

STUDY ON THE SUCCESS FACTOR OF HOUSING CONSTRUCTION  
COMPANY PERFORMANCE BY USING FINANCIAL KEY PERFORMANCE  
INDICATOR IN MALAYSIA

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## APPROVAL

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## DECLARATION

“I admit that this report is the result of my own, except certain explanations and passages where every of it is cited with sources clearly.”

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## ABSTRACT

This research discussed about the study on the success factor of housing construction company performance by using financial key performance indicator in Malaysia. Many housing construction companies have issues of cost and schedule overruns as well as low qualities. Therefore, the outcome of this research able to give some references to particular parties like constructors. There are three objectives stated in this research. Firstly, to identify factors influencing housing construction company performance by using financial ratio in Malaysia. Secondly, to study the relationship between financial ratio on the housing construction company performance in Malaysia. Lastly, to determine the most significant variables between financial ratio on the housing construction company performance in Malaysia. In this research, financial ratios are included quick ratio (QR), current ratio (CR), debt to equity (DER), debt to capital (DCR), gross profit margin (GPM), profit margin (PM) and return on equity (ROE). All the independent variables and dependent variable, revenue growth rate (RGR) had present some previous study review to understand well the research concept. This research will conduct by using the secondary quantitative method with a period of 2014 to 2018. Data was collected through annual reports and using SPSS to run the data. The first research objective will explain in detail in the literature reviews. Second research objective uses the Pearson's Correlations Coefficient to examine. The results show that QR and CR have a negative and insignificant relation with the RGR. Next, DER, DCR and GPM have a negative and significant association with RGR. PM and ROE have a positive and significant relation with RGR. Third research objectives is tested by using Multiple Linear Regression. Lastly, PM is the most influencing significant variables towards the RGR. The success factors of the housing construction company are cash management and accounting.

## TABLE OF CONTENTS

CHAPTER	TOPIC	PAGES
	APPROVAL	i
	TITLE	ii
	DECLARATION	iii
	ACKNOWLEDGEMENT	iv
	ABSTRACT	v
	TABLE OF CONTENTS	vi
	LIST OF TABLES	xi
	LIST OF FIGURES	xii
	LIST OF ABBREVIATIONS	xiii
	LIST OF APPENDICES	xiv
CHAPTER 1	INTRODUCTION	
	1.0 Introduction	1
	1.1 Research Background	1
	1.2 Problem Statement	3
	1.3 Research Objectives	5
	1.4 Research Questions	5
	1.5 Scope of the Research	5
	1.6 Limitation of the Research	6
	1.7 Significant of the Research	6
	1.8 Summary	7
CHAPTER 2	LITERATURE REVIEW	
	2.0 Introduction	8

2.1	Financial Key Performance Indicators	8
2.2	Liquidity Ratio	9
2.2.1	Quick Ratio	10
2.2.2	Current Ratio	11
2.3	Leverage Ratio	12
2.3.1	Debt to Equity Ratio	14
2.3.1.1	Pecking Order Theory	14
2.3.2	Debt to Capital Ratio	15
2.4	Profitability Ratio	16
2.4.1	Gross Profit Margin	19
2.4.2	Profit Margin	19
2.5	Shareholder Values	20
2.5.1	Return on Equity	22
2.5.1.1	DuPont Analysis	22
2.6	Housing Construction Company Performance	23
2.6.1	Revenue Growth Rate	25
2.7	The Factor Influencing Housing Construction Company Performance By Using Financial Ratio in Malaysia	26
2.7.1	Success Factor of Housing Construction Company	31
2.8	Conceptual Framework	32
2.9	Research Hypothesis	33
2.10	Summary	35

### CHAPTER 3 RESEARCH METHODOLOGY

3.0	Introduction	36
3.1	Population and Sample Selection	36
3.2	Research Design	37
3.3	Research Instrument	37



3.4	Data Collection Method	37
3.4.1	Primary Data	38
3.4.2	Secondary Data	38
3.5	Data Analysis	39
3.5.1	Panel Data Analysis	39
3.5.2	Descriptive Analysis	39
3.5.3	Reliability Test	40
3.5.4	Pearson's Correlation Coefficient	40
3.5.5	Multiple Linear Regressions	41
3.6	Measurement of Variables and Operational Definitions	41
3.7	Pilot Study	44
3.8	Summary	44

