International Journal of Recent Technology and Engineering (IJRTE)
ISSN: 2277-3878 (Online), Volume-7 Issue-5s, January 2019

The Effects of Selected Macro & Micro Economic Variables on Firm Performance for Listed Firms in the 'Industrial Products' Sector in Malaysia

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Abstract: ***Firm performance is considered as an important indicator for investors while making investment decisions since it reflects a firm's overall financial health. Hence, with business globalization and the fierce competition for market share among the companies, it is fundamental for a firm to maintain a high firm performance. It is an empirical question of how firm performance is influenced by economic factors. Therefore, this study is designed to investigate the effect of selected macro and micro economic variables on firm performance for listed firms in the 'Industrial Products' sector in Malaysia. Thus, this study explores and establishes the relationship exchange rate, interest rate, financial distress and derivatives usage as independent variables and firm performance as dependent variable. A dynamic panel data model has been employed in this study which comprises of 196 companies over a time period of 5 years (2012-2016). The relationship between the variables has been established via GMM as econometric analysis technique. The study reveals that exchange rate has a negative but not significant impact on firm performance. Moreover, both interest rate and financial distress have a negative and significant effect on firm performance. Finally, derivatives usage and an additional interaction term have a positive and significant effect on firm performance.***

Keywords: ***firm performance; exchange rate; interest rate; financial distress; derivatives***

I. INTRODUCTION

Nowadays, a lot of stress is put on performance that it has become part of our everyday lives. Comparably, in the world of business, most of the attention is drawn towards 'firm performance'. With business globalisation and the fierce competition for market share among the companies, it is fundamental for a firm to perpetuate a high performance. Generally, firm performance is defined as '*the actual output against the intended outputs of an organisation*'. It reflects a firm's overall financial health over a given period of time (Verma, 2017). It is widely used as an indicator to measure the success of a company and as a benchmark for investment purposes (Sudiyatno, Puspitasari and Kartika, 2012; Al-Matari, Al-Swidi and Fadzil, 2014).Accordingly, firm performance is deemed of a great importance.

Manuscript published on 30 January 2019.
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However, taking into fact that businesses do not operate in a void environment, they are exposed to the economic environment conditions prevalent in the market and thereby affecting their performance. It is an empirical question over the influence of the economic factors or risks on firm performance in general. Previous researches carried out in several countries have recognised that firm performance is impacted by both macro and micro-economic factors. However, in Malaysia, not many researchers have explored this topic area. Hence, there exist a theoretical gap about the effect of economic factors such as, exchange rate, interest rate, financial distress and derivatives usage on firm performance in Malaysia. Besides, it is noted that the 'industrial products' sector which contributes significantly to the Malaysian economy is still unexplored. Hence, the main objective of this study is to investigate the relationship between selected macro and micro-economic factors and firm performance. More explicitly, the study aims to explain what is the impact of exchange rate, interest rate, financial distress and derivatives usage on firm performance for the listed firms in the 'industrial products' sector in Malaysia. The study covers the recent 5 years, i.e. from 2012 to 2016 and it is purely based on secondary data.This study will help both corporate managers and shareholders to have a better understanding of the degree to which the four economic variables affect the performance of the 'industrial products' companies. In addition, future investors may rely on the results of this study before investing in this sector. Also, the research will bring additional knowledge in the field of firm performance in Malaysia to both business and finance students. Ultimately, the study may encourage others to undertake similar research in the nearby developing countries in the Asia-Pacific region.

II. LITERATURE REVIEW

According to Rumelt (1991), the idea about which factors determine or affect firm performance has not been clarified yet through previous financial literature. While Hawawini, Subramanian and Verdin (2003) argue that external factors have a greater impact on firm performance, Opler and Titman (1994) on the other hand suggest that firm performance is mainly determined by internal factors. However, according to Demirhan and Anwar (2014), both macro and micro economic factors have significant effects on firm performance. Also, Oxelheim (1984) proclaimed that a firm's future economic value is unfavourably impacted at macroeconomic level (such as interest rates, inflation rates and exchange rates) and at firm level (such as in prices and volumes).

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The few studies carried out about firm performance in Malaysia are for example Mokhtar, Kamil and Muda (2006) who have evaluated how different factors affect corporate performance of Malaysian Listed companies.

