

## STOCK MARKET VOLATILITY AND RISK OF INVESTMENT IN MUSCAT SECURITY MARKET OMAN

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### Abstract

The current research work is aimed to determine the factors influencing investment risks in securities in Muscat Securities Market, Oman. The sample of this study covers Bank Muscat, Bank Nizwa, HSBC Bank and ALIZZ Bank. Out of the four banks considered for study three banks are conventional bank and one is Islamic bank. The study covers a period of five years from 2013 to 2017 where financial data were gathered from the company's annual report. The result of the study shows that the total number of shares of all the banks under study has declined over the years. The EPS for Bank Muscat is the best whereas for the Alizz Islamic bank it is the worst as for it has negative EPS for all the period under the study. This is also true for the volatility measure of Alizz bank as it is the most volatile having beta value of 1.71 and bank Muscat least volatile having beta value of 0.873. The study also confirms that there is risk in investment in Muscat Security Market.

**Key Words:** Investment, beta, eps, stock market, banks.

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### INTRODUCTION

Foundations and nature of economic development vary according to the economic framework adopted by each country. However, no matter how different economic approaches and systems differ in terms of its philosophy and frameworks, they seek to achieve the same goals, which is to raise the standard of living, and this can only be achieved by raising and diversifying the investment which is considered as the cornerstone of a full-scale and sustainable development process. Financial market is a tool for interaction and meeting place of different investment forces. It is also an effective financing channel for developing countries to finance their economy.

The establishment of the Muscat Security market in the midst of economic and financial reforms initiated by the public authorities in the Sultanate of Oman. This was part of the trend towards a market economy, in order to bring about the development process. The stock market provides appropriate channel for providing finance to the required industry. It helps in the allocation of funds in various areas to maximize economic and financial productivity, and it also plays a positive role in accelerating development. However, it faces problem of investment by the investors. This is largely attributed to the lack of savings and lack of knowledge of the stock market. This can only be achieved through an integrated structure of financial institutions and organizations capable of properly channelizing these savings for productive investment. Financial investment is based on forecasts and expectations which are necessarily subject to risk. Therefore, the investor should study the variation in the results due to the circumstances surrounding the investment.

Investment in securities is a sensitive activity due to the volatility in the share price. The risk in security can be minimized by offering dual class share which are less sensitive idiosyncratic risk

(Caixe, Kalatzis and Castro, 2019). The risk in stock market can also be averted by developing a technique to identify suspicious index (Richardson, 2009). Investment in security is subject to some risks, where this study aims to find out what are the various risks of investment in the security market and how are they measured and how can they be minimized? This research work will study the investment risk in securities in the Muscat Securities Market in Oman.

### LITERATURE REVIEW

Wilkinson (2013) added that the definition of investment risk is the risk of a certain investment. Moreover, the assessment of an investment risk commonly includes diverse forms extended from risks of rate of interest to risks of currency. Moreover, Amadeo (2019) added that securities are the investments that are traded in the secondary market. Securities enable people to possess assets without taking ownership. Gorbunova, N. A. (2016) in his study examined what determines equity securities risk and return. This research based on an analysis of opinions on equity securities risks among Russian and foreign researchers. Findings in this work showed that various methodological approaches adopted to equity securities analysis. This study proved that the measure of ratios of securities risks leads to help investor in decision making in investment in securities. It is clear also from results that investment risks in securities depends upon the country economy. Agic-Sabeta, E. (2017): The aim of this study was to determine the strategies used to identify the risks in portfolio insurance. This study sought to investigate advantages and disadvantages of portfolio insurance strategies. Based on recent research articles in the field, some theoretical models are reviewed. Secondary data source used were presented and analyzed via tables and graphs. Findings showed that implementation of strategies of portfolio insurance contributes in