#### CHAPTER 4 DATA ANALYSIS

4.0	Introduction	45
4.1	Pilot Test	45
4.2	Reliability Test	46
4.2.1	Quick Ratio	46
4.2.2	Current Ratio	46
4.2.3	Debt to Equity Ratio	47
4.2.4	Debt to Capital Ratio	47
4.2.5	Gross Profit Margin	48
4.2.6	Profit Margin	48
4.2.7	Return on Equity	49
4.2.8	Revenue Growth Rate	49
4.2.9	Reliability Analysis	50
4.3	Descriptive Statistics	50
4.3.1	Descriptive Analysis for Liquidity Ratio	52
4.3.2	Descriptive Analysis for Leverage Ratio	53
4.3.3	Descriptive Analysis for Profitability Ratio	54

4.3.4	Descriptive Analysis for Shareholder Values	55
4.3.5	Descriptive Analysis for Housing Construction Company Performance (Revenue Growth Rate)	55
4.4	Pearson's Correlations Analysis	56
4.5	Multiple Linear Regressions	59
4.6	Research Hypothesis	64
4.6.1	Hypothesis Testing 1	64
4.6.2	Hypothesis Testing 2	65
4.6.3	Hypothesis Testing 3	66
4.6.4	Hypothesis Testing 4	66
4.6.5	Hypothesis Testing 5	67
4.6.6	Hypothesis Testing 6	68
4.6.7	Hypothesis Testing 7	68
4.6.8	Summary of Hypothesis Testing Results	69
4.7	Summary	70
CHAPTER 5 CONCLUSION		
5.0	Introduction	71
5.1	Discussion on Results and Findings	71
5.1.1	To Identify Factors Influencing Housing Construction Company Performance By Using Financial Ratio in Malaysia	71
5.1.2	To Study the Relationship Between Financial Ratio on the Housing Construction Company Performance in Malaysia	73
5.1.3	To Determine the Most Significant Variables Between Financial Ratio on the Housing Construction Company Performance in Malaysia	75
5.2	Research Implication	76

5.3	Research Recommendation	77
5.4	Summary	79

REFERENCES

APPENDIX

## LIST OF TABLES

<b>TABLES</b>	<b>TITLE</b>	<b>PAGES</b>
3.5.3	Coefficient Value of Cronbach's Alpha	40
4.2.1.1	Quick Ratio Case Processing Summary	46
4.2.1.2	Reliability of Quick Ratio	46
4.2.2.1	Current Ratio Case Processing Summary	46
4.2.2.2	Reliability of Current Ratio	47
4.2.3.1	Debt to Equity Ratio Case Processing Summary	47
4.2.3.2	Reliability of Debt to Equity Ratio	47
4.2.4.1	Debt to Capital Ratio Case Processing Summary	47
4.2.4.2	Reliability of Debt to Capital Ratio	47
4.2.5.1	Gross Profit Margin Case Processing Summary	48
4.2.5.2	Reliability of Gross Profit Margin	48
4.2.6.1	Profit Margin Case Processing Summary	48
4.2.6.2	Reliability of Profit Margin	48
4.2.7.1	Return on Equity Case Processing Summary	49
4.2.7.2	Reliability of Return on Equity	49
4.2.8.1	Revenue Growth Rate Case Processing Summary	49
4.2.8.2	Reliability of Revenue Growth Rate	49
4.2.9.1	Case Processing Summary	50
4.2.9.2	Reliability Statistics	50
4.3	Descriptive Statistics	50
4.4.1	Correlations Between Independent Variables and Dependent Variable	56
4.4.2	Pearson's Correlation Coefficient, $r$	57
4.5.1	Model Summary of Multiple Linear Regressions	59
4.5.2	ANOVA <sup>a</sup> of Multiple Linear Regression	60
4.5.3	Coefficients <sup>a</sup> of Multiple Linear Regression	60
4.6.8	Hypothesis Testing Results	69
5.1.2	The Results of Pearson's Correlation Coefficient	73

## LIST OF FIGURES

<b>FIGURES</b>	<b>TITLE</b>	<b>PAGES</b>
2.7	Conceptual Framework	32
4.3.1	Independent Variable (Liquidity Ratio)	52
4.3.2	Independent Variable (Leverage Ratio)	53
4.3.3	Independent Variable (Profitability Ratio)	54
4.3.4	Independent Variable (Shareholder Values)	55
4.3.5	Dependent Variable (Housing Construction Company Performance)	55
5.3	New Conceptual Framework	78

