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Research Article

The impact of credit policy on firm performance among Malaysian manufacturers

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ABSTRACT

Credit policy is a set of temporary payment terms agreed between seller and buyer, in a form of credit. Credit expedites some of the complicated process organization experienced. Normally, the process required high level approval in order to complete procure activities or business transaction. In Malaysia, the credit policy has become one of the sales tools to secure more business, and identify new business opportunities. However, it is unsure to what extent the credit policy helps on firm performance. Thus, the aim of this study is to investigate the relation, the factors and the influence. The research tested on Malaysian manufacturers. A total of 35 survey questionnaires were received from Malaysian manufacturers and the data has been analysed using Statistical Package for Social Science (SPSS) software. Three out of four dimensional factors were rejected; credit structure, receivables management and inventory control. Only one of the factors was accepted and has significant impact on firm performance which is payables management. The results of the study revealed 41% of firm performance were depending on credit policy. This study fills the gap in the literature of credit policy conducted in Malaysia.

Keywords: Credit Policy; Credit Terms; Trade Credit; Credit Management; Receivable Management; Payables Management; Inventory Control; Manufacturers

1. INTRODUCTION

Credit is a form of receivables awarded by the sellers to the buyer part of the strategy to develop long-term business relationship. It is a form of temporary borrowing which help organization to achieve strategic fulfilment. Business organizations in their attempts to make profit adopt several strategies and one them is allowing credit to their customers (Ifurueze, 2013). Trade credit arises when a firm sells its products or services on credit and does not receive cash immediately. It is an essential marketing tool, acting as a bridge for the movement of goods through production and distribution stages to customers.

Credit policy potentially increase the confidence level among sellers to further extend their business relationship step forward by develop new networks. In this research, the study will highlight the significant impact of credit policy. Credit policy has an important to have such a level of investment in receivables at the same time observing the twin objectives of liquidity and profitability (Kungu et al., 2014).

Trade credit help business secure their sales and attract potential customers to buy at favourable terms. It is common sense that trade credit expedites processes. Business potentially lose its customer if they are not considering this area (Kakaru, 2001).

The statement reflects the importance of trade credit and the objective of this research is to identify on how importance the credit to customer and how it could impact their firm performance. Credit policy has become the most popular medium of managing and regulating receivables (Kungu et al., 2014). The purpose is to ensure optimal investment in receivables, a business is required to have an appropriate credit policy. Credit policy is designed to minimize costs associated with credit while maximizing the benefits from it.

Credit normally granted maximum up to sixty days. The later payment made by the firm, it will affect organization turnaround and profit income. In addition, late payment also could affect their buyer's credit health. In some cases, it could reflect bad financial statement in borrowing. Best is to ensure duration cycle of payment within agreed period or better. Kungu et al. (2014) highlighted that trade credit creates accounts receivables which the firm is expected to collect in future. Accounts receivables are executed by generating an invoice which is delivered to the customer, who in turn must pay within agreed terms.

Many statements reflect the importance of trade credit to customer and this research is to identify on how importance the credit to customer and how it impacts their firm's performance which we measure profitability and liquidity. Business expansion also suggest credit policy part of tools to manage good cash flows, managing customer relations and identify new business opportunities. Kungu et al. (2014) explained that the credit policy requires frequent reviewed to ensure that the organizations operate in line with the competition. Sales and credit departments are benefiting from them.

In any business transaction, credit policy plays an important role. It is a temporary borrowing which help business minimize risk in getting quality raw materials on time. Credit policy is very important in business trade to expedite some of the internal process involving approval. On top of it, credit policy supports the cycle of procurement activities to reduce the amount of time spend against unnecessary cost involve due to duration of processing payment. Credit policy should be based on its particular business and cash flow circumstances, industry standards, current economic conditions, and the degree of risk involve (Ifurueze, 2013).

For a manufacturing business, in order to achieve their objective to maximize liquidity. It is recommended for them to always permit credit terms to their customers at the same time comply with the policy to the extent where the limits controls adequately depending on customer's financial health. Kipkoech (2015) highlighted that credit management is one of important area in any organization involve buyer and seller which most issue happen without a proper management of credit components. It could affect the efficiency of operations and their productivity.

The importance of credit management explained by Kungu et al. (2014) highlight the consequence of poor management on receivables, will influence bad debts which reduce the business profitability. In addition, organizations differ so do their credit policies. While



most companies have their own policies, procedures and guidelines, it is unlikely that any two firms will define them in a similar manner. However, no matter how large or small an organization is and regardless of the differences in their operations or product, the effects of credit policies usually bring about similar consequences.

Credit Policy has been always changing depending on organization's direction or government's regulations following global trends. organizations differ so do their credit policies. While most companies have their own policies, procedures and guidelines, it is unlikely that any two firms will define them in a similar manner. However, no matter how large or small an organization is and regardless of the differences in their operations or product, the effects of credit policies usually bring about similar consequences (Kungu et al., 2014). Therefore, the intention of this research is to identify the impact of credit policy within organization on the result of the performance.

RO: To investigate if credit policy impact on firm performance.

1.1. PROBLEM STATEMENT

Small Medium Company (SME) experienced the most challenging task to achieve credit terms compare with large firm. Financial records and reputation can be part of the factor in order for the vendor to award their credit terms. Credit policy specifies requirement to value the worth of customers. Meanwhile, cash collection procedure provide guideline in order to collect unpaid invoice that will reduce delays for customers who have not yet made payment for goods and services and outstanding receivable (Duru, Ekwe and Okpe, 2014; Hill and Sartories, 1992; Richard and Laughlin, 1980).

New customer normally required at least first purchase in a cash form. For example, manufacturing firm who involve in selling products, they experienced late payment processing due to accounting procedure in getting approval from management or higher in order to release payment. Such late payment potentially affects the purchasing power; in order for them to acquire raw materials with sufficient fund at good price. However, reputation and size of a company has a way around in buying and bargain power.

The cycle of payment also must be always on time in order to establish good confidence levels among suppliers; to expand current credit limits or renegotiate their credit policy. As supplier, debt collection also important in order to get sufficient fund for future investment.

RQ: Does credit policy actually impact on firm performance?

1.2. SIGNIFICANT AND SCOPE OF STUDY

The rationale of this research study is to examine the impact of credit policy on Malaysian manufacturer's performance by testing the independent variables of credit policy by testing their dimensional factors consist of: -

- 1. Credit policy components such as structure, terms, duration, compliance, system and practice.
- 2. Receivables management which we measured by accounts receivables, cash conversion cycle (CCC), debt collection period (DCP) and debt management.



- 3. Payables management which we measured by accounts payables, creditor payment period (CPP), and day payables outstanding.
- 4. Inventory control involve stock monitoring, min-max figure, external-internal warehouse and inventory system.

The research would like to see if these factors significantly influence on the end result of firm performance; to observe the result on profitability and liquidity.

1.3. TERMINOLOGY OF VARIABLES

In this research, it is identified that there are four important components in Credit Policy; credit structure, receivables management, payables management and inventory control. These four components normally involve in design and develop the body of credit policy itself. The strategy of the organization potentially involves in determining the components in credit policy as mentioned in Table 1.

Table 1. Terminology of Variables

Variable	Reason
Credit	Structure of the credit would be depending on the terms and conditions involve in business
Structure	transaction using the credits. It includes with written guidelines and procedures (Owolabi et al.,
	2012) normally involving some the critical area such as return policies, exchange policies,
	cancellations policies, warranty policies, payment durations, outstanding limits and etc. which
	business transaction is concerned.
Receivables	The management of receivables involves with the process of cash and debt collections. The
Management	efficiency of cash and debt collection would reflect on finacial rations represent the performance
	of cash capital measured by cash conversion cycle or debt collection period mentioned by
	Owolabi et al. (2012) ,Uyar (2009) and Jindal et al. (2007).
Payables	The management of payables involves with the process of paying debt measured by cash
Management	conversion cycle to the suppliers. In other words payables and receivables management must
	be balance to ensure balanced firm's performance for a long-term business startegy. If the
	management of receivables is good but the payables is bad, it could affect the relation with the
	suppliers. In opposite, if the management of payables is is good by the receivables is bad, firm
	potentially experienced insufficient fund for future investment.
Inventory	The credit policy defines the strategy of supply chain and suggest firm to decide if they should
Control	invest on their storage or outsource them. This is the new level of control to reduce unnecessary
	cost. The demand to outsource or invest on storage has become lesser because of trade credit
	(Vaidya, 2011). Firm tends to depends on supplier space or consider just-in-time (JIT) system to
	operate efficient utilization of warehouse.
Firm's	Performance of firm evaluated based on profitability and liqudiity. This research to identify
Performance	critical factor which accurately impact on the firm's performance. Some strategy may
	depending on trends which they consider competitor's strategy and some may depending on
	market's trend. It is unsure if those factors really impact on the firm's performance. Therefore,
	this research suggest the best area manufacturing firms should consider. Some research carried
	out financial evaluation by measuring ratios to identify the profitability and liquidity as
	conducted in Bellouma (2004), Uyar (2009), Ramana et al.(2013).