decreasing the level of financial risks. Subramanyam & Kalyan (2018): Their study provide investors some ideas of investing and encourage them to invest in those areas where they can optimize and improve the return on their capital. This study adopted two motives for the investment risks evaluation which are: Safety of funds and liquidity and marketability. As results, their study revealed that firms' performance and firms' financial position are in correlation with present market prices. It showed also that there is no one specific method to analyze and interpret the fluctuations. Sarkar & Sahu (2018): This study aimed to analyze of investment practices of investors of stock market. This study adopted primary data source across a questionnaire distributed on 400 individual investors. This study showed that the individual investors' awareness levels (Financial investment) are more than social learning. Perceived Risk Attitude and Awareness variables were positively affected the investment Behavior of investors Esqueda, Assefa & Mollick (2012) studied the volatility in the stock market by beta-volatility and the standard deviation of stock return covering a period of 1995-2007. They found that financial integration reduces the volatility in the emerging market. Hussain Jawaid & Raza, (2014): They examined the acceptability and the validity of capital asset pricing model in 4 different stock exchanges in Asia. Authors adopted the actual and expected returns as variables of this study. To determine the difference between these variables, authors applied the paired sample t-test. Findings revealed that the capital asset pricing model accurately predict the expected returns from investments in short-term and long-term. Gibson & Mougeot (2004) using bivariate GAARCH (1,1) found that the whole market risk premium is represented by non-negligible time varying negative component which did not influenced the October crash. Badia, Serrats & Rodon (2017) In their analysis using the Mean-Gini and Mean-Variance models found that performance of assets determines by the portfolio. The study also ascertains the minimum period of holdings and the minimum risk premium required for the holding period. Ahmad, Ahmed, Vveinhardt & Streimikiene (2016) studied the volatility of the major stock market of Asia. On the basis of their study concluded that KOSPI of South Korea has the highest return followed by BSE of India and KSE, the stock market of Pakistan has the lowest volatility. Hasan, Maroney, El-Sady & Telfah (2003) found that country economic, political, financial position greatly influence stock market volatility and predictability. The study also highlights the fact that diversification can help international investors to benefit from the market of Middle East and the African country. Tasi (2017) analyzed the contagion of the Economic Policy Uncertainty (EPU) for four countries or region, China, Japan, Europe and the United States covering 22 different stock market. The result indicate that EPU is more influential in

China and the least in USA. The study also confirms that volatility due to the EPU in China and Europe influence the Asian and the European countries the maximum. Astuty (2017). In his study found that the earning per share, price earnings ratio, net profit margin, price to book value and systematic risk had significant influence on the security price. Mansoorian & Moghaddam, (2018). In their study confirms a positive and significant relationships between the stock market return and the CAR at the level of 5%. Vinh Vo. (2018) in his study examined the stock price crash of emerging economy. Based on the study concluded that foreign investors are positively associated crash in the stock market also highlighted information asymmetry in emerging economies. Iqbal (2017) investigated gold acting as a hedge against the stock market risk in three countries, Pakistan, India and USA. The result of his study shows gold successfully employed in minimizing the exchange rate risk in India and Pakistan. On the other hand the use of gold as hedging tool for stock market risk is not identical across all the three markets undertaken for the study.

**DATA AND METHODOLOGY**

To fulfill the need of the study the data were collected from annual financial reports and companies' guide from MSM market for a period covering 2013-2017. The sample of this study consisted of three conventional banks which are Bank Muscat, Bank Nizwa and HSBC Bank and one Islamic bank which is Alizz Bank. The investment risks in securities of these banks were analysed to assess the risks in these banks. The beta value is ascertained using the following technique.

$$\text{Beta } (\beta) = \frac{\text{Covariance (MSM Return, Share Return)}}{\text{variance (MSM Return)}}$$

The market return and the share return are calculated as shown below.