## LIST OF ABBREVIATIONS

%	=	Percentage
NHP	=	National Housing Policy
CITP	=	Construction Industry Transformation Programme
CIDB	=	Construction Industry Development Board
IBS	=	Industrialised Building System
US	=	United States
SAIL	=	Steel Authority of India Ltd
ROS	=	Return on Sales
ROA	=	Return on Assets
SMEs	=	Small and Medium Enterprises
SPSS	=	Statistical Package for the Social Sciences
NLOGIT	=	Nested LOGIT models
SAS	=	Statistical Analysis System
Stata	=	Software for Statistics and Data Science
LISREL	=	Linear Structural Relations
IV	=	Independent Variables
DV	=	Dependent Variable
QR	=	Quick Ratio
CR	=	Current Ratio
DER	=	Debt to Equity
DCR	=	Debt to Capital
GPM	=	Gross Profit Margin
PM	=	Profit Margin
ROE	=	Return on Equity
RGR	=	Revenue Growth Rate

## LIST OF APPENDICES

<b>APPENDICES</b>	<b>TITLE</b>	<b>PAGES</b>
A	List of Housing Construction Industry in Malaysia (Bursa Malaysia).	95
B	Pilot Test Results	98
C	Descriptive Statistics	107
D	Pearson's Correlations Analysis	108
E	Multiple Linear Regressions	110
F	Gantt Chart PSM I & II	112

# CHAPTER 1

## INTRODUCTION

### 1.0 Introduction

This chapter introduces some general information about the study on the success factor of housing construction company performance by using financial key performance indicator in Malaysia. This chapter also highlights the needs to investigate the current issues that happening in Malaysia construction industry. Next, this chapter presents the research background, problem statement, research objectives, research questions, scope of the research and conclusion.

### 1.1 Research Background

In Malaysia, the construction sector has a huge contribution to economic growth. Besides the contribution, it also improves the quality of life and living standards to the Malaysian. This sector also delivers the socio-economic infrastructure for industrial growth and production and basic amenities. For example, highways, railways, residential and commercial space, parks and so on (Khan, Liew, & Ghazali, 2014). Next, the construction sectors divide into four major sub-sectors that is civil engineering, residential buildings, non-residential buildings and special trades (Department of Statistics Malaysia, 2019). For this research, residential buildings are the main focused and investigated further by a researcher.

As indicated by (Osmadi, Kamal, Hassan, & Fattah, 2015), the demand for housing becomes high is due to the population increased. Once the over demanding has arisen, the housing price increases fastly and then will happen the lack in supply of houses. Over the recent years, the housing demand-supply gap become high especially at Kuala Lumpur, Georgetown, Klang Valley, Petaling Jaya, and Johor Bahru. This may cause a shortage of relevant housing such as affordable housing has occurred (Chan & Lee, 2016). Currently, the government announced the National Housing Policy (NHP) to the public in order to provide adequate, quality and



affordable housing to people. This housing policy acts as a direction for the housing industry to continue their career development (Masram & Misnan, 2019).

Again, the construction industry still plays a significant role in the success of major national policies and strategies today. However, some housing construction company gives a bad impression due to the failure in completing the project within the duration time. Thus, the performance of the housing construction company always being criticized and connected with low performance projects such as abandoned projects and shoddy work (Ab Halim, Junoh, & Kamil, 2014). The solution to the construction industry issue is to implement the Construction Industry Transformation Programme (CITP) 2016–2020. With a specific focus on the construction industry, the CITP figures out the plan for future direction. The CITP has become a blueprint document for the Malaysian construction industry and focuses on creating high quality construction products and safe and healthy environment at construction sites (CIDB, 2016).

As stated by (Ab Halim, Junoh, & Kamil, 2014), financial aspects are appreciably related to the housing construction company performance. Most of the frequent problem faced by housing construction company is financial distress. The situation normally is insufficient capital to support the construction project. The factors causing the financial problems occurred are startup capital size is small, delay in collecting payment and progress payment from the client, and low profit earned due to high price construction materials. By using financial performance, the housing construction company eases to identify inefficient financial management. As well, financial performance able to evaluate financial position for the housing construction company.

The determination of the construction projects success by using financial performance. Financial performance is the way to review the housing construction company's progress against its strategic plan and goals. It helps the housing construction company to make good management decisions by analyzing the available information from the financial aspects. One of the model to evaluate financial performance is financial key performance indicator. Financial key performance indicator also called a financial ratio (Alfan & Zakaria, 2013).

## 1.2 Problem Statement

In reality, Malaysia demands for high skill workers gradually decreases during the past years (Benjamin, 2019). Current nature of Malaysia construction industry is still labor-intensive. Therefore, the majority of workers involved in the Malaysia construction sector are foreign workers. The origin of hiring semi-skilled foreigners is for reducing wages in the Malaysia construction sector. Yet, decreasing wages are for the purpose of cost reduction. But, the low-skilled foreign labour always causes quality issues to take place. To solve quality issues, the government had encouraged the construction industry to adopt the Industrialised Building System (IBS). Nevertheless, it did not really work. Most of them select and keep using the traditional approach (conventional system) in term of cost saving (Najib, Nordin, Ahnuar, & Sukor, 2019).

