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IMPACT OF OIL PRICES ON FINANCIAL PERFORMANCE OF CORPORATE FIRMS: A STUDY OF OMANI COMPANIES

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Abstract

Recent decline in oil prices have affected the global economy in general but more specifically the economy of major oil exporting countries. Companies operating in this region have also felt the impact and consequently their various financial indicators have been effected. There is a need to study such an impact to help companies and regulators to better understand current economic scenario arising after volatile decline in oil prices. This study intends to analyse impact of oil prices on financial performance of companies in Sultanate of Oman. The key indicators used to evaluate the financial performance are revenue, profitability and earnings per share. Quantitative analysis has been conducted whereby data has been collected over four years which represent period of high and low oil prices. Data has been analysed by using correlation, scatter diagram and by conducting pair t test. It is found that companies' profitability and earnings per share has been severely affected by falling oil prices, which initially recorded decline in growth but now is showing negative growth.

Keywords: Oil prices, revenue, profitability, earnings per share

1 Introduction

1.1 Research Background

The world economy had not yet fully recovered from great economic recession of 2008 that it had to face yet another major shock in the form of declining oil prices. The decline has resulted in surplus governmental budgets to deficit ones and once considered one of the most lucrative investment sector i.e. oil and gas to the least preferred. Many analysts believe that main reason for decline in oil prices is late November 2014 OPEC decision to not to curtail oil production in response to global demand and supply factors (Baumeister and Killian 2015). Others believe that increase in oil price to begin with was result of speculation rather than genuine demand and supply and so it had to balance out eventually (Einloth, 2009). Irrespective of reasons for decline in oil prices, oil exporting countries around the world are now struggling with current scenario which they never anticipated to happen. For these countries net oil exports was a significant factor explaining budget surpluses (Huntington,2015).

The decline has not only effected the government revenue and spending but it also had an impact of private sector. In countries like Saudi Arabia many companies are laying off workers and opting for other cost cutting measures to counter the reduction in revenue. The companies in Saudi Arabia's non-financial sectors have recorded overall revenue reduction of 141.5% after the year 2013 (Lele, 2016). But the fall in oil prices also has positively affected various countries where cheaper oil has brought down the cost of living.

The economies of Gulf countries rely heavily on revenue from oil export. In case of Saudi Arabia around 90% of budgeted revenue comes for oil. Other GCC countries like Oman (84%), Qatar (70%), Kuwait (95%) and Bahrain (70%) also rely on oil exports for governmental revenue. Government spending in turn impacts on corporate profits as government infrastructure and other projects are life line of the

economies. This study is intended to study the impact of declining oil prices on corporate performance in Oman. Although Oman is not a member of OPEC, the country relies heavily on oil revenues for state expenditure. The government has been trying to diversify the economy and reduce reliance on oil. Efforts are being made to promote tourism and establish special industrial zones like *Duqm special economic zone*to encourage establishment of manufacturing units. Oman obtained World Trade Organisation's membership in 2000 and has been trying to develop legal and economic environment in conformity to the global standards. Efforts are also being made to educate and train nationals to take jobs in the private sector. Availability of skilled and qualified human resource will ensure more foreign direct investment. Muscat Securities Market (MSM) is the only stock market in Sultanate of Oman and is regulated by Capital Market Authority (CMA). This study intends to study performance of all companies listed on MSM for the period 2012 to 2015. These four years include both time period of higher oil prices (average of $100 in 2012) and lower oil prices (average of $41.85) in 2015.

1.2 Rationale of study

Sultanate of Oman like other GCC countries rely on oil revenue and this also impacts performance of various private and public sector companies. It is important to understand how the company's performance has been effected by recent decline in oil prices. This can help companies to better plan for future in terms of resource allocation and other aspects of strategic planning like new product launch etc. The results can also help the regulators and officials to come up with policies more suitable to new economic scenario. For example if the performance of the companies has been effected by declining oil prices, probably government can provide some relief to the companies in the form of lower taxes to help companies deal with difficult situation. On the other hand if corporate sector in Oman has not been effected materially by recent decline in oil, than government can raise taxes to generate revenue lost by fall in the oil prices. The study will also be useful for potential investors as they can get a clear picture of the current state of companies operating in Oman and likely future of such companies. A comprehensive study has not been done in the past to establish link between oil prices and company's performance (revenue and profits). Most of the studies in the past have focused on oil prices and company's share price. This study will take a slightly different approach and try to study the impact of oil prices on revenue and profits rather than on share price.