- Market Return =  $\frac{\text{MSM index Year (i)} - \text{MSM index Year (i-1)}}{\text{MSM index Year (i-1)}}$
- Share Return =  $\frac{\text{(Share Price Year (i)} - \text{Share Price Year (i-1)})}{\text{Share Price Year (i-1)}}$

**ANALYSIS AND RESULT**

The present part will present an overview on the descriptive statistics of investment in Muscat Securities Market such as share price, market index, earning per share for bank Muscat, Alizz bank and HSBC bank during the period from 2013 to 2017. The investment risk in stock market will be measured through the beta which measures the volatility of stock in relation to the market.

**Table 1: Number of Share Traded & EPS**

Year	Bank Muscat		HSBC Bank		Alizz Bank		Bank Nizwa	
	No. of Share Traded	Earnings Per Share	No. of Share Traded	Earnings Per Share	No. of Share Traded	Earnings Per Share	No. of Share Traded	Earnings Per Share
2017	249,217	6.4	52,098	1.0	74,001	-0.3	300,320	0.3
2016	250,327	6.7	260,008	0.8	14,438	-0.5	462,428	0.01
2015	365,735	7.7	1,094,688	0.6	26,076	-0.5	326,968	-0.4
2014	386,673	7.5	169,518	0.6	63,000	-0.5	293,997	-0.5
2013	335,596	7.2	128,387	0.5	85,345	-0.3	259,378	-0.8

Sources: official website of Muscat Security Market.

The table-1 shows the number of share traded and the EPS of the selected bank. From the table-1 it can be inferred that for all the bank taken for study, the total no of share traded for all banks has declined during the period of study. This may be due to the decline in the crude oil prices and over all fall in the bank core business

activity. The EPS of Bank Muscat is the greater than all the other bank undertaken for the study. The Alizz bank is the worst in terms of the EPS, as for all the period undertaken for the study it has negative EPS.

**Table-2: Measure of Volatility**

Bank Muscat	0.873
HSBC Bank	1.706
Alizz Bank	1.710
Bank Nizwa	1.112

The table-2 above shows the beta value of all the selected security listed in Muscat Security Market for the study. From the table it is clear that the Alizz bank, Islamic bank is more volatile while the Bank Muscat representing the conventional bank is the least volatile.

**Hypothesis Test**

To test the hypothesis that there are no investment risks in securities of Muscat Securities Market the mean value and Standard Deviation of BETA are used. The below table represent the output of this test.

	Mean	Std. Deviation	Std. Error Mean
BETA	1.350	.424	.212

It is inferred that the Mean value is 1.350 which greater than 1 and the Standard Deviation is 0.424.

**One-Sample Test**

	Test Value = 1					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
H1: There are no investment risks in securities of Muscat Securities Market	1.651	3	.197	.35047199	-.324897	1.025841

The Sig. (2-tailed) = 0.197 is greater than 0.05. This proves that this hypothesis is not accepted, which reveals that there are investment risks facing MSM. The risk in the security market need to be minimized to encourage investments. Further, investor current risk compensation has a positive effect on the stock return and past risk compensation has got negative effect, (He, He & Wen, 2019). The security market plays a great role in the economic growth as found by Alam and Hussein (2019) in their study.

**CONCLUSION**

The study is aimed at measuring of the investment risk in securities listed in Muscat Securities Market (MSM) of Oman. The author collected data from guidance of companies from MSM’s website during 2013 to 2017. Results attained from this study shows that HSBC ranked the first place in term of number of traded shares where it reached 1,094,688 in 2015. In recent years bank Muscat witnessed an increase in EPS value comparing to HSBC and ALIZZ banks. In all years of the study, ALIZZ bank registered a loss in stock investment where EPS varied between -0.3 and -0.5. The risk is measured using the beta value. The beta values for each bank of the sample (except bank Muscat) are greater than 1 which indicated that price of stocks, swings more wildly than most stocks.

The study clearly indicates presence of volatility in the Muscat Security Market. This risk factors need to managed than only the overall increase in the volume of shares traded will take place and investors’ confidence in the market will increase.

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