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To Understand the Movement of NYSE and NASQAD Market Index Towards the Shift in the Trading Volume of Investors

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Abstract: The purpose of this current study is to understand the relationship on the movement between the NYSE and NASQAD marker index towards the shift in the trading volume of investors in the stock market exchange of NYSE and NASQAD. The previous study provides the suggestion that the movement of the market index and stock price share the positive correlation against the investor's behavioural on the trading activities as the higher and lower trading activities are being affected by the confidence in the market. The high growing of the market is expected to deliver higher expectations of the investors driving the higher trade in the stock market exchange. The quantitative study had been conducted with reference to the historical data from 2001 to 2022 where the monthly data had provided the understanding on the past pattern and trend for the data input will be used to generate the correlation analysis and regression analysis for the findings of the study. The outcome had suggested the lack of evidence to point out the similar findings as suggested from the previous study where there is no relevant positive correlation and relationship identified between the market index of NYSE and NASQAD against the trading volume for the stock exchange market. Therefore, the study had been concluded as not significant rejecting the initial hypothesis as drawn from the literature review of the study. The conclusion of study provides the relevance suggestion for the potential future research to be explored to expand the academic research study.

Keywords: market index, trading volume, NYSE, NASQAD, investor's behavioural.

Introduction

The investor behavioural had been the major focus of the study within the scope of investment finance. The investment finance defines on the behavioural of the investor that define the investor's strategy when comes to making curial investment decision. The economic condition had been highly linked to the performance of the stock market where the boom market will likely to observe ethe increase in the stock prices and vice versa. This had been supported by the fact where the growth of the investment tends to be more favourable during the good times of the economy which triggered the favourable impact towards increase in the growth of investment for the investors (Iqbal & Riaz, 2015). The optimistic of the market had been contributing to the higher activities in the trading within the stock market where the investors tend to be more confident on the performance of the stock market (He et al., 2020).

For instance, the happening of the financial crisis back in 2008 had been showing the negative impact towards the confidence level on the market where the stock market had crashed hard due to the recession during the Great Depression which leads to the fall in the trading activities among the investors (Sheta, Ahmed & Faris, 2015). This had become the evidence posing that the economy condition had been proving to affect the confidence of the investors in trading within the stock market. This is because the investors hold the sentiment where the investor behavioural tends to shift into more conservative approach during the recession as the recession will translate to the lack of growth in the stock performance in the stock market (Batrinca, Hesse & Treleaven, 2018). Therefore, it provides the usual expectations for the investors to reduce their intention to engage in the investment in the stock market due to the high uncertainty which could create high exposure to the potential loss suffered by the investors. With this, the investor will become lesser in terms of the risk tolerance and become more conversative in making high volume trading to reduce the overall risk of investment (He et al., 2020).

This had been crucial for the study on the investment world where the demand and supply in the secondary investment tends to become one of the motivations to drive the activity in the stock market exchange that will contribute to the growth in value for the stock price (Chiah & Zhong, 2020). This is because the high volume of trading tends to provide the push to drive the higher achievement in the stock performance. In other words, the rise of the economy will lead to the higher trading of volume for the units in the stock market which would eventually turn the synergy in the stock performance (Choi, 2019). However, there is still lack of the research evidence to support this investment concept leading to the motivation towards the development of this current study to be conducted to provide the depth of the research to explore the validity of the relationship between the trading volume and the stock price movement within a stock market. With this, the study will reference to the New York Stock Exchange (NYSE) market index to identify the significant of the objective of this study.

Literature Review

The rational expectations theory demonstrates the concept of the theory where the expectations had created the forecast on the macroeconomics changes and investment growth opportunities in the future based on a certain change of event in the environment (Widyarti, Wahyudi & Hersugondo, 2021). The rational expectations theory provide close relation to study the investors behaviour where the risk averse investors tends to show off their conservative side of the decision making in investment choice leading to the expectations drawn on the investors to avoid risky investment in risk times. Based on the scope of current study, the investors are expected to adopt the behavioural to be more risk averse to reduce the number of investment trading in the stock market when the stock market performance had not been favourable which will observe the alignment with the response in behaviour in investors towards the change of the market (Batrinca, Hesse & Treleaven, 2018). This would mean that the increase and decrease of the market index and stock price performance will become the driver to motivate the investors to invest or not to invest in the stock market. The increasing in the overall stock market performance will induce the expectation where the investors will become more confidence with the future growth of the stock price leading to higher trading and investment activities from the investors and vice versa (He et al., 2020).

