

# THE EFFECT OF ACCOUNTING AND MARKET INDICATORS TOWARDS COMPANIES' PERFORMANCE, MEDIATED BY STOCK VOLATILITY: A CONCEPTUAL FRAMEWORK

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## Abstract

*Analysts in business companies face challenges to determine factors affecting company's performance. Accounting and market indicators are one of the significant factors that necessary to verify its impact on the company's performance continuously. In addition, the scaling rate of volatility indicates larger moves and changes in the asset's value. An asset with higher volatility is likely to make a large move up as it does down. This condition would also create a noticeable impact on performance. Therefore, the study proposes a conceptual framework to test the accounting and market indicators towards company's performance and the mediating effects of stock volatility on its relationships, by a review of existing studies and theories. The panel data of companies using regression models, multiple discriminant analysis, and structural equation modelling had supposed as a suitable analysis to accomplish the study objectives. The model fit will be confirmed after the collection of the research data and analysis. This study is important as it offers potential investors a better understanding of the factors affecting the company's performance. Further, investors will be able to appropriately decisions their investments and identify relevant factors that affect performance. The study is expected that profitability analysis, credit risk analysis, valuation analysis and market capitalization are a significant factor could directly affect the company's performance, could discriminate between companies' performance, and the stock volatility has a mediating impact on its relationships with the company's performance.*

*Keywords: Islamic Finance, Companies' Performance, Accounting Indicators, Market Indicators, Stock Volatility.*

## INTRODUCTION

Company performance measurement is a key element of the organisational management control system. Performance assessment helps the company and its stakeholders to identify deficiencies in its various activities and opportunities to improve future performance. An effective performance measurement system must include the basic performance indicators that measure the activities of the company

from the perspectives of clients, management, analysts, users, and other parties interested in the organisation's performance (Dalvi & Baghi, 2014). In addition, good performance metrics help match the company's sub-goals with its strategic objectives, especially when the performance measurement system includes both accounting and financial measures.

The objectives of corporate management include increasing shareholder wealth and evaluating economic and market performance. Accounting performance measures, which are based on accounting information and capital asset pricing model, are used to achieve those objectives (Malgwi & Dahiru, 2014). Financial performance metrics are beneficial as they offer a real perception on the operating, investing, and financing activities of an organisation. Evaluating and comparing the performance of these activities from time to time enables the management to make necessary decisions in an informed manner. Moreover, explaining the costs of transactions and maximising the use of resources enhance the company's realization of efficiency and effectiveness, two attributes sought by investors (Alswalmeh & Dali, 2020a; Subramanyam & Wild, 2009). Furthermore, company's performance indicates a "result obtained in management, economics, accounting and marketing. This printed-features of the company's competitiveness, efficiency and effectiveness and its procedural, structural and administrative" (Verboncu & Zalman, 2005). According to many previous researches, there exist many common and different factors for a company's performance. Analysts in business companies face challenges to determine factors affecting company's performance. Accounting and market indicators are one of the significant factors that necessary to verify its impact on the company's performance continuously (Nm, 2016). Indeed, Alswalmeh & Dali (2019b) found that many researchers in the world targeted on the accounting and market indicators that can affect toward company's performance, and their impact on productivity of companies.

In addition, investor decisions are associated with volatility, that is, the rate of increase or decrease in stock prices for a given set of returns. It is an important measure of the uncertainty of changes in asset prices and is used by market participants, traders, and observers. Investor appetite for volatility varies: some favour it, while others avoid it. The scaling rate of volatility indicates larger moves and changes in the asset's value. An asset with higher volatility is likely to make a large move up as it does down. This condition would also create a noticeable impact on performance (Al-Najjar, 2016; Alexander, 1998; Poon & Granger, 2003a). Therefore, this study intends to answer the questions:

1. What are the impacts of accounting and market indicators on company's performance?

2. What are the accounting and market indicators that can discriminate between performing and underperforming companies?
3. What is the mediating effect of stock volatility on the relationships between accounting and market indicators and company's performance?

Thus, the study aims to construct a conceptual framework of accounting and market indicators that were determined to affect company's performance, identify indicators that can discriminate between performing and underperforming companies, and investigates the mediating effect of stock volatility on its relationships towards company's performance.