2. LITERATURE REVIEW

Credit granting processes directly impact on the survival and performance of Small and Medium Enterprises (SMEs) during economy transition (Zambaldi et al.,2011). It is explained that creditors consider various factors in order to offer credit accounts to a small firm with



minimum information. The purpose is to avoid high interest rates in a situation of credit rationing, without increasing the risk of default implicit in expensive loans.

According to Owolabi et al. (2012), credit policy also known as collection policy; a written guidelines which set the terms and conditions to supply goods on credit basis, identify customer qualification criteria, procedure for making collections, and methods for customer delinquency. The purpose is to decide which customers are sold on open account, the exact payment terms, the limits set on outstanding balances and how to deal with delinquent accounts. In addition, credit policy also used to enhance the collectability of the credit sales to boost company's liquidity and to reduce the risk of bad debt. Credit and collection policies encompasses the quality of accounts accepted, the credit period extended, the cash discount given, certain special terms and the level of collection expenditure. An effective credit policy should increase both liquidity and profitability and reduce the risk of bad debt. A loose credit policy will increase sales and profitability at the expense of liquidity and risk bad debt while a strict credit policy in the other hand will increase liquidity and reduce the risk of bad debt but also reduce sales and profitability.

Uyar (2009) set an early benchmark of dimensional factors in credit policy; by examining the relations between length of cash conversion cycle with size of firm and length of cash of cash conversion cycle with their profitability. The study highlighted cash conversion cycle measures the duration between cash payments for purchase of inventories and collection of receivables from customers. Meanwhile, Ubesie et al. (2016) examined the their effects; parts of the process of measuring the funds that are committed according to credit policy. It ties inventories and receivables less payments that are deferred to suppliers which are interpreted as the cash outlays arise during the production of output, cash inflows that result from the sale of the output, and the collection of accounts receivables.

According to Zainudin et al. (2011), most of previous studies on credit practices by SMEs businesses carried out in United States, United Kingdom and developed countries. These research studies examined various aspects of credit management and have yielded a variety of empirical evidence on numerous trade credit management issues which credit collection period has become part of important factors.

Trade credit consist of accounts receivables and accounts payable; both an important funds for most of manufacturing firms in India (Vaidya, 2011). It is explained that good performance firms have a behaviour both give and receive less trade credit and most of them have greater access to bank credit. On the other hand, firms with many bank loans receive more trade credit. However, holdings of liquid assets have a positive influence on both accounts receivable and accounts payable.

Credit policy has been carried out since 1980s in China it is a kind of credit form based on purchase and sale activities which the creditor plays the role of credit supplier by paying in advance or deferring collecting. Meanwhile, the debtor acts as credit receiver, because it could finance short-term working capital by collecting in advance or deferring payment. During the past 20 years, trade credit turns out to be prevalent in business and plays an important role in enhancing fund allocation, reducing transaction costs, and accelerating commodity circulation (Shi et al., 2011).



Raymond et al. (2015) and Nilsen (2002) suggested businesses should provide trade credit by reducing the cost of administration of invoices between suppliers and buyers involving regular exchanges of goods and services. It is later follow with frequent monitoring to consider if business should further extend their current business relationship.

The globalization impact on businesses influence corporate sector to establish credit policy. Shi et al. (2011) explained that the study on credit policy fall into two categories; business motive explanation (credit offer) and financing motive explanation (credit acquire). As to the business motive explanation, it mainly includes three theories established on the perspective of transaction cost, non-price competition and quality guarantee. Meanwhile, financing motive explanation focused on credit rationing and liquidity theory. The reason why most SMEs suffering financing constraint depending on the trade credit acquired especially from large firms is because to fill the financing gap. Therefore, it is necessary for them to acquire trade credit from their suppliers to keep liquidate.

2.1. THEORIES AND MODELS

Research on credit policy expanded throughout countries and the need on keeping and developing credit policy produce many new theories. In Kungu et al. (2014) research in Kenya, they summarize two relevant theories; Transaction Motive and Financing Advantage. A research also has been carried out by Raymond et al. (2015) earlier in Nigeria by using same Transaction Motive and Financing Advantages theory. In other hand, Joshua et al. (2017) were using Transaction Cost, Portfolio and Information theories in their research in Nigeria.

2.1.1. Transaction cost theory

Transaction cost theory highlighting that suppliers may have an advantage over their borrowers (Joshua et al., 2017); by checking actual financial situation or credit health of their clients. In addition, by referring to this theory, suppliers will have a better ability to monitor and force repayment. In addition, his theory was proven since 1980s which this model applied on market risk in order for companies to manage their interest rate and identify risk exposures in market. However, this theory required verification from other models to support the validity of their data. Therefore, the information theory provide justification on portfolio theory by screening their borrowers background, financial history, current financial statement and the ability to pay on time. This is consider the first step of credit policy compliance before we start our business with new customer.

It is identified that portfolio and information theories are working closely to secure first trade credit. The delay on payment potentially affect the cash capital in order for business to source for raw materials later or as funds to to recycle payment for workers.

2.1.2. Transaction motive theory

Transaction motive theory in other hand widely used manufacturing firms as example (Chee et al., 1999; Nilsen, 2002 Kungu et al., 2014; Raymond et al., 2015). According to them, these firms mostly face strong seasonality and uncertainty in the demand for their products. In addition, they may have to build up large inventories in order to maintain their



production levels. Therefore, firms may be able to manage their inventory positions better and reduce warehousing costs by offering credit terms.

2.1.3. Financing advantage theory

Financing advantage theory suggesting firm who provides credit to its customers normally has an advantage over other credit providers by assessing the credit worthiness of their customers (Chee et al., 1999; Nilsen, 2002; Kungu et al., 2014).

The theories on credit policy has become more advance as the methods to improve the credit monitoring has significant increment on challenges. More argument on the effectiveness of those theories on credit policies in order to achieve greater result. There are many theories argued on the existence of the trade credit. Bellouma (2014) such as tax theory, transaction cost theory, liquidity theory and product quality theory. However, product quality theory which is based on ex-ante asymmetric information, does not agree with the argument made from tax theory, liquidity theory or transaction cost theory.

2.2. HYPOTHESIS DEVELOPMENT

The four dimensional factor of independent variables were used to develop of a hypothesis to test the impact of credit policy on firm performance. Several research also been made and referred in this research to test on Malaysian Manufacturers, their current trends and understanding on credit policy.

H₁: Credit structure has a significantly impact on firm's performance.

H₂: Receivables management has a significantly impact on firm's performance.

H₃: Payables management has a significantly impact on firm's performance.

H₄: Inventory control has a significantly impact on firm's performance.

2.3. CONCEPTUAL FRAMEWORK

The objective of this research is to test the independent variable of credit policy to achieve significant result on hypothesis which will be tested if it will potentially impact on dependent variable of firm's profitability and liquidity.

From the four significances summary of four-dimensional factors above, it is observed that more research study has made in receivables management area and majority study concluded significance relation between receivables factor on firm performance.

More research study required on inventory control area, where the conclusion is not affirmative. More argument should be made on Vaidya study.



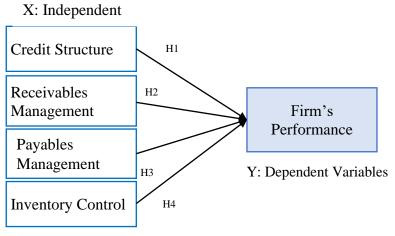


Fig. 1. Conceptual Framework

The dimensional factors as per Fig. 1 consist of credit policy, receivables management, payables management and inventory control are discussed to gain better understanding. The conceptual framework has been referred to ensure the research carried out are guided in line with the research objective; summarizing dependent and independent variables, and their relationship to verify the hypothesis.