Choi (2019) mentioned that the market index had been the right representation for the market performance and often become the indicated for economist and financial expert to reference to the movement in the market index to understand the pattern and performance of the stock market over a certain period of time. Tapa & Hussin (2016) emphasize that the economic condition and stock market performance shared closer relationship where the boom and recession in the economy will become the reason for the stock market to rise and fall as the business value and performance tend to follow the economic condition in the country. For instance, the recent Covid-19 had observed the major fall in the economy recording one of the words recessions in the history where the negative impact was highly felt in the stock market in many countries where the stock market observe the sharp fall in the market indices indicating the significant pitfall for the stock performance in the stock market (Chiah & Zhong, 2020). With this, the investors will tend to pull out from various investment opportunities in the stock market to reduce the potential risk in the exposure of losing the principal of the initial investment.

Based on the previous study, Souza, Barbedo & Araujo (2018) highlighted that investors' behavior in the trading of the stock market can be reference to the volume of trading where the investors will tend to have higher engagement in the trading volumes provided the current growth of the stock market posed a strong positive signal for the investors. The market index performance has become the guidance and reference for the investors to make their investment decision where the rise of the market index provide the impression that the stock market is showing positive growth triggering the investors to be attracted to invest in the secondary market. Al-Ajmi (2017) mentioned that the trading activities of the stock market is expected to increase with the good economic growth and market index growth where the high volume of trading often implies the confidence of the investors towards the current growth and return on the stock investment opportunities. There is no certainty in stock investment where the investors tend to be influenced by the movement of the market index which will serve as the signal for the investors to choose to invest or not to invest in the current stock market (Iqbal & Riaz, 2015).

With reference to the previous study, there is suggestion provided from the previous findings pointing the potential of the significant relationship between the market index against the volume of trading in stock market. This had been leading to the development of the hypothesis to point out the expected finding for the current study where the hypothesis developed as below will be tested in the later stage in the findings and result of the research study.

H0: There is no significant positive influence of market index towards the shift in the volume of trading among investor in the stock market exchange.

H1: There is significant positive influence of market index towards the shift in the volume of trading among investor in the stock market exchange.

Methodology

The methodology of the research will focus on the adoption of the quantitative study method where the quantitative analysis will be observing the data input of numerical data that will become the unit of study for the current research. The quantitative study had been common to study within the scope of economics and finance where there is involvement of the numerical measurement in the data input which put the quantitative analysis more fitting to analyze for the pattern and trend of the data to observe the significant in the outcome of the study (Apuke, 2017). The quantitative study also being defined as the approach that provide more objective findings that will serve as the concrete evidence for the study without creating any doubt or circumstances for the research to be rejected by other views as there will be no biased opinion involvement in drawing the conclusion using the quantitative method of analysis (Sharela, 2016). The current study will adopt the deductive reasoning approach where the findings of the study will be used as reference for the hypothesis testing to identify the outcome of the research having the hypothesis drawn from the logical thinking based on the findings from the previous research study (Cooper & Schindler¸ 2014). The longitudinal study will be introduced for this study as the current study developed the study on the data input based on the timeline from the year 2001 to 2022 to understand the overall pattern and trend from the good and bad times in the economy as part of the coverage in the scope of study (Apuke, 2017).

The data collection for the study will be focusing in obtaining the data from the secondary data market where the historical data for the market index of New York Stock Exchange (NYSE) and NASQAD had been extracted from the publicly available source in the online platform such as Yahoo Finance to ease the data collection process. The data extracted will be based on monthly basis with reference to the timeline from 2001 to 2022 which induce the study covering the time of 2008 financial crisis as well as the recent Covid-19 situation. The reason for choosing the US stock market as the preference for the target population had been clearly motivated by the significant and high activities in the stock market among the global market indices.

The quantitative study will then be proceeded with the SPSS software where the SPSs software will become the fundamental tool in generating the statistical output for the quantitative analysis study. The series of the statistical will become the empirical evidence that will point out result ad outcome of the research that will draw the objective to conclude the current research study (Saunders, Lewis & Thornhill, 2015). The reliability test will become the benchmark o test the consistency and validity of the data input from the market before proceeding to test the correlation analysis as well as regression analysis that will then be utilized for the hypothesis testing for the study (Sekaran & Bougie, 2016). The outcome of the study will then be discussed further in this study based on the expectation of the result from the previous literature review.

Data Analysis

Table 1: Summary of Analysis (NYSE Against Vol_NYSE)

NYSE against Vol_NYSE		
Correlation	Pearson Correlation	-0.067
	Sig. (2-tailed)	0.294
Regression	t-stat	-1.052
	Sig	0.294

The Table 1 demonstrate the summary of the quantitative analysis for the NYSE market index against the trading volume for NYSE stock exchange where the summary of the analysis includes the two major quantitative analysis which include the correlation analysis as well as the regression analysis. The Pearson Correlation Coefficient had been showing negative correlation being presence between the variables, but the p-value recorded had been above the 5% tolerance level which indicate that the negative correlation is not significant being existed between the two variables. On the regression analysis, the p-value of sigma had been recording 0.294 which also exceed the tolerance level of 5% showing lack of evidence to support the decision on identifying the significant relationship between the NYSE market index against the trading volume of the NYSE stock market. With this, the summary had conclude that there is no real relation between these two variables as the historical data failed to showed any significant in the influence toward the movement and shift of the data between the variables over the past 20 years.