They found that ISO 9000, company size and category of industry share a significant positive association with corporate success whereas there is a significant negative relationship between capital structure and firm performance measures. Another study carried out by Shukeri, Shin and Shaari (2012) investigated the effect of different Board of Directors' characteristics on firm performance of listed companies in Malaysia and the results were a mixture of positive, negative and no significant relationship between some of the variables and return on equity. Furthermore, Kwong (2016) studied the impact of derivatives use on firm performance in the Malaysian context and revealed that derivatives users manage to perform better on firm performances measures as compared to non-users. In addition, by selecting various factors such as quick ratio, debt to equity ratio, sales growth and tax rate, Ismail and Subramaniam (2017) investigated how the performance of consumer products companies in Malaysia is affected. Relative to profitability, it was found that the relationship with sales growth is positive and significant whereas the relationship with quick ratio and tax rate are positive and insignificant; however, the relationship with debt to equity ratio is debt to equity ratio is negative and significant. Lastly, Ismail, Ishak, Manaf and Husin (2018) conducted a research about the relationship between macro-economic factors such as GDP, CPI and interest rate and performance of insurance companies in Malaysia. Their results concluded that firm performance is more impacted by GDP and interest rate as compared to CPI.

A. Exchange rate & firm performance

The collapse of the Bretton Woods fixed-parity system in the 1970s has given rise to the floating exchange rate regime. The exchange rate is unpredictable under this regime (Runo, 2009). The volatility of the exchange rate affects the cash flow and this eventually has a significant impact on the company's profit (Runo, 2009; Mbithi, 2013). Furthermore, some researchers (Allayannis and Ofek, 2001; Sarchoghaei, Nagahi and Madhumathi, 2016) described that firm performance can be affected by the movements in exchange rate through the following ways: the cost of imported inputs relative to other factors of production, price of exports to foreign competitors, or the cost of external borrowing. The link between foreign exchange (FX) exposure and firm value is well predicted by theory; however, the relationship is quite weak based on empirical evidence gathered from the studies in most of the developed countries, such as US, Australia, Canada and Japan (Chan, Seow, and Tam, 2002). On the other hand, the scenario is different in developing countries. For example, the research conducted by Runo (2009), Diffu (2011) and Mbithi (2013) among Kenyan firms revealed that firm performance (proxied by the following variables: profitability, FX imports and FX export on net income) is positively and significantly affected by exchange rate fluctuations. Moreover, Inyiama and Caroline (2014) concluded that on a long run, firm performance indicators (such as earnings per share, equity share price, net asset value per share, and price-earnings ratio) are negatively and insignificantly related to foreign exchange rate for the beer industry in Nigeria. In another study, Kelilume (2016) found a significant and negative impact of exchange rate on return on assets, asset turn ratio, portfolio activity and resilience among Nigerian listed companies.

B. Interest rate & firm performance

In most economies, interest rates fluctuate less frequently as compared to commodity prices and foreign exchange rates (Kwong, 2016). Nevertheless, since interest rates are volatile, this expose both economy and business to interest rate risk. In general, a firm's incentive to raise capital or to invest is highly impacted by interest rate volatility (Saunders and Cornett, 2008; Berk, DeMarzo and Harford, 2009). Even Kokemuller (2017) stated that the volatile interest rates affect business as they have a direct effect on borrowing and investment account earnings. Based on 'Pecking Order' theory, debt is preferred over equity as a form of external financing mainly due to the consequential cost associated issuing stocks. Hence, as firms borrow money, they are directly involved with interest rate.

Most of the studies which have investigated the relationship between interest rate and firm performance have been carried out in the developing countries. In Pakistan, the profitability of both the banking sector and textile firms are positively and significantly affected by interest rates as evidenced by Khan and Sattar (2014) and Zulfiqar and Ud-din (2015) respectively. However, there is a weak and statistically insignificant relationship between interest rate volatility and return on equity for construction companies in Kenya (Eunice, 2013). The scenario is different for agricultural firms in Kenya as the profitability ratios are positively and significantly influenced by interest rate (Odalo, Achoki and Njugna, 2016). Moreover, in Thailand it was unveiled that the stock returns are vulnerable against changes in interest rate (Suckcharoensin, 2013).

C. Financial distress & firm performance

As stated by Nevalainen (2010), financial distress is normally associated with poor operational management or the management's choice of capital structure. Generally, theory predicts that the performance of a company is impacted by financial distress. A company's financial system is weakened when it is in a state of financial distress (Hellen, 2013). Moreover, Ufo (2015) stressed on the fact that the profitability of any firm irrespective of the industry is influenced by financial distress. Ultimately, Outecheva (2007) emphasized that a sharp decline in firm performance and firm value is a characteristic of financial distress.