1.3 Hypothesis:

Ho1: There is no effect of oil process on the revenue of the corporate firm
Ho2: There is no effect of oil process on profitability of firms
Ho3: There is no effect of oil process on EPS of firms

2 Literature review

Many researchers have tried to study the impact of oil prices on equity. Significant impact of oil price shocks was not found on stock returns in china except for the shares of oil and gas companies (Cong et al, 2008). Nandha and Hammoudeh (2007) studied the impact of oil prices and exchange rates on beta and market return for 15 countries. They concluded that the two variables did not have significant impact in any of the country. Maghyereh, and Aktham (2004) studied the impact of oil prices on stock returns in 22 countries. The results of the study which was conducted using VAR showed that oil prices did not have significant impact on market returns. Sadorsky (2008) concluded that increase in oil prices have more impact on share prices than decrease in oil price. Efforts have also been made to study the impact of changing oil prices on company's performance measured by increase/decrease in sales revenue, profit and return on assets etc. Dayanandan and Donker (2011) studied North American oil and gas companies for the period 1990 to 2008. They concluded that performance of oil and gas companies was negatively affected by 2008 financial crises.Basha (2014) concluded that changing oil prices had significantly (negatively) affected the financial performance of Al-Hikma Pharmaceutical Company in Jordon.

Oil and gas sector companies are directly affected by changing oil prices. El-Sharif et al (2005) studied the relationship between changing oil prices and equity value of UK oil and gas firms. They concluded that the relationship is always positive and changes in oil prices have direct impact on firms' equity

value. Nanda and Faaf (2008) concluded that oil prices are positively related only to few sectors like oil, gas and mining. Rest of the sectors are negatively related to changes in oil prices. Their study was of global nature and selected companies from around the world. They also found consistency between their findings and previous research done in this area. Malik et al (2009) studied the relationship between changing oil prices and equity value of firms in five different sectors in America for the period 1992 to 2008. They concluded that volatility in oil prices have significant impact on equity value of the selected firms.

Ewing et al (2007) studied the relationship between changes in oil prices and various macroeconomic factors like unemployment and general economic activity. They concluded that oil prices volatility effects all macroeconomic factors including prices of various consumer products. Maghyereh and Al-Kandari (2007) studied impact of oil prices on stock prices of various companies listed in GCC. They used nonlinear co integration and concluded that oil prices have direct impact on stock prices of almost all the companies.Berument et al (2010) concluded a similar study to analyse the impact of oil prices on economic growth of selected countries in the MENA region. These countries were not oil producing. They concluded that the impact of oil prices on economic growth varied from one country to other. For most of the countries the impact was direct whereas some countries were not affected by changes in oil prices. Nguyen (2010) who conducted a study for European stock market concluded that the impact of oil price change varied from sector to sector. Saketa (2016) found that reduced oil prices have improved the profitability of airline sector. The main reason being oil the major operating expense.

3 Methodology

Quantitative technique will be used whereby secondary data will be collected for the selected companies. Hypothesis testing technique will be used which requires numerical data organized and tabulated according to assumptions of t-test. The relationship between two variables will be tested using correlation co efficient, so quantitative technique is suitable for the study. The study will include analysis of total income, profits and earnings per share of all the companies over a period of four years i.e. 2012 to 2015. These four years cover the period when oil prices were highest hovering around $115 per barrel and also when the prices declined to as low as $50 per barrel. The relevant data for company's financial performance indicators will be collected from Arab stock market analysis website http://www.asmainfo.com/ where the said data is readily available. Average oil prices will be taken from the website www.statista.com/

4 Data Collection and Analysis

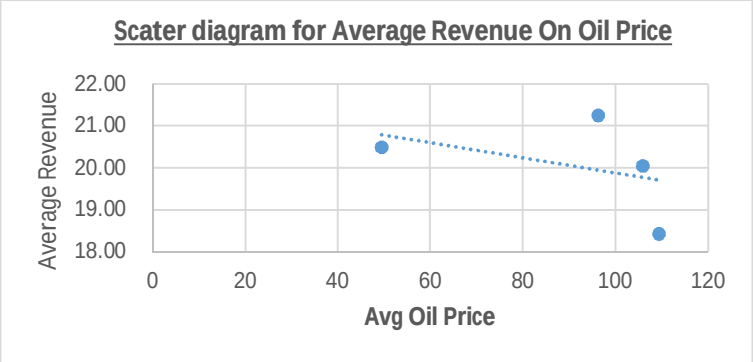
4.1 Oil prices and Total Income

Average revenue has been collected for all companies listed on the stock market for the years 2012 to 2015. Similarly average oil prices for the same period has been taken. The revenue figure here represents the turnover of the companies before deduction of any operating expenses.