## MATERIALS AND METHODS

This study focused on determining the accounting and market indicators affecting company's performance and mediating stock volatility on the basis of the investigated variables in the recent literature, to proceed with this research. The secondary data collected in this study include book, journals, and online databases.

The research study conceptualized out on the accounting and market indicators as independent variables, company's performance as dependent variables, stock volatility as mediator variable as illustrated in Figure (1). Based on the statement, a theoretical framework has been developed to represent the relationship between different types of accounting and market indicators, three variables of a company's performance, and two variables of stock volatility. The following sections describes the overall study's variables.

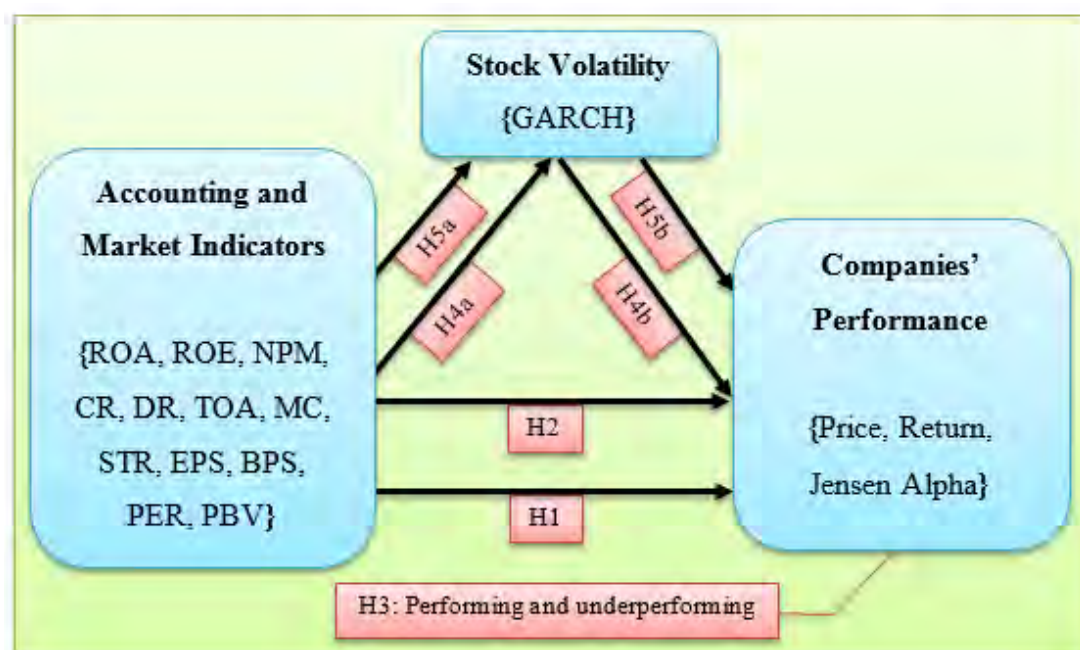


Figure (1): Conceptual Framework

## 1. Company's Performance

In economics, there is several definitions regarding the concept of performance; their differences largely rest on the perspectives of the users of performance information. Current and potential investors see performance as the profitability of their investments; managers consider it as the overall operations of the companies that they manage; employees recognize the concept as the stability and profitability of their jobs; and creditors see performance as a company's profitability, stability, and ability to service debts.

Over the last four decades, there have been several attempts to provide a general definition for performance in general and to apply the concept of performance in economic and financial sciences to different types of companies. Baird (1986) viewed the concept of performance as "a direct action that should be expressed by a verb", though in most cases the word either refers to an action (verb), event (results), or simultaneously both. Niculescu & Lavalette (1999) and Bourguignon (1995) argued that the term company performance produces three simultaneous interpretations: "action", "outcome", and "success". They agreed that "action" relates to the purpose of the company, "outcome" the achievements for the expended resources, and "success" to the environment in which the company is located. In other words, the first concept refers to the company's mission, the second to how well it manages its resources, and the third to its ability to adapt to external factors.