The relationship between financial distress and firm performance has been studied by many researchers and their findings are mixed. It was revealed through the study carried out by Opler and Titman (1994) that US firms which are highly leveraged experienced both lower market share and lower operating profits as compared to their competitors.

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They also showed that during industry downturns, firm performance is positively correlated to the financial condition. On the other hand, during the Asian financial crisis, the firm performance (proxied by Tobin's Q and ROA) for companies from the East Asian countries is negatively affected by financial distress (proxied by leverage) (Tan, 2012). Additionally, Notta and Vlachvei (2014) demonstrated that profitability is negatively and significantly impacted by leverage ratio (proxy for financial distress) for Greek food manufacturing firms. On the other hand, Kimathi, Galo and Mellisa (2015) established a negative relationship between leverage and firm performance for non-financial listed firms in Kenya.

D. Derivatives Usage & firm performance

Most of the companies are exposed to various types of market risk and hence they have adopted he concept of risk management. This management policy involves derivatives as a financial tool or technique to mitigate the associated risks and to avoid any costs pertaining to financial distress. Derivatives were originally created as a form of risk management and not risk creation. As explained by Hodgkins (2014), there exists a divergence from their original purpose as companies are using these financial instruments for speculation and for arbitrage in order to make significant profits. In any derivative transaction, one of the party will gain while the other will lose depending on the changes of the price of the underlying assets thereby affecting the firm's profitability.

There have been many empirical research which have focused on how firm performance is affected through the use of derivatives. The majority of researchers have determined that the two variables are positively correlated. For example, Tobin's Q (proxy for firm value) and derivatives usage share a significant and positive relationship as it has been evidenced for non-financial firms in US (Allayannis and Ofek, 2001), Greece (Kapitsinas, 2008) and Turkey (Ayturk, Gurbuz and Yanik, 2016). However, further research carried out by Ayturk et al. (2016) showed that firm value is not affected by financial derivatives through Fama-French three factor time-series analysis and single sector analysis. Moreover, Chaudhry, Mehmood and Mehmood (2013) revealed that firm performance is significantly and positively affected by derivatives for firms in Pakistan; they further illustrated that the main characteristics of firms which make use of derivatives are: large size, higher profitability and higher dividend which ultimately lead to higher firm value. On the other, Bashir, Sultan and Jghef (2013) established that derivatives usage has no significant effect on firm value when Tobin's Q is used as a valuation measure.

E. Previous Implemented Methodologies and Models

Most of the above-mentioned studies are based on a quantitative approach and have employed the most popular technique which is regression analysis in order to capture the relationship among variables. However, different methods have been used in estimating the coefficients of the regression models. For example, Mokhtar et al. (2016), Mbithi (2013) and Inyiama and Caroline (2014) employed the linear regression being the simplest model. On the other hand, the inclusion of more than one independent variable make multiple regression a suitable model for the studies conducted by Runo (2009), Shukeri et al. (2012), Ismail and Subramaniam (2017) and Ismail et al. (2018). The research conducted by Opler and Titman (1994), Allayannis and Ofek (2001), Chaundhry et al. (2013) and Kimathi et al. (2015) have also employed regression analysis but have further used estimation techniques such as ordinary least squares and weighted least squares to determine the coefficients of their models. Another regression model which is the probit model has been used by Allayannis and Ofek (2001) and Kwong (2016) as it was appropriate in analysing their binary response study.Kapitsinas (2008), Bashir et al. (2013) and Odalo et al. (2016) have opted for a panel data model whereby they have used fixed effect, random effect, univariate and multivariate analysis. The selection of a panel study allows for the multiple measurements of variables, usually at regular intervals, over a circumscribed period of time. Besides, Kelilume (2016) used a dynamic panel data model to investigate the dynamic processes between the variables of his study.

