**Research Article** 

ISSN: 2393 - 9532



# International Journal of Arts and Science Research Journal home page: www.ijasrjournal.com



## IMPACT OF OIL PRICES ON THE STOCK EXCHANGE OF PAKISTAN AND MALAYSIA

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## ABSTRACT

The aim of this study to show the impact of changing oil prices on the stock market of Pakistan and Malaysia. Our study is trying to show that an oil price has devastated impact on all the aspects of the life. We have taken the data of 1989 to 2010. We have applied the correlation and regression analysis. Our study is showing Pakistan is the importing country therefore; it has worst impact on the oil prices of Pakistan. Normally, most of the studies revealed that there is negative association between oil prices and stock market. It is seen that each stock market has the vital role in the progress of the economy. Rising in the prices of fuel can become reason of inflation in the country. By different estimates, emerging countries have also been affected due to increase and decrease the prices of oils.

## KEYWORDS

Oil prices, Pakistan stock exchange, Malaysia stock market and Emerging countries.

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## **INTRODUCTION**

The changes in the prices of oil have influenced on the different countries in different ways. On the topic of oil concern, there are some countries, which have crucial role in the exporting the oil like Iran and Saudi Arabia. There are also some major importing country which do import oil from another country, one of them are Pakistan. But in this paper, our concern with the Asian country. There are a lot of countries which have been affected by the fluctuations in the oil prices. Most of the studies have proved that systematic across countries are most affected rather than some other countries. In this paper, we shall see how all prices impact on the

stock markets of developing and under developing countries. Normally, most of the studies revealed that there is negative association between oil prices and stock market. It is seen that each stock market has the vital role in the progress of the economy. Rising in the prices of fuel can become reason of inflation in the country. By different estimates, emerging countries have also been affected due to increase and decrease the prices of oils. In this study, we have discussed the influence of international oil prices on the different stock exchange. As far as, like other countries Pakistan is also known as such country, which economic growth is going fall due to fluctuation in the international oil prices. It is seen that Pakistan is the importing country and more energy intensive. Our rational view is showing that increases in the prices of oil are the major concerns of inflation. Without the knowledge the oil prices of the country investors cannot predict about the stock market position.

## Stock exchange of Pakistan

In Pakistan, there are three main stock exchange 1) Islamabad 2) Karachi 3) Lahore stock exchange. Due to political instability the progress of stock exchange of Pakistan is worst. In Asia the return of Karachi stock exchange is more than other stock exchange. Karachi stock exchange is the largest and oldest stock exchange of Asia. In the 2016 from the last few months, its performance was outstanding. Different researchers have explained stock exchange in such words means, a market where securities are traded. Stock market has the vital role in the development of the economy. It is also known as the channel between investors and borrowers. According to Kohl, there is association between stock prices and oil prices. Stock exchange is known as the common feature on the modern economy .without the better performance of the stock exchange, Government cannot start new financing program.

## History of stock exchange of Malaysia

Another name of Bursa Malaysia stock exchange is Kuala Lamoure stock exchange. At the time of 1930, Singapore stockbrokers were first traded their securities in this stock exchange. It was established in 1960 at the time of financial crisis the stock exchange of Malaysia had faced the losses. Due to this reason currency of Malaysia was fallen down.

### **Problem statement**

Impact of oil prices on the stock exchange of Pakistan and Malaysia.

#### Objectives

- 1. Impact of oil prices on the economic growth of Pakistan
- 2. Impact of oil prices on the economic growth of Malaysia.
- 3. Impact of oil prices on the development of both stock markets.

#### Hypothesis study

H0: There is positive relationship between oil prices and stock prices

HA: There is no positive association between oil prices and stock market prices.

#### Literature review

Afia Malik, Found that oil prices have negative association with the stock exchange of Pakistan .For this purpose, they have utilized the data from 1989 to 2008 and applied the Pearson correlation and ANOVA method. Results have shown that there is short run relationship between fluctuation in oil price and stock exchange of Pakistan<sup>1</sup>.

Achraf Ghorbel, Examined that oil prices have short run association with the stock exchange of India .For this purpose, they have utilized the data from 1981 to 2001 and applied the classical regression model, best linear unbiased estimates (BLUE). Results have shown that there is short run relationship between fluctuation in oil price and stock exchange of India<sup>2</sup>.

Abdul et al, Analyzed that oil prices have negative association with the stock exchange of Tehran .For this purpose, they have utilized the data from 1990 to 2010 and applied the Regression, Granger-causality test and vector autoregressive (VAR) model. Results have shown that there is short run relationship between fluctuation in oil price and stock exchange of Tehran<sup>3</sup>.

