 3.2: ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.084999123	0.084999123	0.034139703	0.8580081
Residual	8	19.91795248	2.48974406		
Total	9	20.0029516			

a. Dependent Variable: Stock Returns
b. Independent Variable: PE Ratio

Model summary reported in Table 3.1 showed a linear relationship between price earnings ratio and stock returns from Muscat Gases. As per the value of adjusted R square which was reported as -0.120 it can be inferred that the predictive ability of the proposed model is very weak. The significance level reported p=0.858 in Table 3.2, which is more than 0.05 so it can be inferred based on the significance value that the linear relationship between PE Ratio and Stock Returns is not significant.

Regression Analysis of Oman Oil Marketing

Table 4.1: Model Summary of Oman Oil Marketing

Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the estimate**
1	0.786	0.618	0.570	0.215

a. Predictors: (Independent), PE ratio

Table 4.2: ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.600935998	0.600935998	12.97067329	0.006967287
Residual	8	0.370642902	0.046330363		
Total	9	0.9715789			

a. Dependent Variable: Stock Returns
b. Independent Variable: PE Ratio

Oman Oil Marketing Model summary shown in Table 4.1 showed the value of adjusted R square which was reported as 0.570 it can be inferred that the predictive ability of the proposed model is strong. The significance level reported p=0.006 in Table 4.2, which is less than 0.05 so it can be concluded that the linear relationship between PE Ratio and Stock Returns is significant.

Regression Analysis of Shell Oman Marketing

Table 5.1: Model Summary of Shell Oman Marketing

Model	R	R Square	Adjusted R Square	Std. Error of the estimate
1	0.241	0.058	-0.059	0.220

a. Predictors: (Independent), PE ratio

Table 5.2: ANOVA

	Df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.024074571	0.024074571	0.494883685	0.501714198
Residual	8	0.389175429	0.048646929		
Total	9	0.41325			

a. Dependent Variable: Stock Returns
b. Independent Variable: PE Ratio

Model summary reported in Table 5.1 showed a linear relationship between price earnings ratio and stock returns from Shell Oman Marketing. As per the value of adjusted R square which was reported as -0.059 it can be inferred that the predictive ability of the proposed model is weak and there is no relationship between price earnings ratio and the stock price in Shell Oman Marketing. The significance level reported p=0.501 in Table 5.2, which is more than 0.05 so it can be concluded that the linear relationship between PE Ratio and Stock Returns is not significant based on the significance value.

Regression Analysis of Almaha Petroleum Products Marketing

Table 6.1: Model Summary of Almaha Petroleum Products Marketing

Model	R	R Square	Adjusted R Square	Std. Error of the estimate
1	0.410	0.168	0.064	6.979

a. Predictors: (Independent), PE ratio

Table 6.2: ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	78.81681779	78.81681779	1.618131136	0.239080957
Residual	8	389.6683823	48.70854779		
Total	9	468.4852001			

a. Dependent Variable: Stock Returns
b. Independent Variable: PE Ratio

Al Maha Petroleum Products Marketing Model summary shown in Table 6.1 showed a linear relationship between price earnings ratio and stock returns. As per the value of adjusted R square which was reported as 0.064 it can be concluded that the predictive ability of the proposed model is very weak. The significance level reported p=0.239 in Table 6.2, which is more than 0.05 so it can be inferred based on the significance value that the linear relationship between PE Ratio and Stock Returns is not significant.

Conclusion

The present study on the Impact of Price Earnings Ratio on Stock Returns in Oil sector in Muscat Securities Market concludes that there exists some positive correlation between the Price Earnings Ratio and Stock Returns among the oil companies listed in Muscat Securities Market. Regression analysis was done to check the impact of Price Earnings ratio on stock returns and the study has disclosed that for only one company there existed a significant relationship between the price earnings ratio and stock returns while the other companies does not show any significant relationship between the two variables. Hence the study concludes that stock returns cannot be predicted from the price earning ratio.

Direction for Future Research

1. Further Study can be done taking into consideration the external factors which has an effect on stock returns of Oil Companies listed in Muscat Securities Market.
2. The same study can also be made in the other companies listed in Muscat Securities Market.

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Abbreviations

AQ = Audit Quality
BMR = Book to Market Ratio
DY = Dividend Yield
ECM = Error – Correction models
ISR = Indonesia Stock Exchange
JSX = Jakarta Stock Exchange
MSM= Muscat Securities Market
P/E= Price Earnings ratio
PER = Price to earnings ratio
PBV= Price to book value ratio
ROE= Return on Equity
RE = Common stock return ratio