III. METHOD & MATERIALS

A. Research Design

This research is purely a fundamental and an explanatory research. It focuses mainly on firms categorised under the 'industrial products' sector in Malaysia and it covers the period from 2012 to 2016. There are 264 firms listed under this category on the market of Bursa Malaysia. This study identifies 196 firms representing approximately 74% of the 264 listed firms from Thomson Reuters DataStream for which historical financial data from 2012 to 2016 was available for analysis. A dynamic panel data model suits this study with N=196 and T=5. Similar to Kelilume (2016), it employs the generalised methods of moments (GMM) as econometric analysis technique to investigate the relationship between the selected independent and dependent variables.The GMM is a broadly applicable parameter estimation strategy which nests the classic method of moments, linear regression and maximum likelihood. It is an estimation technique that controls for both missing and unobserved variables and relationships. The GMM is often associated with a panel data where there is a large number of individuals over a few periods, i.e. N > T. The popularity and reputation of GMM is due to its claimed flexibility, generality, ease of use, robustness and efficiency (Kiviet, Pleus, and Poldermans, 2017). The GMM estimators display the smallest bias and variance when compared to Ordinary Least Square (OLS) and Within Group (WG) estimators. Both types of GMM estimators (difference and system) are powerful tools to estimate dynamic panel data models with autoregressive processes for so-called small T, large N panels. Difference GMM performs poorly when the explanatory variables are persistent over time. The lagged levels of these variables are weak instruments for the equation in differences. On the other hand, the system GMM leads to more precise estimates.

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B. Variables & Proxies

Return on Assets (ROA) and Return on Equity (ROE) are two financial ratios among many othersto measure firm performance. However, previous studies such as those of Zulfiqar and Ud-din (2015), Odalo et al. (2016) and Kwong (2016) revealed that ROA is the most commonly used performance indicator instead of ROE.When evaluating the firm performance, ROA considers the firm's total assets whereas ROE considers the firm's equity capital. Hence, the fact that the capital structures of the firms in the selected sample vary considerably, using ROA as a proxy for firm performance suits this study.

Regarding the two macro-economic variables: (i) the monthly exchange rate between MYR and USD has been chosen due to the important bilateral ties between Malaysia and US and (ii) the interest rate is represented by the interest rate set by Bank Negara Malaysia through Overnight Policy Rate.On the other hand, this study uses debt ratio as a proxy to measure financial distress in accordance with the previous research carried out by Kimathi et al. (2015). Debt ratio is a financial ratio which compares a company's total debt to its total assets, which reflects the amount of leverage being used by the company. Hence, the higher this ratio, the more leveraged the company is, implying greater financial risk or financial distress.Finally, as mentioned by Shaari et al. (2013), as from 2008 all listed firms on Bursa Malaysia are required by the Financial Accounting Standards Board to disclose all their derivatives transactions or contracts in the financial reporting documents. Hence, this study a dummy variable to designate the use of derivatives, i.e. '1' represents derivatives users and '0' represents non-derivatives users.

C. Model Specification

The model specification for this research is as follows:

$$FirmPerformance = f(exchangerate, interestrate, financialdistress, derivativesus$$

$$ROA = \alpha_i + \beta_1 ER_{it} + \beta_2 IR_{it} + \beta_3 DR_{it} + \beta_4 DU_{it} + \beta_5 INTER_{it} + \varepsilon_{it}$$

Where the short forms of the variables stand for:
ROA: Return on Assets,ER: Exchange Rate,IR: Interest Rate,DR: Debt Ratio,DU: Derivatives Usage,INTER: Interaction effect between IR and DR,α: Intercept of the Model,β: Coefficient of Independent Variable,ε: Error Term,*i*: Companies,*t*: Time Dimension

Interaction effects are very common in statistics and econometric models. This effect occurs when one explanatory variable interacts with another explanatory variable on a response variable. If interactions are present, this can cause significant implications while interpreting the statistical models. Hence, in this study, an interaction term has been included in order to improve the model. The additional variable consists of the interaction effect between interest rate and financial distress (proxied by debt ratio).

IV. DATA ANALYSIS & RESULTS

A. Descriptive Statistics

The basic feature of the collected data in this study is illustrated via descriptive statistics. The statistical measures such as minimum, maximum, mean, median and standard deviation have been selected to get a brief overview of each variable individually. Table 1 encapsulates the statistics of the variables for the 196 firms over the period of 5 years.