Al-Fayoumi, N. A., Khamees, B. A., and Al-Thuneibat, A. A Found that oil prices have negative association with the stock exchange of Nigeria .For this purpose, they have utilized the data from 1985 to 20085and applied the Augmented Dickey Fuller Unit Root Test, Johansen co-integration test. Results have shown that there is short run relationship between fluctuation in oil price and stock exchange of Nigeria<sup>4</sup>.

Amano, R. A., and Van Norden, S. Observed that oil prices have negative association with the stock exchange of Japan .For this purpose, they have utilized the data from 1995 to 2005 and applied the pertain Zivot-Andrews Unit Root Test, F-Bound Cointegration and Toda and Yakama to Causality tests. Results have shown that there is short run relationship between fluctuation in oil price and stock exchange of Japan<sup>5</sup>.

Chu-Chia *et al*, Viewed that oil prices have negative association with the stock exchange of Ghana. For this purpose, they have utilized the data from 1989 to 2008 and applied the Unit Root Test, Co-integration and Granger Causality Test. Results have shown that there is short run relationship between fluctuation in oil price and stock exchange of Ghana<sup>6</sup>.

Cheng, H-F, Gutierrez, M., Mahajan, A., Shachmurove, Y. and Shahrokhi, M. Found that oil prices have negative association with the stock exchange of Malaysia .For this purpose, they have utilized the data from 1980 to 2001 and applied Johansen co-integration test and vector error correction model. Results have shown that there is short run relationship between fluctuation in oil price and stock exchange of Malaysia<sup>7</sup>.

Chung, Analyzed that oil prices have negative association with the stock exchange of Iran. For this purpose, he have utilized the data from 1985to 2005 and applied Co-integration and Vector Error Correction Method (VECM). Results have shown that there is short run relationship between fluctuation in oil price and stock exchange of Iran<sup>8</sup>.

Denial *et al*, Examined that oil prices have negative association with the stock exchange of Sri Lankia .For this purpose, he has utilized the data from 1990 to 2011 and applied the Pearson correlation and ANOVA method. Results have shown that there is short run relationship between fluctuation in oil price and stock exchange of Sri Lankia<sup>9</sup>.

El Hedi, (Observed that oil prices have negative association with the stock exchange of France. For this purpose, he has utilized the data from 1989 to 2008 and applied the Pearson correlation and ANOVA method. Results have shown that there is short run relationship between fluctuation in oil price and stock exchange of France<sup>10</sup>.

Gerben Driesprong *et al* Analyzed that oil prices have negative association with the stock exchange of Jordan .For this purpose, he has utilized the data from 1991 to 2011 and applied the Regression, Granger-causality test and vector autoregressive (VAR) model. Results have shown that there is short run relationship between fluctuation in oil price and stock exchange of Jordan<sup>11</sup>.

Chen, J., Hong, H., and Stein, J. C. Viewed that oil prices have negative association with the stock exchange of Brazil, Russia, India and China. For this purpose, they have utilized the data from 1989 to 2008 and applied the Unit Root Test, Co-integration and Granger Causality Test. Results have shown that there is short run relationship between fluctuation in oil price and stock exchange of Brazil, Russia, India and China<sup>12</sup>.

Jimenez Rodriguez, R., and Sanchez, M. Found that oil prices have negative association with the stock exchange of USA .For this purpose, they have utilized the data from 1986 to 2006 and applied Johansen co-integration test and vector error correction model. Results have shown that there is short run relationship between fluctuation in oil price and stock exchange of USA<sup>13</sup>.

James D. Hamilton, Examined that oil prices have negative association with the stock exchange of UK .For this purpose, they have utilized the data from 1991 to 2012 and applied the Pearson correlation and ANOVA method. Results have shown that there is short run relationship between fluctuation in oil price and stock exchange of  $UK^{14}$ .

Kaul, G., and Seyhun, H. N. Analyzed that oil prices have negative association with the stock exchange of Russia. For this purpose; they have utilized the data from 1995 to 2015 and applied the Regression, Granger-causality test and vector autoregressive (VAR) model. Results have shown that there is short run relationship between fluctuation in oil price and stock exchange of Russia<sup>15</sup>.