Table 2: Summary of Analysis (NASQAD Against Vol_ NASQAD)

NASQAD against Vol_NASQAD		
Correlation	Pearson Correlation	-0.331
	Sig. (2-tailed)	0.000
Regression	t-stat	-5.460
	Sig	0.000

The Table 2 had been demonstrating the summary of the quantitative analysis capturing the related information for the independent variable of NASQAD market index against the trading volume of NASQAD stock market being the dependent variable for the research. The correlation analysis and the regression analysis had built up the summary of the analysis where the relationship between the two variables of NASQAD market index and the trading volume within NASQAD stock market can be further study based on the historical data of the past 20 years. The result and findings based on the Table 2 had shown the suggestion on the presence of the negative correlation where the Pearson Correlation Coefficient of -0.331 had been detected which translate to the detection of weak negative form of correlation exist between the two variables. The p-value of 0.000 had indicate the significant of the negative correlation bonding between the two variables where the increase or decreases in the market index of NASQAD had slightly contributed to the opposite movement of the trading volume representing the investors' behaviour in the investing activities in the stock market. For the regression analysis, the p-value of 0.000 had been identified in the output which provides sufficient evidence to support the existence of the significant relationship between the NASQAD market index against the trading volume of NASQAD stock market.

Based on the findings on the outcome for the quantitative study, the findings suggested that there is totally no close relationship between the NYSE market index against the trading volume within the NYSE market index showing that the investment behaviour of the investors in terms of the trading volume is not affected by the movement of the market index of NYSE. On the other hand, there is presence of the negative relationship between the NASQAD market index against the trading volume of NASQAD stock market which showed the opposite result from the expected findings as derived from the initial literature review of the previous research study. With this, there is show of no evidence to point the support towards the initial hypothesis drawn in H1 leading to the decision to reject the alternate hypothesis and accepting the null hypothesis in H0 as below.

H0: There is no significant positive influence of market index towards the shift in the volume of trading among investor in the stock market exchange.

H1: There is significant positive influence of market index towards the shift in the volume of trading among investor in the stock market exchange.

The difference in the current findings against the previous findings as suggested from the literature review could be risen due to multiple factors. The decision to invest for the investors indeed is being affected by the confidence of the investors towards the market but the market index performance is not the sole indicator for the investors to refer to when comes to making wise investment decision. There are many concepts and models as introduced in financial investment and economics which may become the higher reference over the market index performance. Besides, the representation of the market index performance as the guidance to determine the trading activities for the investors could be very subjective as the decision for the investors within the investment decision could be very depending on the preference and customization of the portfolio for the investors. For instance, different investors could be focusing in investing in different stocks and industries which lead to the benchmark for the market index may not provide the accurate reference to their desired investment strategy. The market index performance could be too big to serve as the guidance to make investment decision making as the coverage for the market index like NASQAD and NYSE had been too wide and lack of focus for the investors to create a more focus and precise portfolio for their customized investment strategy. With this, these reasons could be the potential reason that lead to the outcome in rejecting the hypothesis as initial drawn in the literature review showing the disagreement with the expectations on the outcome for the current study.

Conclusion

The outcome for this research had been providing the significant in the study where ethe study provide the perspective of the new knowledge being created within the are of study for the investment behavioural. The findings had been providing new insight for the academic study reflecting the improvement in the area of study for the current and future researchers to reference on the current findings. Besides, the outcome of the current study also open doors for the area of study to further explore on the potential area of expertise that are directed from the current findings and result of the study creating new opportunities for the world of academic research. In addition, the significant findings of the study will come in great reference for the investors to understand the current norm of the investors' behaviour to understand the predated action of the investors based on the performance of the market index. This will help the investors to reference the study to identify the next step in their investment strategy and decision making to avoid making unnecessary error that could jeopardized their potential return in the investment.

The current research conducted may not achieved the desired result as per reference to the previous study, but the current study provides the suggestion for the future study to be conducted within the area of expertise. Firstly, the current study had only be focusing in the US market index as the reference of study where the wide range of stocks in both NYSE and NASQAD market index could provide the impact on the outcome for the current findings. Therefore, the future research can replicate the current methodology to study the different market indices from different countries which could provide fresh insight as well as validation on the current empirical evidence of this current study. Furthermore, the study on the behavioural of investors may not always be reflected towards the trading volume or activities of the investors but could be driven by other human factors including the risk tolerance, income level, experience in investing and so on. Therefore, the future study can consider adopting the questionnaire design approach to identify the potential significant difference in their personal attributes in affecting the behavioural for the investors towards the investment opportunities in the market.

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