Table 1: Average oil price and Average revenue

Year	Average g Oil Price ($ per barrel)	Average Revenue (RO Million)	Correlation
2012	**109.45**	18.43	-0.42047
2013	105.87	20.05	
2014	96.29	21.25	
2015	49.49	20.49	

The data above shows considerable fall in oil prices from the year 2012 to 2015. Relevant average revenue is also shown. Below is the scatter diagram for the two variables;



The scatter diagram above shows a negative trend as regression line is going downwards. This means that even decline in oil price did not reduce the revenue of companies in Oman and the revenue continued to increase from one year to another. This is an interesting finding because Oman economy relies heavily on Oil. The growth in revenue in these difficult times gives an indication that Oman Corporate sector has shown resilience to the challenging scenario created by falling oil prices.

The two variables show a negative correlation of -0.45811 which gives further evidence that revenue continued to grow even when oil prices fell. However significance of this correlation needs to be tested which can be done by conducting a paired t-test. The results of the test have been given below:

t-Test: Paired Two Sample for Means

	Average Oil Price	*Average Revenue*
Mean	79.655	20.05474537
Variance	670.3584333	1.41957846
Observations	4	4
Pearson Correlation	-0.458107785	
Hypothesized Mean Difference	0	
df	3	
t Stat	4.505221143	
P(T<=t) one-tail	0.01021332	
t Critical one-tail	2.353363435	
P(T<=t) two-tail	0.02042664	
t Critical two-tail	3.182446305	

The value 4.505 lies outside the critical value of 3.182 indicating that correlation between oil prices and revenue is significant.

Oil prices and average revenue have shown negative relationship above meaning when oil prices fell, the revenue of the companies continued to grow. However this does not mean that when oil prices will rise the revenue will fall. Nevertheless it can be concluded that revenue of the companies did not take a big hit when oil prices declined. Consequently null hypothesis Ho1 is accepted.

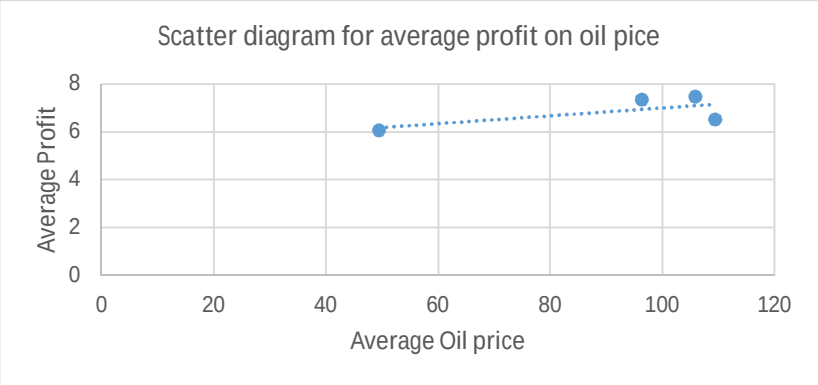
4.2 Oil Prices and Profitability

The term net profit generally indicates profit of the company after deduction of all operating expenses but before deducting interest and tax. The relevant data for companies listed on MSM is shown below;

Table 2: Average oil price and Average revenue

Year	Average g Oil Price ($ per barrel)	Average Net Profit (RO Million)	Correlation
2012	109.45	6.50	0.681079
2013	105.87	7.45	
2014	96.29	7.33	
2015	49.49	6.05	

The data above shows fall in profitability with fall in oil prices. If we draw a regression line for the two variables we will find positive trend as shown below:



The regression line above shows a positive relationship between fall in oil prices and fall in profitability of the companies. This indicates that profitability of corporate sector was effected by fall in oil prices. This is also evident from correlation coefficient of 0.681079. This finding for profitability is inconsistent with finding for revenue above. It can safely be concluded that when oil prices fell, even though revenue of the companies grew their profit margins squeezed. The main reason being higher cost of conducting business in Oman. Decline in oil prices have resulted in government taking actions to generate revenue from other sources and reduce expenses. For example government has reduced the subsidy being given on fuel consumption. This has led to increase in fuel prices but subsequently has effected cost of living. The significance of correlation between oil prices and profitability has been analysed by conducting a t test. The results are shown below.

t-Test: Paired Two Sample for Means

	109.45	*6.502844*
Mean	83.88333333	6.94633
Variance	910.1201333	0.593214
Observations	3	3
Pearson Correlation	0.996629398	
Hypothesized Mean Difference	0	
df	2	
t Stat	4.532510799	
P(T<=t) one-tail	0.022694218	
t Critical one-tail	2.91998558	
P(T<=t) two-tail	0.045388436	
t Critical two-tail	4.30265273	

It can be seen that t test value 4.53 is greater than 4.3 thus indicating that change in oil prices does have a significant impact of profitability of the companies. Consequently null hypothesis Ho2 is rejected.