Besides the quality, the level of productivity is vital for the contribution to the Malaysia construction sector. The high production level definitely increases the success probability of construction projects. In short, labour productivity plays a core role in determining the financial success of construction projects (Mahamid, 2013). However, the problem of low productivity still keeps arising in Malaysia. In accordance with (Mottain, 2019), the Malaysia construction sector confronts with the low productivity situation as before. Additionally, labour productivity and the over-dependence on low-skilled foreigners have a close and direct relationship. From the findings discovered that the over-dependence on low-skilled labour contributes to 72.5 % of total employment. Bank Negara also indicated the low-skilled labours factor blocking Malaysia moving forward to a high-productivity nation.

According to (Memon, 2014), the findings found that low labour productivity might lead to time overrun take place. Since, foreign workers have low productivity due to semi-quality compared to local laborers and indirectly influence project progress and efficiency. Most of the foreigners are illegal workers but the housing construction companies still take the risk of workers being caught and deported keep hiring. If evictions occurred, labour shortage severely affects the construction industry (Sambasivan & Soon, 2007). There will be no workers no productivity thus impact on the cost and schedule overruns. For cost overruns, the housing construction company may require to bear all the additional cost thus decrease the revenue growth. This can affect the housing construction company performance. Delay the project schedule may

cause failure delivery on time to the client. Besides, the outcome of the delayed delivery construction project represents to the low productivity and thereby lead to low housing construction company performance.

Besides that, the delayed issues may cause the housing construction companies required to increase an additional cost. Many housing construction companies have a challenge in financial management and often confront with the risk of failure. This also leads them difficult in rolling their business operation. For instance, cash flow problems. (Musa, 2012) If the shortage of capital occurrence in housing construction companies, some large project schedule directly overran 20%, thus raised the budget up to 80%. (Agarwal, Chandrasekaran, & Sridhar, 2016)

In the past, only a few construction projects completed within the duration time, budget and quality as written in the contracts in Malaysia. For example, 20.5% of public projects and 33.35% of the private sector projects completed within the duration time. While the public projects and private projects completed within the budget are only 46.8% and 37.2% respectively (Endut, Akintoye, & Kelly, 2009). In general, many issues able to cause the housing construction company to have a poor performance which included over budget and quality issues. If the expected performance is not achieved, the issues of financial mismanagement basically arisen. By doing this topic research all the related parties will benefit and avoid some general problems such as poor company performance always take place. On the whole, poor housing construction company performance implied to low profit earned or small revenue growth.

Till to date, there is still very little research on success factor of housing construction company performance in Malaysia and even less empirical research concerning the financial ratio influencing the company performance. Hence, there is a need for this study to assess financial performance as the indicators of company performance among the housing construction sector. The success factor of housing construction company performance by using financial key performance indicator in Malaysia can become a reference for certain parties involved such as constructor.

### 1.3 Research Objectives

In order to realize the aims of this research, the following supporting objectives are established:

- i. To identify factors influencing housing construction company performance by using financial ratio in Malaysia.
- ii. To study the relationship between financial ratio on the housing construction company performance in Malaysia.
- iii. To determine the most significant variables between financial ratio on the housing construction company performance in Malaysia.

### 1.4 Research Questions

To achieve the research objectives, the researcher has illustrated some research questions for this research.

- i. Is there any factors influencing housing construction company performance by using financial ratio in Malaysia?
- ii. Is there any relationship between financial ratio on the housing construction company performance in Malaysia?
- iii. Is there any relative importance of the significant variables between financial ratio on the housing construction company performance in Malaysia?

### 1.5 Scope of the Research

In this research, financial performance indicators are a tool applied to analyze the housing construction company performance in Malaysia. Therefore, the scope of research is mainly focused on the collected data to analyze. The secondary data is required to investigate the success factors of the housing construction company performance in Malaysia. This study is needed to understand the challenge of housing construction companies is faced and why they can succeed in solving the difficulty. All the housing construction company in Malaysia involved in this research and had registered with Construction Industrial Development Board (CIDB).

## 1.6 Limitation of the Research

This research is based on the financial key performance indicators to measure housing construction company performance. However, financial key performance indicators have their own limits to assess. This financial key performance indicators only give limited information, which is quantifiable or quantitative information. Besides that, this research has a lack of prior studies in this research area. Some of the researchers did not fully utilize financial key performance indicators in their research area. They only pick out certain ratios most appropriate to their research area. Therefore, in this research, there will be little research regarding the unpopular metrics such as debt to capital ratio. By investigating this research using the financial key performance indicators, the researcher able to contribute more references to people.