Burgington (1995) presented three acceptable approaches to company performance. First, performance is action, that is, a process and not a result that appears every time; its content is almost secondary to its own dynamics. Second, performance is the result of an action that is subsequently evaluated. Third, performance means success. Performance does not exist independently; rather, it is defined by the different users of accounting information, hence some may perceive the accomplishment of certain indicators as a success, but others would not share a similar view. Verboncu & Zalman (2005) defined company performance as "a particular result obtained in management, economics, accounting and marketing that print features of competitiveness, efficiency, and effectiveness of the organisation and its procedural and structural components." Performance as a concept therefore is synonymous to competitiveness (Alswalmeh & Dali, 2020b).

The stock markets are major elements of the global economy and the financial cycle, thus building a model that can price assets accurately is of great significance. Researchers have developed many models throughout the years to investigate stock market movements and to explore the inherent laws of asset valuation. The current study adopts the stock price, return, and Jensen alpha model to represent the company's performance.

## 2. Accounting and Market Indicators

Accounting and market indicators are most useful when they are oriented to the future. Therefore, analysts must assess the factors that can potentially influence the trends and magnitude of the ratios in the future, such as new accounting standards. Ratios are also affected by a number of external factors beyond the internal operating activities, including government policies, accounting standards, industry factors, and economic events. Nevertheless, a good ratio analysis highly depends on its skilful application and interpretation by analysts (Subramanyam & Wild, 2009; Alswalmeh & Dali, 2019a).

Of the different types of ratio analysis, the current study employed the indicators belonging to three broad categories: profitability, credit (risk), and valuation.

### 2.1 Profitability Analysis

Profitability analysis is “the evaluation of a company’s return on investment”. Profitability means the ability of companies to generate profit from their business activities. It is an indication of the management’s efficiency to generate profit using all available resources (Gibson, 2009, p. 297). Harward & Upto (1961) defined profitability as “the ability of a given investment to earn a return from its use” that can either be distributed to shareholders or reinvested into the company to enhance solvency.

A company’s overall value is a key determinant of its ability to generate profit on the capital invested. Analysts consider profitability as the main focus of financial analysis. Profitability indicators measure the company’s efficiency to gain profits, design and implement policies, and make investment decisions under different situations. Profitability is the main subject of interest of investors, creditors, and managers.

According to Robinson, Greuning, Henry, & Broihahn (2009, p. 152) ratios are important measures of a company’s profitability. Return on assets and return on equity are the most commonly used measures of profitability; they should be used to evaluate companies both individually and as a group to identify the drivers of profitability. The following table shows the most important profitability indicators along with their measurements and interpretations.

**Table 1: Profitability Indicators**

#	Ratio	Measurement	Interpretation
1	<b>Return on Assets</b>	"(NI + Interest Expense * (1-Tax Rate)) / Average Total Assets"	The return generated by a company for a given level of assets
2	<b>Return on Equity</b>	Net Income / Average Shareholders' Equity	The return generated by a company to equity holders
3	<b>Gross Profit Margin</b>	(Revenue – Cost of Revenue) / Revenue	The percentage of revenue available to cover operating and other expenditures
4	<b>Net Profit Margin</b>	Net Income / Revenue	"Better view of a company's potential future profitability"
5	<b>Return on total Capital</b>	EBIT / Short- and long-term debt and equity	"Profits generated by a company on all the capital that it employs"

Sources: Robinson et al. (2009, p. 152); Subramanyam and Wild (2009, p. 447); Gibson (2009, p. 298); (Brealey, Myers, & Allen, 2011, p. 707).

## 2.2 Credit (Risk) Analysis

Credit (risk) analysis aims to evaluate the ability of a company to meet its obligations. Robinson et al. (2009, p. 308) defined credit risk as "the risk of loss caused by a counterpart or debtor's failure to make a promised payment". Credit (risk) analysis depends on three major areas: liquidity, capital structure, and solvency. Subramanyam and Wild (2009, pp. 527-528) explained that liquidity reflects "the availability of company resources to meet short-term cash requirements", while solvency refers to "a company's long-run financial viability and its ability to meet long-term obligations". Capital structure, meanwhile, means the sources of financing of a company.