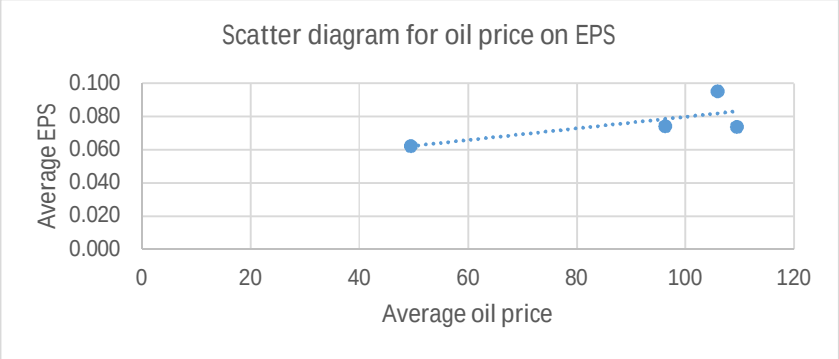
4.3 Oil prices and earnings per share

Earnings per share represents the profits available for distribution as dividends to the shareholders. The figure is arrived at after deducting all expenses including operating, interest and tax. The relevant data for selected companies is shown below:

Table 3: Average oil price and Average revenue

Year	Average g Oil Price ($ per barrel)	Average EPS	Correlation
2012	109.45	0.074	0.710513
2013	105.87	0.095	
2014	96.29	0.074	
2015	49.49	0.062	

It can be seen that average EPS of companies listed in MSM fell during the four years period when oil prices started to decline. This is evident from the regression line shown below.



The regression line shows a positive trend as it is upwards. This means that when oil prices fell EPS of the companies also fell. This is also evident from correlation coefficient of 0.710513 between the two variables. This again gives an indication of rising cost of conducting business in Oman. Businesses' operating expenses have increased but they are not able to transfer the incremental expenses fully to the customers. The significance of impact of oil prices on EPS can be further analysed by conducting a t test. The results of such test are shown below

t-Test: Paired Two Sample for Means

	109.45	*0.074056*
Mean	83.88333	0.077244
Variance	910.1201	0.000276
Observations	3	3
Pearson Correlation	0.866954	
Hypothesized Mean Difference	0	
df	2	
t Stat	4.81387	
P(T<=t) one-tail	0.020273	
t Critical one-tail	2.919986	
P(T<=t) two-tail	0.040547	
t Critical two-tail	4.302653	

The t test value of 4.8 falls outside critical value of 4.3 thus indicating that decline in oil prices have significant impact on earnings per share of the companies. This leads to rejection of null hypothesis Ho3.

Average growth in revenue, profitability and EPS was also calculated to clearly see the pattern.

	Average Growth (%)		
Year	**Total Income**	**Profits**	**EPS**
2013	24.630	99.3	29.51
2014	18.890	27.6	11.67
2015	11.400	-202.48	-48.57

The figures above shows that profitability of the companies took big toll of falling oil prices in 2015 when profits reduced by 202% on average and EPS fell by 48% on average.

5 Discussion & Conclusion

The findings of the study suggest that decline in oil prices has affected the profitability of companies in Oman. The impact was more severe in 2015. Even though the revenue of the companies continued to grow in 2015 the growth rate is almost half of what it was in 2013. If this trend continues the growth will come to halt in future years and might tend towards negative growth. This is what has happened with the profitability and earnings per share which showed declining growth in 2013/2014 and then showed negative growth in 2015.

Volatile changes in oil prices can discourage investors to further invest and can also reduce consumption of durable goods (Kilian 2014; Bernanke 1983; Pindyck 1991). This can further increase the difficulties for the corporate sector. Lack of investment can make an economy stagnant and unable to grow. Given the circumstances companies need to find ways to reduce cost by using effective and innovative methods in business processes. Many companies have been able to achieve this by investing more in new technologies. The corporate sector will have to adjust to the changing economic realities and take required steps to deal with the current scenario. Also those companies who rely heavily on government expenditure like construction industry will have to find alternative sources of revenue generation. Because government will try to cut on any avoidable expenditure to balance the books.

However the oil prices have started showing improvement and crude price which hit 27$ per barrel in 2016 has now gone up to 50$ per barrel. This will bring back investor's confidence to some extent.

6 Limitations of Research and possible new research

This research has clearly identified the trend in financial performance of companies in Oman over last four years. The findings are that cost of conducting the business in Oman have risen since the oil prices declined. But specifically which costs have increased are not evident. A comprehensive study is required in this area as to figure out which costs are directly effected by oil price volatility and also on how to control such costs. Such a study will be really useful for the industry and also will be a valuable addition to the literature.

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