3. RESEARCH METHODOLOGY

This research was carried out by using quantitative approach which testing only two point of variables; independent and dependent. As per figure 1, dimensional factors have been tested to identify their significance one the dependent variables, firm performance; profitability and liquidity. Quantitative research usually used deductive logic, in which researchers start with hypotheses and then collect data which can be used to determine whether empirical evidence to support that hypothesis exists (Quantitative Research Approach, 2019).

3.1. RESEARCH DESIGN: QUANTITATIVE APPROACH

Research design as per Fig. 2 is the main structure in the research which replicate the input achieved from the observation of data collected and analyzed from the experience gain, the understanding achieved and communication conversed with interviewee from interview or from respondent from answered questionnaire.

The technique includes metrics, benchmarks, simulators, and prototypes. Main benefit of quantitative approaches is that they typically yield hard facts such as concrete quantities (Eeles et al., 2014)



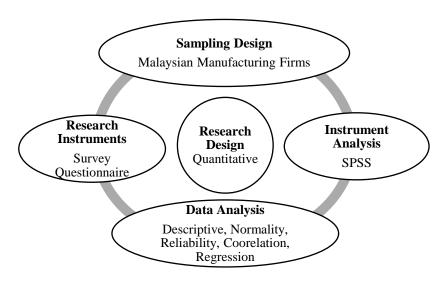


Fig. 2. Research Design

3.2. SAMPLING PLAN

The research area currently focusing in southern state of Malaysia, Johor in which according to the Federation of Malaysian Manufacturers (FMM) Johor Branch (FMM, 2019), they representing 420 leading manufacturing and service companies in the State.

From the population of 420 manufacturing organization in Johor, the research expecting according to Krejcie and Morgan table; 217 respondents. Link to the online survey has been forwarded to Ms.Sim Biow Siong, representative for Federation of Malaysian Manufacturers (FMM) to get their help distribute the links to their respective members. However, unregistered members also have been approached directly through their sales department. Unfortunately, due to time constraint and topic sensitivity, the numbers of 217 respondents unachievable. Therefore, the number has been reduced to a minimum 30 respondents.

According to StatisticsSolution.com (2019), sample size calculation is concerned with how much data we require to make a correct decision on particular research. It is further explained that if we have more data, our decision will be more accurate and there will be less error of the parameter estimate. However, it does not necessarily mean best in sample size calculation. If comparing the means of two populations as example; if the sample size is less than 30, t-test were normally used. However, if the sample size is greater than 30, z-test shall be used. If the population size is small, bigger sample size required, and if the population is large, smaller sample size required compared to the smaller population.

Minimum 30 samples have been used in this research to get a minimum confidence interval highlighted by Marshall (2019) that the equation for a 95% Confidence Interval for the population mean when the population standard deviation is unknown and the sample size is large, over 30. He added, if the sample size larger, the more likely a significant on the result. However, for a smaller sample size, it may bring a huge difference to conclude a significant difference. For a large sample sizes, small differences may be significant but verification is required if the difference is meaningful.



Earlier, Confidence Interval Calculator from Creative Research Systems website reflect been identified for alternative reduced number of respondents. However, 201 sample required still unachievable with a confidence interval of 5 represent 50%. The confidence interval which also called margin of error is the plus-or-minus figure usually reported in newspaper or television opinion poll results. For example, if you use a confidence interval of 4 and 47% percent of your sample picks an answer you can be "sure" that if you had asked the question of the entire relevant population between 43% (47-4) and 51% (47+4) would have picked that answer (Creative Research System, 2019).

On the first trial on the questionnaire before the online survey distributed, manual questionnaire been tested and respondents mostly from sales and procurement department; responsible involves in overall process which related to credit management and their cycle. However, it is observed the feedback required high-ranks permissions to answer some of sensitive questions. Therefore, accounting personnel participation observed.

In this research, the challenges were to get up to 217 respondents from credit decision maker within limited time frame. By having such a challenge involving financial decisions, according to Saunders et. al (2012), a sample size of minimum at least 50 subjects suggested for a complexity statistical analysis. However, 35 respondents were participated. According Cohen et al. (2007), a sample size of thirty is held by many to be the minimum number of cases if researchers plan to use some form of statistical analysis on their data.

3.3. RESEARCH INSTRUMENTS

Sampling survey information has been used on SMEs in Beijing by Shi et al. (2011). The data collected were divided into two categories; financial informations and non-financial informations. Financial informations inclusive of assets size, account receivable, account payable, operating revenues and operating costs. In opposite, Non-financial informations inclusive of forms and terms of trade credit.

Saunders et al. (2012) however explained that the designing a good questionnaire is an important step within research processes especially on descriptive design. The main objective is to determine the concepts to study and measuring the variables related to the research problem. It is advisable that the correct usage design of questionnaire been used to ensure good understanding of question in order to receive accurate feedback for positive outcome.

Structure questionnaire from previous researcher must be adopted to achieve consistent result especially if the research is testing in new population. In this research, some of the questions were modified to assess Malaysian environment. Questionnaire by Kung'u (2015) has been selected and adapted into this study. It was modified to ensure its reliability were consistent where the research suggesting researchers to choose relevant questions and consider their format and sequences (Saunders et al., 2012). The reason the questionnaire selected for the research is because the study made by Kung'u (2015) covered all four dimensional factors similar with the objective of this research. However, some of the original irrelevant questions were removed.



The questionnaire used was devided into two section represent the dependent and independent variables. Respondent will have to fill in demographic information before proceed with core questions. The demographic asking on respondent's information consist of gender, education level, years in manufacturing industry, corporate position, and firm's information consist of years of firm has been operating, number of workers, and structure or system of form.

The first section of the questionnaire represent the independent variables which divided into four categories which represent four dimensional factors; credit policy, receivables management, payables management and inventory control. The second section represent the dependent variable to get more information related with firm's performance.

Questionnaire as per Table 2 in the research is using nominal likert scale model to measure the agreeable level. Each section used 5-point; 1= "Strongly Disagree" to 5 = "Strongly agree". According to Saunder et al. (2012), likert scale is considered as a popular means for measuring attitude by checking how strongly they agree or disagree with the statements from the questions.

Table 2. Likert Scale to Measure the Independent and Dependent Variables

Choice	Strongly Disagree	Disagree	Normal	Agree	Strongly Agree
Scale	1	2	3	4	5

The manual questionnaire been used first to test the earlier feedback. The questionnaire was converted into online survey via Google Form, for faster feedback..

3.4. DATA ANALYSIS

Quantitative analysis using descriptive statistics such as frequency counts; to describe the distributions in pie charts and graphs format to display those frequencies in nominal or ordinal data. The mode was used to show the category or observation that appear most frequently in the distribution or the category containing the largest number of responses (Mugenda & Mugenda, 2003).

Stages of research method has been carried out in this study. First stage involved conducting a preliminary analysis from the first 10 respondents to identify any incorrect entries or missing values from questionnaire supplied for the inconsistency, incomplete or ambiguous response. Number of respondent was met more than thirty which 35 respondents were participated. The data was translated into full numerical inclusive of demographic data received for SPSS result reading.

3.4.1. Descriptive analysis

Desciptove analysis helps to describe, show or summarize data in a meaningful way such that, for example, patterns might emerge from the data (Lund Research, 2019). Descriptive statistics enables firms to present the data depending on category or group of profiles, in a more meaningful way which allow simpler interpretation of those data.



3.4.2. Normality Test

Normality test used to identify if the variables were distributed correctly to the correct recipients. According to Laerd Statistics (2019), Normality test is an assessment of the data normality prerequisite for many statistical tests because normal data is an underlying assumption in parametric testing. According to Origin Lab Corporation (2019) explained the normality test was normally used to determine whether sample data has been drawn from a normally distributed population which is within some allowed tolerance. A number of statistical tests, such as the Student's t-test and the one-way and two-way ANOVA require a normally distributed sample population. If the assumption of normality is not valid, the results of the tests will be unreliable.

3.4.3. Reliability Analysis

Reliability analysis explains the extent to which data obtained by the various study constructs can be used in analysis and for consistency of study results. The most common reliability coefficient is the Cronbach's alpha which estimates internal consistency by determining how all items on a test relate to all other items and to the total test. The reliability is expressed as a coefficient between 0 and 1.00. The higher the coefficient, the more reliable is the test. In this study to ensure the reliability of the instrument Cronbach's Alpha was used(Muriuki, 2014). Table 3 below, shows the general guideline for reliability analysis which intrepreted from U.S. Department of Labor (2019).