Liquidity analysis intends to evaluate the ability of companies to generate profit and satisfy working capital requirements from their operating activities. The current ratio is an important indicator of liquidity. It measures the availability of current assets to cover current liabilities. Capital structure and solvency analyses, on the other hand, identify the proportion of debt in the capital structure of a company, as well as assessing risk and financial leverage. Moreover, the analyses can reveal the potential risk-return relation in a company's capital structure and its implications (Gibson, 2009, p. 201).

An important capital structure and solvency indicator is the debt ratio. The following table shows other important credit (risk) indicators and their measurements and interpretations.

**Table 2: Credit (Risk) Indicators**

#	Ratio	Measurement	Interpretation
1	<b>Current ratio</b>	Current assets / Current liabilities	"Assets expected to be consumed in relation to liabilities falling due within one year"
2	<b>Defensive interval ratio</b>	(Cash + short-term marketable investments + receivables) / Daily cash expenditures	"How long the company can continue to pay its expenses from its existing liquid assets without receiving any additional cash inflow".
3	<b>Debt ratio</b>	Total liabilities / Shareholders equity	"Amount of debt capital relative to equity capital"
4	<b>Coverage ratio</b>	EBIT / Interest payments	"Number of times a company's EBIT could cover its interest payments".

Source: Robinson et al. (2009), p. 310; Subramanyam and Wild (2009), p. 530; Gibson (2009), p. 221; Brealey, Myers & Allen (2011, p. 720).

### 2.3 Valuation Analysis

Analysts use a set of methods to evaluate the equity of companies. Valuation analysis, based on valuation ratios, is important to many users of financial statement. A reliable valuation of stocks enables investors to make buy, sell, or hold decisions in relation to investments, credit decisions, business merges, and public stock offerings (Subramanyam & Wild, 2009, p. 40).

A valuation analysis provides understanding on the financial profile of companies. It gives investors the ability to choose the appropriate valuation model upon which they can base their investment decisions. Financial analysis also provides useful information to complete valuation analysis. Fundamental analysis involves the assessment of a company's equity and performance to assess its relative attractiveness as an investment. Ratios should be useful in valuation analysis (Gibson, 2009, p. 464). Robinson et al. (2009, p. 303) stated that the end product of a valuation analysis is often a valuation and recommendation about investment, while theoretical valuation models are useful in selecting indicators that would be useful in this process. Moreover, the positive values of these indicators send out positive signals to all investors, creditors, and interested parties.

Market capitalisation "is the sum derived from the current stock price multiplied by the amount of shares outstanding" (Olson, 2005; Woo, 1981). Woo (1981) argued that because outstanding stocks are transacted in the secondary market, market capitalization could be used as a proxy for the public's valuation of a company's net worth and as a determinant in some stock valuation models. Capitalisation may be compared to other economic indicators. According to O'Regan

(2002), market capitalisation can be an indicator of a company's value, but it is only an ephemeral measure as it is based on the current stock market prices. The true value of the company is represented by its balance sheet, product positioning, and profits. Other variables may not reflect market capitalisation due to information asymmetry.

The identification of appropriate indicators will help investors to monitor changes in the market. Stock market indices are the commonly used indicators to monitor market performance and report changes in market capitalisation. Koller, Goedhart, & Wessels (2010, p. 337) defined stock market performance as a measure of returns over a period, in which stock returns are measured based on the portfolio of the manager, usually on a daily, weekly, monthly, and yearly basis. While there are various ways to measure stock market performance, the most common measure is market capitalisation. However, the following table shows some important valuation indicators along with their measurements and interpretations.

**Table 3: Valuation Indicators**

#	Ratio	Measurement	Interpretation
1	<b>Price to Earnings</b>	Price per share / Earnings per share	"How much an investor in common stock pays per dollar of current earnings"
2	<b>Market value added</b>	Price per share / Book value per share	"Market judgment about the relationship between a company's required rate of return and its actual rate of return"
3	<b>Earnings per Share</b>	Net income minus preferred dividends / Average outstanding common shares	"The amount of earnings attributable to each share of common stock"
4	<b>Dividend pay-out ratio</b>	Common share dividends / Net income attributable to common shares	"Percentage of earnings that the company pays out as to shareholders"
5	<b>Dividends per Share</b>	Common dividends declared / average outstanding common shares	"The amount of dividends to investors for each share of common stock"
6	<b>Market capitalisation</b>	Total current stock price * number of shares outstanding	"Market value of the company"

Source: Robinson et al. (2009, p. 303); Subramanyam and Wild (2009, p. 613); Gibson (2009, p. 342); Brealey, Myers & Allen (2011, p. 707).