## Gaps in literature

1. In the prior studies, they did not discuss about the alternative of oil.

- 2. In the past studies did not discuss about the impact of increase oil prices on the prices of commodities.
- 3. In the last studies did not explain properly about the how can control oil price factor.
- 4. In the last studies did not explain that increase oil prices are the major reason of inflation.

## METHODOLOGY

In this paper, we have taken the data of 19 years of both stock exchanges and oil prices. We have taken the data from 1989 to 2010. We have seen that in these years increase in oil prices caused the increase of the prices of different commodities. Most of the theories suggest, there is association between changes in the oil prices and aggregate economic. The main goal of this paper is to investigate the association between oil prices and stock prices of Pakistan and Malaysia. The literature is showing that (Chen, J., Hong, H., and Stein, J. C) there is the negative association between oil prices and stock prices of all developing and under developing countries. (Donoso et al, 2009) is showing there is also week relationship between oil prices in china stock exchange. We have taken the stock prices as the dependent variables and oil prices as the independent variables.

#### Data analysis

For the analysis of data, we have taken the correlation and regression analysis. Descriptive analysis is helpful to calculate the mean value of data of dependent and independent variables and standard

deviation shows that standard deviation of its mean value. The result of correlation has shown that there is positive relationship between oil prices and stock exchange of Pakistan. The level of sensitivity is more in Malaysia then Karachi stock exchange.

The regression analysis showed that there is significant relationship between both dependent and independent variables.

This result is showing that all the independent variables are more efficient.

KLSE = - 32.9 + 3.02 oil prices.....

This equation is showing that there is significant relationship between stock prices and international oil prices.

The standard deviation is explaining the standard deviation of the risk level.

Table No.3 is shown that there is correlation between both dependent and Independent variables which has shown the 32.428 and value of (R-SQ) there is 59.5% bring variation on the dependent variable. Nova table is helpful to explain the model is fit value is also showing the fitness of the model. The value of p is showing that model is significant. The purpose of this paper is to show the association between international oil prices and stock market of Pakistan and Malaysia. Most of the countries like Pakistan import more oil from another country and increase and decrease the prices of fuel has the impact on the economy of any country. Other studies also trying to explore that we can control the oil prices itself and get utilized the gas in the place of oil.

Table 100.1. Descriptive analysis						
S.No	Variable	Min	Max			
1	KSE	11.2	165.4			
2	KLSE	22.5	240.8			
3	OIL PRICES	16.12	95.26			

Table No.1: Descriptive analysis

Table No.2: Correlation Matrix						
S.No	Variables	OIL PRICES				
1	KSE	0.772				
2	KLSE	0.833				
VCE - 2	$0.2 \pm 1.96$ oil misso					

KSE = -20.3 + 1.86 oil prices

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S.No	STOCK	PRICES	R R-SQ	ADJ R-SQ
1	KSE	32.428	59.5	57.4
2	KLSE	42.7	69.24	67.6





Figure No.1: Followers of the oil market will be familiar with the recent evolution of oil supply and price



**Figure No.2: Fuel consumption by sector** 





Figure No.3: Oil prices in Malaysia

#### THEROTICAL FRAME WORK



Figure No.4: Theoretical Frame Work

#### CONCLUSION

There might be some other variables which caused the changes in the variability of the stock exchange. But in this paper, we have taken the impact of oil prices on the performance of the stock market of Pakistan and Malaysia. Different reasechers had proved there are also some hidden variables which have also very huge impact on the stock market performance. Our result was shown that there is negative relationship between both stock exchange

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and oil prices. We had taken the data from year 1991 to 2011of both stock exchanges. Our results are showing that in these years oil prices were high, therefore the recital of both stock market were meager. Our study is showing that oil prices are the uncontrollable factors which are influenced on the development of the economy. Different researchers proved that those factors which impact on the stock market prices are known as the economical factors.

January - June

## RECOMMENDATION

- 1. There should be proper policy in the uncertain condition to take decision about the investment in the stock market.
- 2. Oil prices are uncontrollable variable therefore government should implement such policy to control it.
- 3. Forecasting is the better way for the investment in the stock market.

#### ACKNOWLEDGEMENT

The author which to express their sincere gratitude to Department of Accounting and Finance, University of Lahore, Islamabad Campus, Pakistan for providing necessary facilities to carry out this research work.

## **CONFLICT OF INTEREST**

We declare that we have no conflict of interest.

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**Please cite this article in press as:** Rabia Najaf and Khakan Najaf. Impact of oil prices on the stock exchange of Pakistan and Malaysia, *International Journal of Arts and Science Research*, 3(1), 2016, 9 - 15.