Table 3. General Guideline for Reliability Analysis

Reliability Coefficient Value	Intrepretation
.90 and up	excellent
.80 to .89	good
.70 to .79	adequate
Below .70	May have limited applicability

Reliability refers to the extent to which a scale produces consistent results, if the measurements are repeated a number of times. The analysis on reliability is called reliability analysis. Reliability analysis is determined by obtaining the proportion of systematic variation in a scale, which can be done by determining the association between the scores obtained from different administrations of the scale. Thus, if the association in reliability analysis is high, the scale yields consistent results and is therefore reliable (StatisticsSolutions.com, 2019).

3.4.4. Correlation analysis

Correlation analysis method of statistical evaluation used to study the strength of a relationship between two, numerically measured, continuous variables(djsresearch, 2019). It is useful when a researcher wants to establish if there are possible connections between variables. It is often misunderstood that correlation analysis determines cause and effect; however, this is not the case because other variables that are not present in the research may have impacted on the results.



Correlation is a bivariate analysis that measures the strength of association between two variables and the direction of the relationship (Solutions, 2019). In terms of the strength of relationship, the value of the correlation coefficient varies between +1 and -1. A value of \pm 1 indicates a perfect degree of association between the two variables. As the correlation coefficient value goes towards 0, the relationship between the two variables will be weaker. The direction of the relationship is indicated by the sign of the coefficient; a + sign indicates a positive relationship and a – sign indicates a negative relationship.

3.4.5. Regression analysis

Regression analysis is a way of mathematically sorting out which of those variables does indeed have an impact (Gallo, 2015). Regression analysis is a powerful statistical method that allows you to examine the relationship between two or more variables of interest (Foley, 2018). While there are many types of regression analysis, at their core they all examine the influence of one or more independent variables on a dependent variable. It used in stats to find trends in data (StatisticsHowTo, 2019) and to explain the relationship between one dependent variable and one or more independent variables (StatisticsSolutions.com, 2019).

4. ANALYSIS AND FINDINGS

The outcomes from the methodology were discussed to identify the relationship between independent variables and dependent variable. The result from the regression analysis will be further explained to demonstrate the impact of credit policy by analyzing the hypothesis suggested. The four hypotheses to be tested earlier represent each dimensional factor in which analyzed using linear and regression analysis.

4.1. RESPONSE RATE

Scope of study is focus on Malaysian Manufacturers. Questionnaires distributed via online survey to manufacturers firm by email, social media and text messaging. Researcher also received a support from Ms. Sim from FMM to distribute the online survey to list of their corporate members; mostly from manufacturers who registered with FMM. The feedback from the respondents were very slow. It is very challenging to get a data that related to policy and practices from the organization. Therefore, researcher had to follow up and convince the respondent that this research carried out for academic purpose only. 35 respondents accepted and only one was rejected due to incomplete information.

4.2. DESCRIPTIVE ANALYSIS – PROFILE OF RESPONDENTS

The respondent feedbacks were recorded in a form of raw data; extracted from google form in Excel format. Those data were converted into numerical data which then uploaded to SPSS software to run report. The result will be explained further in Chapter 5. Descriptive analysis is divided by two analyses; profile of respondents and continuous variables. Descriptive analysis of profile of respondents explained the number of respondents and its percentage. The profile of the respondents categorized into gender, education, years in manufacturing industry, corporate position, years of firm has been operating, number of



workers and structure or system of the firm. Meanwhile, descriptive analysis of continuous variables explained the mean and standard deviation of each item.

4.2.1. Demographic

As shown in Table 4 and Fig. 3, the frequency of male respondents is 27 out of 35, 77.1% while the balance of 8 respondents, 22.9% were females who possibly involved in decision making related to credit management and credit policy.

Table 4. The Frequency and Percentage of Gender

Gender	No of Respondents	Percentage (%)
Male	27	77.1
Female	8	22.9
Total	35	100.0

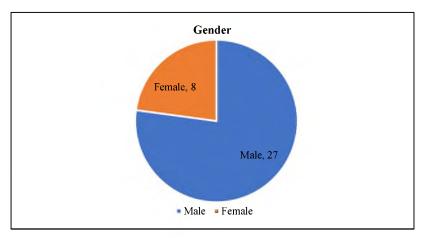


Fig. 3. The Percentage of Gender

4.2.2. Education

The level of education in this research is analyzed to identify whether the level of education and knowledge potentially influenced the management of credit. It has been observed in Table 5 and Fig. 4 that the majority number of respondents have basic bachelor degree with 17 respondents, 48.6% who experienced in credit management. Meanwhile, second highest of the education level is those with Master and PhD. Next, followed by diploma and certificate holder. Thus, it was concluded that education is one of the main factors in decision making of credit management which involves financial understanding. Zucchi (2019) explained that financial literacy is the confluence of financial, credit and debt management and the knowledge that is necessary to make responsible financial decisions; integral to our everyday lives. She also highlighted that the level of financial literacy varies according to education and income levels. However, in some cases there were evidence shows that highly educated consumers with high incomes can be just as ignorant about financial issues as less-educated, lower-income consumers. Hogarth (2006) highlighted that well-informed, well-educated consumers can create economic ripples. They tend to make better financial decisions for themselves and their families; increasing their economic security and well-being.



Table 5. The Frequency and Percentage of Education

Education	No of Respondents	Percentage (%)
Certificate	1	2.9
Diploma	7	20.0
Bachelor Degree	17	48.6
Master/PhD	10	28.6
Total	35	100.0

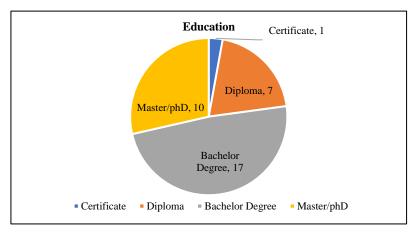


Fig. 4. The Percentage of Education

4.2.3. Years in Manufacturing Industry

Since the topic of this research is specific on manufacturer, it is crucial to understand if number of respondents have sufficient experience in this industry and also to indicate group of professionals who involves with credit management decisions. However, the factor may not influence directly but the percentage group of respondents may represent majority of involvement related to the topic. The table 6 and fig. 5, shows the majority of respondents were from the group of professionals who have more than 10 years of experience in manufacturing which leads to the maturity level to decide on credit policy within an organization. According to BankNegaraMalaysia (2019) in their Guidelines on Best Practices for the Management of Credit Risk for Development Financial Institutions (DFI), the credit approving function should be performed by full-time executive personnel or a committee comprising as such. Although not involved in the approval process, the Board has the veto power to reject credits or modify the terms of credits which have been approved by the DFI's executive body/credit personnel should the majority of the Board be of the opinion that the loan/financing would expose the DFI to undue excessive risk. It is explained that the decision on credit required experienced personnel to protect from credit risk.

However, professional who within 6 to 9 years of working experience reflected the lowest respondents. It was concluded that there is high possibility of this group moved to new industry after 5 years of working experience. According to Ryan (2016), at least every three to five years' people will move to new industry; to grow and advance in career. The statement was depending on culture or working environment in the country itself. If we considering the level of position, 5 years would be sufficient to stay in one same industry.



Ryan (2016) also highlighted that in some companies they won't hire people who have short-term jobs; jobs that lasted two or three years on their resumes. She reminded that this is not a problem. It depending on the culture the organization practiced.

Table 6. The Frequency and Percentage of Years in Manufacturing Industry

Years in Manufacturing Industry	No of Respondents	Percentage (%)
Less than 2 years	6	17.1
3 to 5 years	10	28.6
6 to 9 years	4	11.4
Above 10 years	15	42.9
Total	35	100.0

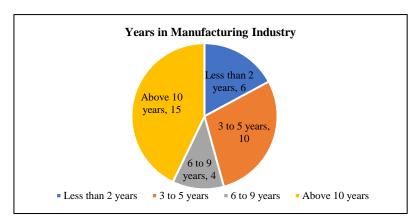


Fig. 5. The Percentage of the Years in Manufacturing Industry

4.2.4. Corporate position

The data in Table 7 and Fig. 6, below shows that most of the respondents are the manager with the number of respondents of 21, 60%. Followed by the position of executive with 10 respondents, 28.6%. Both of corporate position of non-executive and 'C' suites are the lowest with 2 number of respondents each, 5.7%. Normally, group of managers involved in managing the people, process and policy of an organization. They are the decision makers in daily operation who understand the requirement and benefits of credit policy. If the majority come from lower level, the possibility of inaccuracy on conducting this research is very high. Source from Bank Negara Malaysia (2019) in their Guidelines on Best Practices for the Management of Credit Risk for DFI, the qualified individuals to decide on credit is executive an above who again will be monitor by upper management or board of director; who have the authority to reject or expand.