Table 1: Descriptive statistics about the dependent and independent variables

Variables	Obs.	Mean	Std. Dev.	Min.	Median	Max.
ROA	980	-2.7277	68.3405	-2083.7690	0.2809	0.8832
ER	980	3.5062	0.4082	3.0849	3.2792	4.0556
IR	980	3.1250	0.1119	3.0000	3.1250	3.2500
DR	980	17.5215	459.9301	0.0052	0.3423	14318.0000
DU	980	0.4439	0.4971	0.0000	0.0000	1.0000
INTER	980	56.4980	1493.8960	0.0200	1.0700	46533.5000

Each variable comprises of 980 observations. Among the variables, ROA is negatively skewed whereas the others are positively skewed. The negative skew for ROA is explained by the extremely low value of -2083.77 for one the firm in the sample. A negative ROA suggests that the firm is not utilising its capital properly or that the capital invested for its productions exceed the received income. Also, the computed statistics show that exchange rate of MYR/USD has been fluctuating between 3.085 and 4.056 whereas interest rate has been varying between 3.00 and 3.25 during the 5 years. The differencesare not colossal, anyhow even a small change is sensitive to the firm's cash flow. For debt ratio, one of the companies has a value of 14318. This implies that the company is relying mainly on debt financing to fund its operations. Also, this high value shows that the company is very risky and might face financial distress any time soon if no corrective measures are being taken. Since 'INTER' is the interaction effect between interest rate and debt ratio, this explains the maximum value of 46533.50.

B. Panel Unit Root Test

As mentioned by Blundell and Bond (1998), GMM estimators require all data to satisfy the stationary condition. In addition, the unit root need to be static by at least first difference. The evaluation of a panel data model with non-stationary data may lead to bias results. Hence, it is imperative to ensure that none of the data contain unit root. Among the various unit root tests, the Harris-Tzavalis (HT) method is the most appropriate one for this study since T is fixed and N is quite large. According to the HT unit root test, the null hypothesis specifies that all the panels contain unit roots.

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Table 2 summarises the HT unit root test results. It is clearly shown that all the variables are stationary at level and valued at 5% acceptance threshold. All being integrated if order zero, it is unnecessary to carry out further analysis via co-integration.

Table 2: Panel unit root test

Variables	HT Results	Probability
ER	I(0)**	0.0000
IR	I(0)**	0.0000
DR	I(0)**	0.0000
INTER1	I(0)**	0.0000
ROA	I(0)**	0.0000

*Notes: *, **, *** significant at 90%, 95% and 99% confidence interval respectively*

C. Dynamic Panel GMM Estimation Results

Compared to previous conducted research, this study attempts to determine the coefficients of the model by using a different estimation technique other than linear, multiple, ordinary least squares and weighted least squares. Accordingly, the GMM estimator is employed to provide an insight about how firm performance is impacted by the selected dependent variables. Furthermore, the selection of GMM is mainly due to its appropriateness when dealing with endogeneity issues. Following the confirmation that none of the variables in this study have unit root, the GMM estimation may be proceeded with. The regression results for the system GMM model with one lagged dependent variable is shown in table 3.

Table 3: GMM Estimations Results

System GMM Results	Coefficients	P-Value
Constant	-393.4917	0.000
ER	-0.0036	0.906
IR	-2.2718	0.000
DR	-20.8428	0.000
DU	898.6233	0.000
INTER1	6.4114	0.000
ROA	-0.5962	0.000

*Notes: *, **, *** significant at 90%, 95% and 99% confidence interval respectively*

Most of the previous studies found little effect of exchange rate on firm performance and the relationship is weak among the developed countries such as US, Australia, Canada and Japan. Even the research conducted in Kenya (Runo, 2009; Diffu, 2011; Mbithi 2013) reveal a positive relationship between exchange rate and firm performance. However, this study discloses a negative but non-significant relationship between exchange rate and firm performance. The findings are fully supported by Inyiama and Caroline (2014) who found similar results in the Nigerian beer industry. Also, Kelilume (2016) has come to the conclusion that the impact of exchange rate on firm performance (ROA) among Nigerian firms is negative but the relationship is significant. The negative association between the two variables among the Malaysian firms in the industrial products sector is due to their involvement in international trades and the instability of the Malaysian Ringgit against other currencies. As for interest rate, this study reveal that it has a negative and significant effect on firm performance. This is consistent with the study of Eunice (2013) which focused on the Kenyan construction sector. Other studies such as those of Khan and Sattar (2014) and Zulfiqar and Ud-din (2015) have established a positive relationship between interest rate and firm performance among banking institutions in Pakistan. It should be stressed that the way interest rate affects the performance of firms in the financial and non-financial industry is completely contradictory. The profitability of the banking sector relies heavily on increasing interest rate in the case when they are the lenders. This can further be explained by the fact that a large percentage of a bank's revenue comes from the amount of interest paid by the customers while the profitability of the non-financial sector depends on low interest rate in the case they are the borrowers. Hence, the fact that the firms in the industrial products sector in Malaysia rely on debt to finance their operating activities and costly machineries, their cash flows are undesirably affected by fluctuation in interest rate thereby influencing firm performance. With respect to one of the micro-economic factor, this study establishes a negative and significant effect of financial distress on firm performance. Most of the other researchers have evidenced similar results. The findings of this study are strongly supported by Notta and vlachvei (2014) who identified that firm performance is negatively and significantly affected by the condition of financial distress among Greek firms. Furthermore, the study undertaken by Tan (2012) is more closely connected to this study as the focus is on the region of East Asia through which the positive association between the two variables has been proven. Ultimately, similar outcome was found by Ufo (2015) in Ethiopia which is a developing country similar to Malaysia. On the other hand, Opler and Titman (1994) have found that financial distress and firm performance are positively correlated. They strongly believe that the performance of firms facing financial distress can be improved as the corporate managers will be forced to upgrade the firm performance to a reasonable level in order to avoid bankruptcy and failure.