### 3. Stock Volatility

Markowitz's seminal work (1952) on the basic portfolio theory posits a linear risk-return relationship, providing a useful model for portfolio and asset management, as well as assets and derivatives valuation. Uncovering the risk-return relationship offers

a deeper understanding of market dynamics and can serve as a reference for the development of new asset pricing models. In addition, Black (1976) and Christie (1982) studied the risk-return relationship and found that the declining stock prices of individual companies would increase their financial leverage, increasing the equity's volatility. The study used stock volatility as the mediator variable, which was expected to influence the relationships between the accounting and market indicators and company performance. Analysing the mediating effect of stock volatility contributes additional knowledge regarding the measurement of company performance.

Recently, researchers have placed great attention on volatility measurement. There are many measures of volatility. Poon & Granger, (2003b) reviewed 93 studies to determine the best method to forecast volatility. They concluded that GARCH produces the most accurate forecast of volatility. Therefore, the current research employed the GARCH model to measure the stock volatility using monthly data of stock prices  $P_i$  and stock returns  $R_i$  for each company.

#### **4. Hypotheses Development**

The current study investigates the effects of accounting and market indicators on company performance. These indicators are among the most widely used tools in finance. Clemente, Taffarel, & Silva (2012) showed that accounting and market indicators had significant impacts on stock performance and confirmed that accounting analysis is an important source of information. Hall (2009) found that the annual turnover ratio predicted changes in stock price and return. Moreover, the use of accounting and market indicators could improve company performance (Balatbat, Lin, & Carmichael, 2010; Rani, Yadav, & Jain, 2015).

Profitability indicates the ability of companies to generate profit from their business activities and by exploiting all available resources (Brealry et al., 2011, p. 711). Horobet (2012) found that operational profitability had a significant impact on company performance. Wilson et al. (2012) showed that revenue growth positively affected company performance. Ally (2013) found significant differences between banks when their performance was measured with ROE. Mubin, Lal, & Hussain (2014) and Delen, Kuzey, & Uyar (2013) found profit margin and asset utilization indicators significantly predicted company performance. Similarly, Hornungová, Jana, & Milichovský (2016) concluded that operational indicators had strong relationships with companies' performance.

Credit risk analysis relates to liquidity, capital structure, and solvency. Liquidity indicates the ability of a company to meet short-term obligations, while solvency to meet long-term debts. Capital structure refers to the financing sources of a company (Subramanyam & Wild, 2009, p. 36). Paulo (2008) and Erdoğan, Erdoğan,

& Ömürbek, (2015) found significant relationships between liquidity ratio, debt ratio, and financial performance. Pawar (2013) found that the liquidity position of a company reflected its ability to pay short-term commitments. Lenka (2017) revealed that debt ratio had a significant impact on company performance. In addition, Creixans-tenas & Arimany-serrat (2018) concluded that acceptable levels of liquidity and indebtedness significantly affected company performance.

The main objective of valuation analysis is to estimate the intrinsic value of company stock (Subramanyam & Wild, 2009, p. 36). Jiang & Lee (2012) found that EPS and market-to-book-value ratio significantly predicted company performance. Aliabadi, Dorestani, & Balsara (2013) found a strong relationship between valuation analysis and company performance. Vasiu (2016) showed a strong correlation between EPS and stock index. In addition, Arkan (2016) concluded that EPS and market-to-book-value ratio had significant, positive relationships with stock price trends. In an analysis of market capitalisation, Subeniotis et al. (2011) summarised that stocks were positively correlated with market capitalisation. Horobet (2012) showed that bigger companies had higher profitability and EPS than smaller firms, suggesting that market capitalisation could affect firm performance. Majid & Lode (2015) concluded that market capitalisation may be associated with financial performance. Based on the above discussions, two hypotheses were formulated:

H<sub>1</sub>: Accounting and market indicators significantly predict stock price.

H<sub>2</sub>: Accounting and market indicators significantly predict stock return.