 Table 7.
 The Frequency and Percentage of Corporate Position

Corporate Position	No of Respondents	Percentage (%)	
Non-executive	2	5.7	
Executive	10	28.6	
Manager	21	60.0	
'C' suite	2	5.7	
Total	35	100.0	



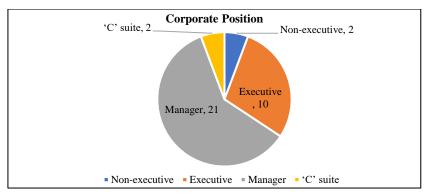


Fig. 6. The Percentage of Corporate Position

4.2.5. Years of Firm has been operating

In some organizations, the management maturity is very important to develop processes and procedures. It set a boundary between the firm and their vendors or their customers. It reflects the direction of the organization towards their annual objectives. Oliveira et al. (2011) explained that the concept of process maturity derives from the understanding that processes have life cycles or developmental stages that can be clearly defined, managed, measured and controlled throughout time. From the data analyzed, Table 8 and Fig. 7 below shows the majority of respondents were from group of firms that have been operating more than 11 years; participated by professional who working for an organization which is stable and understand the best requirement of credit policy for their organization.

Table 8. The Frequency and Percentage of Years of Firm Has Been Operating

Years of Firm Has Been Operating	No of Respondents	Percentage (%)
Less than a year	1	2.9
1 to 5 years	6	17.1
6 to 10 years	6	17.1
More than 11 years	22	62.9
Total	35	100.0

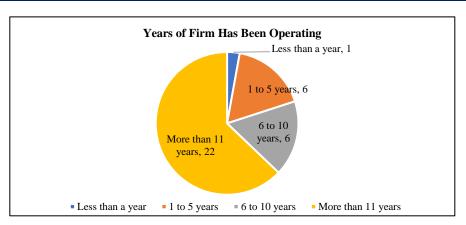


Fig. 7. The Percentage of Years of Firm Has Been Operating

4.2.6. Number of workers

The number of workers was identified to measure the size of respondent's organization. It represents the operating cost, the way they control their credit management and how they



decide and enforce their credit policy. From the Table 9 and Fig. 8 shows below, it is observed that the majority of the respondents are coming from group of organization which have standard average of manufacturing workers between 101 to 300 workers.

Table 9. The Frequency and Percentage of Number of Workers

Number of Workers	No of Respondents	Percentage (%)
Less than 50	10	28.6
50 to 100	3	8.6
101 to 300	14	40.0
More than 300	8	22.9
Total	35	100.0

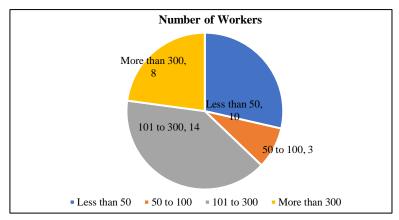


Fig. 8. The Percentage of Number of Workers

4.2.7. Structure and System of Firms

Multi-national, regional operation or any conglomerate company normally practice different standard of policy. Some may have same standard one policy. The structure of organization would be depending on the system of the organization itself. Therefore, the structure of the firm differentiates the practice of credit policy in organization with another. Table 10 and Fig. 9 shows that most of the respondents are working in divisional company with 19 respondents, 54.3%. Followed by 9 functional companies, 25.7% and 7 simple companies, 20% accordingly. None of the respondents that came from matrix structure of firm.

Table 10. The Frequency and Percentage of Structure System of Firm

Structure System of Firm	No of Respondents	Percentage (%)	Percentage (%)	
Simple	7	20.0		
Functional	9	25.7		
Divisional	19	54.3		
Matrix	0	0		
Total	35	100.0		



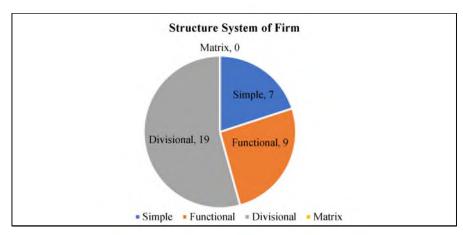


Fig. 9. The Percentage of Structure System of Firm

4.3. DESCRIPTIVE ANALYSIS - CONTINUOUS VARIABLES

The purpose of descriptive analysis of continuous variables is to identify the mean and the standard deviation of each of the variables. The five variables were measured by using 5-likert scale and its' variability were measured by standard deviation score. Cohen (1988) suggested that if the level of 1.00 to 2.33, 2.34 to 3.67, 3.68 to 5.00 and 5.00 to 6.33 are low, medium, high and very high accordingly. The mean scores as per Table 11 were indicated as the agreement of the respondents in the dimension of credit policy towards firm's performance.

Table 11. The Mean Category

Group Code	Mean Level	Category
1	1.00 – 2.33	Low
2	2.34 – 3.67	Medium
3	3.68 – 5.00	High
4	5.00 – 6.33	Very High

Source: (Cohen, 1988)

4.3.1. Credit Structure

Table 12 below shows the mean and standard deviation for credit structure. CS1, CS2, CS7 and CS8 have high mean score with 3.74, 4.09, 4.20, and 4.23 accordingly. CS8 has the highest mean score with 4.23 and standard deviation of 0.690. This indicates that most of respondents are agree with their firm frequently reviews the levels of bad debts. Does the firm regularly chase the bad debt? Or making sure customers paid for the bad debts? It is observed that credit structure has less important compare to payables management.

Table 12. Mean and Standard Deviation of Credit Structure

Code	Items	Mean	Standard Deviation
CS1	Firm grant credit to their newly customer based on reputations	3.74	1.120
CS2	Firm grant credit to their newly customer based on financial records	4.09	1.040
CS3	Firm allow credit duration for longer periods	2.77	1.031
CS4	Firm provide credit extension	3.00	.907
CS5	Firm considers production cycle when setting credit standards	3.40	.847
CS6	Length of time allowed to your customers has an influence on sales	3.63	.843



CS7	Firm frequently reviews levels of accounts receivables	4.20	.797
CS8	Firm frequently reviews the levels of bad debts	4.23	.690
CS9	Firm set a lenient credit policy	3.46	.919

4.3.2. Receivables Management

Table 13 below shows the mean and standard deviation for receivables management. RM4 has the highest mean score with 3.86 and standard deviation of 0.733. This indicates that most of respondents are agree with their firm has set credit terms that stipulate credit period extension. By having credit terms stipulate credit period extension firms were considerably being flexible with their customer. It is important that we are managing good relationship with customer. However, compliance on credit policy also important where firm need to be transparent and being firm on credit decisions to consider long-term business strategy.

Table 13. Mean and Standard Deviation of Receivable Management

Code	Items	Mean	Standard Deviation
RM1	Firm regularly writes to customers reminding them to pay their debts.	3.69	.867
RM2	Firm sometimes writes off bad debts from customers who do not pay.	3.03	1.272
RM3	Firm consider legal action against customers who refuse to pay.	3.69	1.132
RM4	Firm has set credit terms that stipulate credit period extension.	3.86	.733
RM5	Firm allows cash discounts to customers to induce them pay promptly.	2.71	1.250
RM6	Firm stipulates the amount of discount allowed to a customer on	2.83	1.294
	payment within a specified time.		
RM7	Discount given to your customers depend on the credit period allowed.	3.00	1.328
RM8	Firm considers production cycle when setting collection period.	3.60	.976
RM9	Average collection more than 30 days.	3.20	1.256

4.3.3. Payables Management

Table 14 below shows the mean and standard deviation for payable management. Out of 7 indicators of payable management in the table, PM1 has the highest mean score with 3.69 while its standard deviation is at 0.963. This means that most of the respondents were agreed that their firm received good credit facilities from their suppliers. With the highest score of standard deviation of 1.345, PM5 explained that there were high number of respondents tends to agree or disagree that their firm sometimes unable to pay its suppliers on time maybe depends on their current financial situations periodically. This variable contributes the highest impact compare to other variables.