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In addition, regarding the effect of derivatives usage on firm performance, this study reports that there is a positive and significant link between the two variables.

The findings are well supported by the majority of the previous studies. For example, Kapitsinas (2008) and Ayturk et al. (2016) have come up with the outcome that firm value (represented by Tobin's Q) is significantly and positively affected by the use of financial derivatives. Even in developing countries such as Pakistan, Chaundhry et al. (2014)have provided sufficient evidence leading to a positive and significant relationship between derivatives usage and firm performance. Also, all the studies mentioned above clearly give a picture that irrespective of the sector or industry, all firms which use derivatives positively influence their performance. This is in line with some recent theories which suggest that the hedging strategy contribute to an increase in firm value.

Ultimately, it is revealed that firm performance is positively and significantly affected by the interaction effect. It can be said that an increase in the interaction term will cause firm performance to increase as well due to positive correlation. Interestingly, individually both interest rate and debt ratio negatively impact firm performance. However, the interaction of both variables produces a positive effect on firm performance. Bo and Sterken (2002) conducted a research on how firm investment is jointly impacted by interest rate volatility and debt. They found that there is a positively relationship between the cross-effect of the two variables on firm investment. Since, firm investment can indirectly reflect firm performance, it can be concluded that the findings about the interaction term in this study is supported by the results of Bo and Sterken (2002).

V. CONCLUSION

Firm performance is sensitive to some macro and micro-economic variables. There have not been many researches which have studied the effect of these variables on firm performance in Malaysia. Hence, this study tries to fill in this gap and increase the knowledge about factors affecting firm performance (FP) among the Malaysian companies. More specifically, this research investigates the effect of exchange rate, interest rate, financial distress and derivatives usage on firm performance for listed firms in the 'industrial products' sector in Malaysia. A sample of 196 companies were selected for this research over the year 2012 to 2016. The study has employed a dynamic panel data model with companies as cross-section and years as time period. sing an advanced technique, that is the GMM estimation, this study investigates to what extent firm performance is influenced by exchange rate, interest rate, financial distress and derivatives usage. Consistent with expectations, it unveils that interest rate and financial distress have a negative and significant impact on firm performance. The negative relationship, for both variables, implies that an increase in either interest rate or financial distress will cause the declination of firm performance. Furthermore, this study finds that the performance of the firms is positively and significantly affected by the interaction term and the use of derivatives. In fact, the usage of derivatives is to firstly mitigate risks and secondly contribute to the improvement of the financial performance of a firm. Ultimately, on the other hand, exchange rate is found to have a negative effect on firm performance but is not-significant. Surprisingly, the result of non-significance is contrary to the expectation due to the fluctuations of the exchange rate MYR/USD.

This study can further be extended by considering different financial ratios other than ROA for firm performance which may further contribute to the knowledge about how firm performance is affected. In addition, there is no consensus about a good measurement for financial distress. Accordingly, further research can be carried out in order to determine which proxy can be used for financial distress. The Malaysian firms are also exposed to the fluctuations of currencies other than MYR/USD. A deeper research on this issue can help in giving a better explanation of the effect of exchange rate on firm performance. Firms in other sectors might respond differently. Hence, the same study can be carried out for the other sectors to get a better idea of the effects of each independent variables on firm performance.

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Published By:
Blue Eyes Intelligence Engineering
and Sciences Publication (BEIESP)