Several studies have employed various financial indicators to discriminate company performance into groups. Azar & Nasr (2016) classified company performance into performing and non-performing loans; Venkataramana, Azash, & Ramakrishnaiah (2012) into bankrupt and non-bankrupt; and Odibi, Basit, & Hassan (2015) into failure and non-failure. Using Altman's Z-score, Foo & Pathak (2016) and Tyagi (2014) measured financial health, while Halteh, Kumar, Gepp, & Gepp (2017) predicted financial distress. Ng, Wong, & Zhang (2011) developed a quantitative model based on financial indicators to distinguish solvent and insolvent companies, whereas Muchlis & Jayanti (2009) identified bankrupt and non-bankrupt companies. Using Jensen's alpha model and financial ratios, Dali, Mudasir, & AbdulHamid (2008) discriminated plantation companies to performing and non-performing. A hypothesis was developed based on these results:

H<sub>3</sub>: There are significant differences between performing and underperforming companies.

Risk is an important consideration in investment decisions. Graham & Harvey (2001) showed that the volatility of stock price and return naturally affected financial decisions. Gautam (2017) concluded that leverage, dividend payout, and dividend

yield were positively associated with share price volatility. However, market capitalisation, book-to-market ratio, asset growth, and E/P ratio had opposite effects. Handayani, Muharam, Mawardi, & Robiyanto (2015) showed that stock price volatility was positively explained by ROE, CR, DER, DPR, company size, and sales growth. Bateni & Asghari (2014) found a significant relationship between P/E ratio and market price deviations. Li, Yang, & Hsiao (2005) found evidence of a significant negative relationship between expected returns and volatility in six markets. McKee (1987) examined the mediating effect of volatility on the relationship between marketing effort and organisational performance. Market volatility negatively affected the relationships of certain variables but positively influenced others. Two hypotheses were developed from these conclusions:

H<sub>4</sub>: Stock price volatility mediates the relationships between accounting and market indicators and stock price.

H<sub>5</sub>: Stock return volatility mediates the relationships between accounting and market indicators and stock return.

## **PROPOSED METHODOLOGY**

This study integrates finance theories with the financial analysis theories in explaining the effect of the accounting and market indicators on company's performance. The term of accounting and market indicators represent the profitability analysis, credit risk analysis, and valuation analysis. The term company's performance represents the stock price and return of the company, as well as the performance measurement using Jensen alpha model. The term volatility represents the stock volatility based on GARCH model.

Four methods of analysis were proposed to answer the research questions. They are descriptive analysis, multivariate analysis, multiple discriminant analysis, and mediation analysis.

The objective of descriptive analysis is to ensure the validity of the research data. It explores the characteristics of the dataset, analysing its mean, standard deviation, and minimum and maximum value. The multivariate analysis was conducted using panel data. All observations were analysed to determine the relationships between accounting and market indicators and company performance, as well as to assess the mediation effect of stock volatility.

The multiple discriminant analysis technique intends to distinguish the sample companies into either performing or underperforming. The sample was discriminated by assessing its performance using specific accounting and market indicators.

Annual stock price  $P_i$ , annual stock return  $R_i$ , and monthly stock return  $R_i$ . The return measure was computed using the following formula (Strong, 2008, p.30):

$$R_{i,t} = (P_{i,t} - P_{i,t-1}) / P_{i,t-1} \dots\dots\dots (1)$$

where  $P_{i,t}$  is the monthly price in period  $t$  and  $P_{i,t-1}$  is the monthly price in period  $t-1$ . The risk-free rate  $R_f$  is based on the yield of the Jordanian Government Bond.

The Jensen model is used to measure historical performance of a portfolio by differentiating between realized return and expected return for a given period. The alpha coefficient ( $\alpha$ ) is differentiated from the estimated  $\beta$  of CAPM. The latter is estimated by regressing stock return ( $R_i$ ) on market return ( $R_m$ ) (Reilly & Brown, 2012 p. 967):

$$R_i = \alpha + \beta R_m \dots\dots\dots (2)$$

where  $\alpha$  is the intercept and  $\beta$  is the slope, that is,  $Cov(R_i, R_m) / \sigma_m^2$ . The slope of the regression shows the beta (risk) value of that stock.