Table 14. Mean and Standard Deviation of Payable Management

Code	Items	Mean	Standard Deviation
РМ1	Firm receives credit facilities from its suppliers.	3.69	.963
PM2	Firm receives cash discounts from its suppliers upon payment within a stipulated period of time.	2.83	1.248
РМ3	Firm charged an interest by its suppliers for late payment.	2.66	1.235
PM4	Past debts have ever been waived by its suppliers.	2.63	1.308
PM5	Sometimes, firm unable to pay its suppliers on time.	2.89	1.345
РМ6	Payment period allowed by your suppliers to your firm is reasonable.	3.57	.948
РМ7	Average credit granted more than 30 days.	3.46	1.010



4.3.4. Inventory Control

Table 15 below shows the mean and standard deviation for inventory control. The item that has the highest mean score is IC3 with mean score of 4.20 and standard deviation is 0.718. This means that most of the respondents are agree that their firm regularly do stock take and it is an important process to ensure good management of inventory control. With the highest score of standard deviation of 0.877 and 1.14, IC1 and IC6 is indirectly related. It indicates that there were high number of respondents agree or disagree with their firm has sufficient space for raw materials. Such situation probability depends on supply demands. Where the demands increasing, the possibility of space requirement insufficient and external warehouse may require. However, if the demand is low, the space requirement is a waste. Therefore, we shall identify some of business strategy from this indication.

Table 15. Mean and Standard Deviation of Inventory Control

Code	Items	Mean	Standard Deviation
IC1	Firm has sufficient space for raw materials.	3.77	.877
IC2	Firm has determined optimal batch sizes.	3.89	.718
IC3	Firm regularly do stock take.	4.20	.719
IC4	Firm keeps accurate inventory records.	4.17	.747
IC5	Firm has inventory control system implemented.	4.17	.747
IC6	Firm does not require external warehouse.	3.37	1.140

4.3.5. Firm's Performance

Table 16 below shows the mean and standard deviation for firm's performance. The indicator which has the highest mean score is FP1 with mean score of 4.20 and standard deviation is 0.632. This means that most of the respondents are agree that their firm has an ability to increase sales. This indication may depend on current capacity the organization has. It is observed that they believe and confidence that their organization has a capacity ability to increase sales and profits reflected on FP1 and FP2, two of the highest mean. However, respondents are not consistent if current assets in a firm should be financed by a long-term fund; reflected on FP6, the highest standard deviation.

Table 16. Mean and Standard Deviation of Firm's Performance

Code	Items	Mean	Standard Deviation
FP1	Firm has an ability to increase sales.	4.20	.632
FP2	Firm has an ability to improve profit.	4.06	.802
FP3	Firm current assets are maintained at a higher level than the current liabilities.	3.57	.979
FP4	Firm regularly assesses the optimum and minimum levels of liquidity.	3.51	.742
FP5	Firm maintains a high level of current assets in relation to current liabilities.	3.46	.780
FP6	Firm's current assets are financed by long term funds.	3.31	1.132

4.4. NORMALITY TEST

There are two main method assessing normality test; graphical and numerical. This test identify normal frequency has been distributed among each variable; to validate the



acceptance of each variable among each other if they are connected. According to Saunders et al. (2012), normality test compares the shape of distribution sample to a normally distributed curve with the same mean and standard deviation. It indicates if the data collected were accurately display within normal distribution measured by skewness and kurtosis. Malhotra (2010) explained that the acceptable range of skewness and kurtosis is between +3 to -3. Table 17 demonstrate that the skewness and kurtosis value were within acceptable range.

Table 17. Skewness and Kurtosis from Normality Test

Factor	N	Skewness		Kurtosis	
ractor	Statistic	Statistic	Std. Error	Statistic	Std. Error
CS	35	.627	.398	.129	.778
RM	35	.728	.398	.515	.778
PM	35	.071	.398	1.950	.778
IC	35	195	.398	848	.778
FP	35	.351	.398	.226	.778
Valid N (listwise)	35				

4.5. RELIABILITY ANALYSIS

According to Sekaran and Bougie (2013), the purpose of reliability analysis is to test the consistency and stability of the instruments used in this research. Cronbach's alpha score is the indication to the reliability of the instruments used. The highest score of Cronbach's alphas is 1 which means the instruments used is so reliable and consistent (Sekaran & Bougie, 2013). Referring to Li (2013), the score of Cronbach's alphas that has more than 0.7 is acceptable reliable meanwhile less than 0.6 is unsatisfactory reliable. The value of Cronbach's alpha of credit structure, payable management, receivable management, inventory control and firm's performance were accepted with the value of 0.772, 0.657, 0.765, 0.787 and 0.715 respectively as shown in Table 18.

Table 18. Coefficient Analysis

Variables	No of Items	Cronbach's Alpha Coefficient
Firm's Performance	6	.715
Credit Structure	9	.772
Receivable Management	9	.657
Payable Management	7	.765
Inventory Control	6	.787

4.6. CORRELATION ANALYSIS

The objective of this research is to identify the relationship between credit policy and firm's performance which involve the dimension factor of credit policy (credit structure, receivable management, payable management and inventory control). Pearson Correlation Coefficient is used in correlation analysis which its range is from -1 to +1 whereby r specified the correlation and the p value is the significant value. Table 4.16 below shows the level of the correlation by Collis & Hussey (2009).



Table 19. Pearson Correlation Coefficient and Its Strength

Range	Strengths
0.90 to 0.99	Very high positive correlated
0.70 to 0.89	High positive correlated
0.40 to 0.69	Medium positive correlated
0 to 0.39	Low positive correlated
0 to -0.39	Low negative correlated
-0.40 to -0.69	Medium negative correlated
-0.70 to -0.89	High negative correlated
-0.90 to -0.99	Very high negative correlated

As compared the result in Table 19 and Table 20, it was found that the correlation between FP and CS (r = 0.430), RM (r = 0.529) and PM (r = 0.525) is medium positive correlated. This explained that there is a medium level of firm's performance that related to the medium level of credit structure, receivable management, and payable management. Meanwhile the correlation between FP and IC is considers as low positive correlated with r value of 0.397. This defines that there a low level of firm's performance that associated with the low level of inventory control.

Table 20. Correlation Analysis Result

Correlation		FP	CS	RM	PM	IC
FP	r	1				
CS	r	.430**	1			
	Sig. (2-tailed)	.010				
RM	r	.529**	.555**	1		
	Sig. (2-tailed)	.001	.001			
PM	r	.525**	.276	.565**	1	
	Sig. (2-tailed)	.001	.108	.000		
IC	r	.397	.544**	.499**	.155	1
	Sig. (2-tailed)	.018	.001	.002	.374	

4.7. REGRESSION ANALYSIS

The outcome from the tools on methodology carried out were discussed to identify the relationship between independent variables and dependent variables. Regression analysis as per Table 21, tested the hypotheses developed; if it is significant impact or not significant impact.

Table 21. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.640ª	.410	.332	2.710

a. Predictors: (Constant), IC, PM, CS, RM

As shown is Table 21, it was found that the r² value is 0.410 which indicates that the independent variables 41% impact on firm's performance. Meanwhile, ANOVA in Table 22, reflect the research has significance relations which beta below than 0.05; indicates positive relation.



^{**.} Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 22. Multiple Regression Analysis Result (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	153.223	4	38.306	5.216	.003 ^b
	Residual	220.320	30	7.344		
	Total	373.543	34			

a. Dependent Variable: FP, b. Predictors: (Constant), IC, PM, CS, RM

Table 23. Multiple Regression Analysis Result (Coefficients)

N4I - I	Unstandardized Coefficients Standardized Coefficients			C:		
Model		β	Std. Error	β	- τ	Sig.
7	(Constant)	6.928	3.727		1.859	.073
	CS	.098	.122	.145	.799	.431
	RM	.089	.130	.142	.684	.499
	PM	.238	.109	.376	2.176	.038
	IC	.179	.167	.189	1.071	.293

a. Dependent Variable: FP

4.8. RELATIONSHIP BETWEEN CREDIT STRUCTURE AND FIRM PERFORMANCE

As shown in Table 23, credit structure is not significant impact on firm's performance (β =0.145, t-value = 0.799, P > 0.05). This means that credit structure is not influencing the firm's performance. The hypothesis of H1 developed the credit policy has a significantly impact on firm's performance which contra with the gained result. Hence, H1 against the hyposthesis thus rejected; not significant.