## 1.7 Significant of the Research

Basically, this research is expected to determine the rare success factors of the housing construction company performance in Malaysia. Many housing construction companies failed to deliver the residential projects to clients on time causing them always in trouble. In addition, the housing construction companies often face the issues of cost overruns. Thus, by identifying the success factors in the housing construction companies performance, this may directly benefit to the certainly parties involved. The outcome of the research able to be a guideline for the housing construction companies in Malaysia.

In this research, the success factor of housing construction company performance will be explored and explained briefly in the literature review (Chapter 2). Therefore, this research can help the construction industry attempts to avoid any source overruns and complete the tasks within the time, budget and quality as in the contract. Apart from this, this research also can be as a basic guidance for those who are involved in construction industry. For example, constructor, subconstructor, client, consultant and others in the relation to residential projects. Moreover, hopefully this research able to assist these parties in reducing any unnecessary resource wasting while assuring the residential projects success and better relationship among the contractual parties.

## 1.8 Summary

This chapter has fully described the general introduction and broad explanation of the research. This research described clearly the background and the purpose of this study which create a source of reference to related parties in Malaysia construction industry. Meanwhile, the problem statement pictured the real issues that occurred in Malaysia construction industry. As stated in this research, there are three objectives stated in this study.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.0 Introduction

Literature review presents the review on previous studies on financial key performance indicator and the measurement of the housing construction company performance. It covers literature review on the concept and definition of liquidity ratio, leverage ratio, profitability ratio, shareholder values and the measurement of the housing construction company performance. This chapter also describes the conceptual framework and the research hypothesis. The conceptual framework illustrated to show the overall view of the relationship.

#### 2.1 Financial Key Performance Indicators

Financial key performance indicators are considered as financial ratio analysis. Financial ratio analysis is able to help a company to evaluate its financial strengths and weaknesses and search for a proper solution. In a word, the financial ratio is a method to assess the performance of the company. Through using this ratio analysis, the effectiveness of an organization can be measured. This financial ratio analysis is able to reflect the result of a company's financial activities whether regardless of obtaining a positive or negative effect. The financial activities include liquidity, leverage, profitability and shareholder values. The ratio analysis also aids a company to figure out the relationship between variables to afford better results (Thomas & Rabiathulbasariya, 2017).

Liquidity, leverage and financial health of companies should be an integral part of their policy framework stated by (Atieh, 2014). This is because the ratios are able to help the company to improve its financial weaknesses. For the profitability part, it is important due to it reflects the success or failure of the company (Nyabwanga, Ojera, Simeyo, & Nyanyuki, 2013). Besides, shareholder values play a significant role in maximizing the value like increasing the company profits. Therefore, the shareholder

values also require to apply in this research to determine the company whether able to fulfill the needs of shareholder by enhancing the profitability (Mäenpää, 2016).

In fact, each type of ratios plays its own significant and different role in evaluating company performance. Therefore, it is important for the researcher to apply the different aspects of financial ratio analysis in this research. In sum, the company performance must involve various ratio analysis to assess in order to obtain the most accurate information and data. If did in one ratio analysis perspective, the analyzed outcome will be imprecise and vague. This is the reason why company performance cannot be based on one angle to evaluate.

## 2.2 Liquidity Ratio

Liquidity ratio shows how fast a housing construction company able to pay off its short term obligations. The high the liquidity ratio, the best the housing construction company performance (Alifiah, Salamudin, & Ahmad, 2013). Aims to employ this ratio is to determine the relationship between current assets and current liabilities. In other words, this ratio helps to identify whether cash inflows able to cover cash outflows or not. It is important to the housing construction company to make sure its cash always sufficient for unpredicted events such as over cash outflows. This ratio normally is to appraise with the duration of the general operating cycle of the housing construction company. For example, the raw materials transform into end products and services and lastly change it into cash with a short period of time (Doina & Mircea, 2008).

Liquidity ratio is used to examine the status of credit facility stated by (Khaliq, Altarturi, Thaker, Harun, & Nahar, 2014). It ordinarily embodies the extent of companies's ability to meet its short term debts without difficulty. This ratio is able to portray the financial situation of the companies. It is computed by two types of components which are current assets and current liabilities. These components all in the short term which means less than one year. The current asset involves cash, inventories, accounts receivable, short-term investments and prepaid expenses. While for the current liabilities, accounts payable, short-term loans, accrued payments, interest, current tax and dividends due are included (Doina & Mircea, 2008).