CAPM is based on a set of simplified assumptions to facilitate estimations, but they are nonetheless very restrictive and still fundamental to studying the relationship between risk and return. These assumptions are: 1) investors use the Markowitz model to build an investment portfolio; they are risk averse and seek to maximise the expected utility of wealth; 2) investors select their portfolios by looking only at the expected return and variance; 3) investors can lend and borrow unlimitedly at a risk-free rate; 4) all information is available to all investors without cost; and 5) there are no transaction costs or taxes in the markets, and the assets can be divided and traded infinitely (Sharpe, 1964). The CAPM equation is:

$$E(R_i) = R_f + \beta_i [E(R_m) - R_f] \dots\dots\dots (3)$$

where  $E(R_i)$  is the expected return of stock  $i$ ;  $\beta_i$  is  $Cov(R_i, R_m) / VAR(R_m)$ ;  $R_f$  is the risk-free rate of return; and  $E(R_m)$  is the expected market return. The model assumes a linear relationship between the expected return on risky assets and  $\beta$ . The latter is an appropriate risk measure in the cross-section of average returns. It supposes that assets can only earn a high average return when they have a high market  $\beta$ .

To measure the performance of a stock at a given period, the intercept from the regression is used along with a modified version of the CAPM formula (Equation 2.3):

$$R_i = R_f (1 - \beta) + \beta R_m \dots\dots\dots (4)$$

The regression in Equation 2 is similar to Equation 3. This shows that Jensen's alpha coefficient ( $\alpha$ ) and  $\beta$  is similar to  $R_f (1 - \beta)$  from the CAPM model. The difference

between  $\alpha$  and  $R_f(1-\beta)$  results in Jensen's alpha, which can be used to measure stock performance at a given period. This measure is used to see whether the company's stocks are either performing or underperforming (Mohd Dali et al., 2008). The criteria for the alpha are:

- $\alpha > R_f(1-\beta)$  means that the stock is performing.
- $\alpha = R_f(1-\beta)$  means that the stock is performing as expected.
- $\alpha < R_f(1-\beta)$  means that the stock is underperforming.

The GARCH model is generally expressed as (Bollerslev, 1986):

$$\sigma^2 = \omega + \sum_{j=1}^q \alpha_j \varepsilon^2_{t-j} + \sum_{i=1}^p \beta_i \sigma^2_{t-i} \dots (5)$$

where  $i=0, 1, 2, 3$ ;  $P$  is conditional volatility;  $\omega, \alpha_j, \beta_i$  are non-negative constants, with  $\alpha_j + \beta_i < 1$  should be close to unity for an accurate estimation;  $\varepsilon_{t-j}$  is residuals and lagged conditional volatility. The last part of the formula is the main difference between ARCH and GARCH models.  $\alpha_j$  and  $\varepsilon^2_{t-j}$  are ARCH components  $\sigma^2 = \alpha_0 + \sum_{i=1}^q \alpha_i \varepsilon^2_{t-i}$  while  $\beta_i$  and  $\sigma^2_{t-j}$  are GARCH components (Al-Najjar, 2016; Engle, 1982).

## CONCLUSION

Analysts in business companies face challenges to determine factors affecting company's performance. Accounting and market indicators are one of the significant factors that necessary to verify its impact on the company's performance continuously. In addition, the scaling rate of volatility indicates larger moves and changes in the asset's value. An asset with higher volatility is likely to make a large move up as it does down. This condition would also create a noticeable impact on performance. Therefore, the study proposes a conceptual framework to test the accounting and market indicators towards company's performance and the mediating effects of stock volatility on its relationships, by a review of existing studies and theories. The panel data of companies using ordinary and generalised least squares regression models, multiple discriminant analysis, and structural equation modelling had supposed as a suitable analysis to accomplish these objectives. The model fit will be confirmed after the collection of the research data and analysis. This study is important as it offers potential investors a better understanding of the factors affecting the company's performance. Further, investors will be able to appropriately decisions their investments and identify relevant factors that affect performance. The study developed the conceptual framework based on the accounting and market indicators and stock volatility to investigate company's performance. It is expected that profitability analysis, credit risk analysis, valuation analysis and market capitalization are a significant factor could directly affect the company's performance and the stock

volatility has a mediating impact on its relationships with the company's performance.

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