4.9. RELATIONSHIP BETWEEN RECEIVABLES MANAGEMENT AND FIRM PERFORMANCE

As shown in Table 23, receivables management is not significant impact on firm's performance (β =0.142, t-value = 0.684, P > 0.05). This indicates that receivable management is not affecting the firm's performance. Hence, H2 against the hyposthesis thus rejected; not significant.

4.10. RELATIONSHIP BETWEEN PAYABLES MANAGEMENT AND FIRM PERFORMANCE

As shown in Table 23, payable management is significant impact on firm's performance (β =0.376, t-value = 2.176, P < 0.05). This means that payable management strongly influencing the firm's performance. Hence, H3 is accepted; significant.

4.11. RELATIONSHIP BETWEEN INVENTORY CONTROL AND FIRM PERFORMANCE

As shown in Table 23, inventory control is not significant impact on firm's performance (β =0.189, t-value = 1.071, P > 0.05). This means that inventory control is not influencing the firm's performance. The hypothesis of H4 suggested that inventory control has a significantly impact on firm's performance but it does not support the result. Hence, H4 against the hyposthesis thus rejected; not significant.



4.12. SUMMARY OF HYPOTHESIS TEST RESULT

In conclusion, credit policy has 41% impact on firm performance. This figure is positively depending on situation of the manufacturing firm which discussed on Chapter 5. As show in Table 24, three out of four hypotheses were rejected which indicate their dependent variables were not significant impact on independent variable. Only one hypothesis supported, payables management impact on firm performance.

Table 24. Summary of Hypotheses Testing

Ref.	Hypotheses	Result
H ₁	Credit structure has a significant impact on firm's performance.	Not supported
H ₂	Receivables management has a significant impact on firm's performance.	Not supported
Нз	Payables management has a significant impact on firm's performance.	Supported
H4	Inventory control has a significant impact on firm's performance.	Not supported

5. DISCUSSION

This chapter discussed the findings of this research study. Each hypothesis has been tested to fulfill the answer for earlier research questions to verify the research objective. This chapter also inclusive with summary, discussion, implications, limitations and recommendations for future studies.

5.1. SUMMARY OF FINDINGS

The primary objective if this study is to identify if credit policy does impact on firm performance. Having focus with the Malaysian manufacturers, the scope of study has been narrowing down to single sector. The study expecting up to 217 respondents. Since the question mostly required high level of decision maker's answer, the response rate was gradually slow. Therefore, researcher ensuring minimum best 30 respondents achieved as per mentioned in research methodology.

Thirty-five samples have been used to generate a data which collected through online survey; to test the proposed four hypotheses which represent four dimensional factors of credit policy. Those factors were supported with numerical proof extracted from online survey carried out representing frequency, percentage and standard deviation. The research question was to test the impact of credit policy on firm performance. It was defining that four-dimensional factors normally involves in credit management decision; credit structure, receivables management, payables management and inventory control. From these factors four hypothesis were tested. Three out of four hypothesis found insignificant and only one hypothesis accepted which is H3; payables management.

5.2. Discussion on Findings

Hypothesis 1 was tested and the result found that the credit structure not significance to the firm performance. This research adding equal value to the previous study made by other researchers. Malaysian manufacturers mostly do not care on the importance of credit structure. They are more focus into the performance result and short-term effect of the



credit policy and their dimensional factors if any. However, publics need to believe that good governance were depending on policy compliance. International Federation of Accountants (2013) highlighted that effective governance in the public sector encourages better decision making with the efficient use of resources which strengthens accountability for the stewardship of those resources. Effective governance is characterized by robust scrutiny, which provides important pressures for improving public sector performance and tackling corruption. Effective governance can improve management, leading to more effective implementation of the chosen interventions, better service delivery, and, ultimately, better outcomes. This is also to protect and prevent any risk which could impact the reputation of the organization.

Hypothesis 2 was tested and found that the receivables management also not significant to the firm performance. It may due to maintain good relationship with customers, firm tends to give opportunities to expand the credit limits in order to increase their sales. Bear in mind that cost involve in the production could impact the cycle of new production if organization does not have sufficient fund or further borrowing from creditors or bank. Hawley (2019) highlighted that a hallmark of good business management is the ability to utilize working capital management to maintain a solid balance between growth, profitability and liquidity. In addition, working capital is a daily necessity for businesses, as they require a regular amount of cash to make routine payments, cover unexpected costs, and purchase basic materials used in the production of goods.

Hypothesis 3 was tested and accepted. Payables management is significant to the firm performance. It has been concluded that maintaining good relationship with suppliers also important for Malaysian manufacturers. In order to get sufficient supply of raw materials, manufacturers have to maintain good relationship with their suppliers. In addition, this is to build trust and avoid any delay due to outstanding payments. They ensure good payment has been made up to their suppliers. In some other cases, payables management has been an issue by their customers, especially distributor; to wait cycle of sale. The management of this receivables and payables seems unbalance. It potentially could impact on firm's cashflow for a long-term direction. Hawley (2019) explained that efficient working capital management helps maintain smooth operations and can also help to improve the company's earnings and profitability. Management of working capital includes inventory management and management of accounts receivables and accounts payables.

Hypothesis 4 was tested and inventory control predicted not significant to firm performance. Current organization management strategy is to outsource space from external warehouse instead investing on internal warehouse. One of the main reasons is to reduce unnecessary cost related to warehouse operation especially if the space unoccupied or if required more additional space. However, the strategy is outsourcing external warehouse is depending on the nature of the business. Other option is by utilizing supplier's space and minimize internal space usage. Hawley (2019) highlighted that working capital management is an essentially part of accounting strategy. The focus is maintaining sufficient balance between a company's current assets and their liabilities. An effective working capital management system helps businesses not only cover their financial obligations but also boost their earnings.



From the four findings above, the research concluded that majority of the manufacturers in Malaysia are having focus on the payables management instead others factors within credit policy. It is part of the supply chain culture involve many aspects; from origins to end users. However, in some area those factors need to be considered. The structure of processes and policy, compliance of policy, receivables effectiveness, and inventory management factors seem less important compare with payables.

Potentially, Malaysian manufacturers tend to maintain good relationship with their suppliers instead of strengthening their credit structure, chasing for payment collection or invest on inventory. It is believed that raw materials are main source in manufacturing business. Maintaining on this area potentially help generate good performance. Hammer (2004) highlighted that all product and service offered have become commodities. It is observed that almost no one has any pricing power, and none of this is likely to change in the near future. Therefore, the only way to grow is to take market share from competitors by operating at lower costs that can be turned into lower prices and by providing extraordinary levels of quality and service.

5.3. IMPLICATIONS FOR PRACTICE

The discussion on the study earlier underlying the importance of credit policy which carried out almost 41% of firm performance. It is indirectly high which potentially could impact on firm performance without proper management.

The findings of this study proven the relation between the credit policy and firm performance. In practice, this finding may provide an indication to a new or current manufacturer to understand the area they should focused when they come across any issue related to credit policy where the business relationship is concerned. This also produce set of guidelines to recommend wiser decision in credit planning or credit offering.

5.4. IMPLICATION FOR RESEARCH

This research study contributes not only to the corporate organization but also to the academic research. The 35 samples received reflect the number of participation of individuals in organization. It is undeniable low compare to 420 manufacturers available in Malaysia. It is unsure if the remaining manufacturers are not interested with the survey or not really understanding on the importance of credit policy.

Credit policy can be part of financial strategy. It reflects the objective and direction of the organization in a long run; involve cost saving, cycle of payment and cycle of supply which potentially impact on cycle of production. Pisano (2015) highlighted that it is a strategy which nothing more than a commitment to a set of coherent, mutually reinforcing policies or behaviors aimed at achieving a specific competitive goal. Good strategies promote alignment among diverse groups within an organization, clarify objectives and priorities, and help focus efforts around them.

The implication of this research and their result reflected the needs to carry out further research possibly using different methods to verify if the conclusion is accepted. This



research was using questionnaire to get the opinions from established manufacturing firms. Future research should consider secondary data to understand if financially credit policy in fact impact on firm's performance.

5.5. RECOMMENDATION FOR FUTURE STUDY

There are needs to carry out further research using different sampling to identify if current basis consistent. The transparency of information in one organization is also important to ensure that the information collected is accurate. Future research is recommended to focus in sampling where the subject is more assessable such as listed firms, where they published their financial report annually.

6. CONCLUSION

Malaysia is one of developed countries with further development planning following current economic situations. The new government agenda to strengthen governance and integrity amongs corporate firms is part of the improvement plan. Therefore, this research significantly important to study the potentially area to support such initiative.

The decision on credit award depending on the direction of finance in line with the the company's objective. Credit policy has been developed according to the requirement of the operation and their processes. The higher the values goes, more limitations involved.

The research indicate 41% of credit policy contribute to the firm performance. Indirectly, it is significantly high if the remaining other influence factor such as operation matter and production matter less than expected.

Good credit terms and policy required trust and good business relationship. The cycle of payment must be on time in order to establish sufficient confidence among suppliers; to consider credit expansion or renegotiate the current credit terms. In addition, the research suggested the corporate firms to focus on the area which required some improvement especially in payables management which significantly support to the contribution of firm performance.

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APPENDICES

A.1. SPSS RESULT OUTCOME

Descriptive Analysis - Profile of the Respondents

Table 4: The Frequency and Percentage of Gender

Gender		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	27	77.1	77.1	77.1
	Female	8	22.9	22.9	100.0
	Total	35	100.0	100.0	

Table 5: The Frequency and Percentage of Education

Education		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Certificate	1	2.9	2.9	2.9
	Diploma	7	20.0	20.0	22.9
	Bachelor Degree	17	48.6	48.6	71.4
	Master/PhD	10	28.6	28.6	100.0
	Total	35	100.0	100.0	

 Table 6: The Frequency and Percentage of Years in Manufacturing Industry

Years in	Manufacturing Industries	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 2 years	6	17.1	17.1	17.1
	3 to 5 years	10	28.6	28.6	45.7
	6 to 9 years	4	11.4	11.4	57.1
	Above 10 years	15	42.9	42.9	100.0
	Total	35	100.0	100.0	

Table 7: The Frequency and Percentage of Corporate Position

Corpora	ate Position	Frequency	Percent	Valid Percent	Cumulative Percent
	Non-executive	2	5.7	5.7	5.7
	Executive	10	28.6	28.6	34.3
Valid	Manager	21	60.0	60.0	94.3
	'C' suite	2	5.7	5.7	100.0
	Total	35	100.0	100.0	



Table 8: The Frequency and Percentage of Years of Firm Has Been Operating

Years of Firm has been Operating		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than a year	1	2.9	2.9	2.9
	1 to 5 years	6	17.1	17.1	20.0
	6 to 10 years	6	17.1	17.1	37.1
	More than 11 years	22	62.9	62.9	100.0
	Total	35	100.0	100.0	

Table 9: The Frequency and Percentage of Number of Workers

Numbe	r of Workers	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 50	10	28.6	28.6	28.6
	50 to 100	3	8.6	8.6	37.1
	101 to 300	14	40.0	40.0	77.1
	More than 300	8	22.9	22.9	100.0
	Total	35	100.0	100.0	

Table 10: The Frequency and Percentage of Structure System of Firm

Structure System of Firms		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Simple	7	20.0	20.0	20.0
	Functional	9	25.7	25.7	45.7
	Divisional	19	54.3	54.3	100.0
	Total	35	100.0	100.0	

Descriptive Analysis - Continues Variables

Table 12: Mean and Standard Deviation of Credit Structure

Credit Structure	N	Minimum	Maximum	Mean	Std. Deviation
CS1	35	1	5	3.74	1.120
CS2	35	1	5	4.09	1.040
CS3	35	1	5	2.77	1.031
CS4	35	1	5	3.00	.907
CS5	35	2	5	3.40	.847
CS6	35	2	5	3.63	.843
CS7	35	3	5	4.20	.797
CS8	35	3	5	4.23	.690
CS9	35	2	5	3.46	.919
Valid N (listwise)	35				

Table 13: Mean and Standard Deviation of Receivable Management

Receivables Management	N	Minimum	Maximum	Mean	Std. Deviation
RM1	35	2	5	3.69	.867
RM2	35	1	5	3.03	1.272
RM3	35	1	5	3.69	1.132
RM4	35	3	5	3.86	.733
RM5	35	1	5	2.71	1.250
RM6	35	1	5	2.83	1.294
RM7	35	1	5	3.00	1.328
RM8	35	2	5	3.60	.976
RM9	35	1	5	3.20	1.256
Valid N (listwise)	35				



Table 14: Mean and Standard Deviation of Payable Management

Payables Management	N	Minimum	Maximum	Mean	Std. Deviation
PM1	35	1	5	3.69	.963
PM2	35	1	5	2.83	1.248
PM3	35	1	5	2.66	1.235
PM4	35	1	5	2.63	1.308
PM5	35	1	5	2.89	1.345
PM6	35	1	5	3.57	.948
PM7	35	1	5	3.46	1.010
Valid N (listwise)	35				

Table 15: Mean and Standard Deviation of Inventory Control

Inventory Control	N	Minimum	Maximum	Mean	Std. Deviation
IC1	35	2	5	3.77	.877
IC2	35	3	5	3.89	.718
IC3	35	3	5	4.20	.719
IC4	35	3	5	4.17	.747
IC5	35	3	5	4.17	.747
IC6	35	1	5	3.37	1.140
Valid N (listwise)	35				

Table 16: Mean and Standard Deviation of Firm's Performance

Firm Performance	N	Minimum	Maximum	Mean	Std. Deviation
FPI	35	3	5	4.20	.632
FP2	35	2	5	4.06	.802
FP3	35	1	5	3.57	.979
FP4	35	2	5	3.51	.742
FP5	35	2	5	3.46	.780
FP6	35	1	5	3.31	1.132
Valid N (listwise)	35				

Correlation Analysis

Table 20: Correlation Analysis Result

Correl	ations	FP	cs	RM	РМ	IC	
FP	Pearson Correlation	1	.430**	.529⁺⁺	.525**	.397 [*]	_
	Sig. (2-tailed)		.010	.001	.001	.018	
	N	35	35	35	35	35	
CS	Pearson Correlation	.430**	1	.555**	.276	.544**	
	Sig. (2-tailed)	.010		.001	.108	.001	
	N	35	35	35	35	35	
RM	Pearson Correlation	.529**	.555**	1	.565**	.499⁺⁺	
	Sig. (2-tailed)	.001	.001		.000	.002	
	N	35	35	35	35	35	
РМ	Pearson Correlation	.525**	.276	.565**	1	.155	
	Sig. (2-tailed)	.001	.108	.000		.374	
	N	35	35	35	35	35	
IC	Pearson Correlation	.397*	.544**	.499**	.155	1	
	Sig. (2-tailed)	.018	.001	.002	.374		
	N	35	35	35	35	35	

^{**.} Correlation is significant at the 0.01 level (2-tailed).



^{*.} Correlation is significant at the 0.05 level (2-tailed).

Regression Analysis

Table 21: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.640°	.410	.332	2.710

a. Predictors: (Constant), IC, PM, CS, RM

Table 22: Multiple Regression Analysis Result (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	153.223	4	38.306	5.216	.003 ^b	
	Residual	220.320	30	7.344			
	Total	373.543	34				

a. Dependent Variable: FP

b. Predictors: (Constant), IC, PM, CS, RM

Table 17: Skewness and Kurtosis from Normality Test

Factor	N	Skewness		Kurtosis	
ractor	Statistic	Statistic	Std. Error	Statistic	Std. Error
CS	35	.627	.398	.129	.778
RM	35	.728	.398	.515	.778
PM	35	.071	.398	1.950	.778
IC	35	195	.398	848	.778
FP	35	.351	.398	.226	.778
Valid N (listwise)	35				

 Table 23: Multiple Regression Analysis Result (Coefficients)

Model		Unstandard	dized Coefficients	Standardized Coefficients	_	Sig.
Model		В	Std. Error	Beta	- t	
1	(Constant)	6.928	3.727		1.859	.073
	CS	.098	.122	.145	.799	.431
	RM	.089	.130	.142	.684	.499
	PM	.238	.109	.376	2.176	.038
	IC	.179	.167	.189	1.071	.293

a. Dependent Variable: FP

