



**PERFORMANCE OBJECTIVES AND PERFORMANCE
INDICATORS FOR PUBLIC PRIVATE PARTNERSHIP
(PPP) PROJECTS IN MALAYSIA**

BY

ROSNANI BINTI MOHAMAD @ AHMAD

**A dissertation submitted in fulfilment of the requirement for
the degree of Master of Science in Accounting**

**Kulliyyah of Economics and Management Sciences
International Islamic University Malaysia**

SEPTEMBER 2015

ABSTRACT

Public Private Partnership (PPP) has been world widely used as one of the procurement mode by the government. In Malaysia, PPP has been officially introduced in 2006. The present study focuses on two important aspects of PPP implementation that are performance objectives and performance indicators. In particular, there are four objectives of the study that are: 1) to identify the importance performance objectives of PPP in Malaysia; 2) to investigate the differences in the perception between public and private sectors on the importance of performance objectives; 3) to identify the important performance indicators used in assessing PPP performance in terms of the five aspects of PPP which are ‘before construction begins’, ‘financing and markets’, ‘innovation and learnings’, ‘stakeholders’ perception’ and process of lifecycle of PPP project’; and 4) to investigate the differences in the perception between public and private sectors on the importance of performance indicators in terms of the five aspects of PPP. Using a questionnaire survey, 237 completed questionnaires were received representing 51.52% response rate. In examining the importance of performance objective and performance indicators, the descriptive statistical tests of mean, standard deviation and mean score ranking were used. The independent t-tests were conducted to investigate the differences in the perceptions between the two respondents’ groups on the importance of performance objectives and performance indicators. The results show that the top three important performance objectives are ‘High quality public service’, ‘Provide convenience service for society’ and ‘Within or under budget’. In relation to the indicator used in assessing PPP performance, the findings show that the top three important performance indicators before construction begins are ‘Project maintainability’, ‘Commitment and responsibility between public and private sectors’ and ‘Government’s knowledge of PPP’ while for financing and markets, the top most important indicators are ‘Operational cost’, ‘Construction cost’ and ‘Construction period’ are perceived as the most important indicators. For innovation and learning, the overall respondents perceived ‘Technology innovation’, ‘Employee training’ and ‘Financial innovation’ as the top three most important indicators whilst ‘The satisfaction from public client or government’, ‘General public/social satisfaction’ and ‘Good relationship among the concessionaire for the stakeholders’ perception component. The top three important indicators for process of lifecycle of PPP project are ‘Time management’, ‘Contractual management’ and ‘Cost management’. In terms of the differences in the perceptions between the public and private sector groups, the test results indicate that there are only significant statistical differences for one performance objective and few performance indicators for three out of five performance indicators components. The findings of the present study contribute to both knowledge and practice especially to the policy makers in ensuring better implementation of PPP in future.

خلاصة البحث

عالميا كانت شراكة القطاع العام والخاص تستخدم على نطاق واسع باعتبارها واحدة من أساليب التحصيل من قبل الحكومة. في ماليزيا، شراكة القطاعين العام والخاص قدم رسميا في عام ٢٠٠٦. لذلك تركز هذه الدراسة على جانبين مهمين من تنفيذ شراكة القطاعين العام والخاص والتي هي أهداف الأداء ومؤشرات الأداء. على وجه الخصوص، هناك أربعة أهداف لهذه الدراسة والتي هي: (١) تحديد أهمية أهداف الأداء لشراكة القطاعين العام والخاص في ماليزيا. (٢) التحقيق في اختلافات التصور بين القطاعين العام والخاص على أهمية أهداف الأداء؛ (٣) تحديد مؤشرات الأداء الهامة المستخدمة في تقييم أداء شراكة القطاعين العام والخاص من حيث الجوانب الخمسة والتي هي 'قبل بداية البناء'، 'التمويل والسوق'، 'الابتكار والتعليم'، 'تصور أصحاب المصلحة وعملية دورة حياة مشروع شراكة القطاعين العام والخاص'؛ و (٤) للتحقيق في اختلافات التصور بين القطاعين العام والخاص على أهمية مؤشرات الأداء من حيث الجوانب الخمسة لشراكة القطاعين العام والخاص. باستخدام إستبيان، ردّ ٢٣٧ استبيان والتي تمثل نسبة إستجابة ٥٢,٥١٪. لدراسة أهمية أهداف الأداء ومؤشرات الأداء، الاختبارات الإحصائية الوصفية للمتوسط والانحراف المعياري ومتوسط ترتيب النتيجة استخدمت. أجري اختبار t المستقل للتحقيق في الاختلافات المتعلقة بالتصورات بين الجماعتين المستطلعتين على أهمية أهداف الأداء ومؤشرات الأداء. بينت النتائج أن أعلى خمسة أهداف الأداء الهامة هي 'الخدمة العامة ذات جودة عالية' و 'تقديم خدمة مريحة للمجتمع'. وفيما يتعلق بالمؤشر المستخدم في تقييم أداء شراكة القطاعين العام والخاص، أن أعلى خمسة مؤشرات الأداء الهامة قبل بداية البناء هي 'صيانة مشروع'، 'الالتزام والمسؤولية بين القطاعين العام والخاص'، 'معرفة الحكومة بشراكة القطاعين العام والخاص'، أما بالنسبة للتمويل والأسواق، أعلى المؤشرات الأكثر أهمية هي 'التكلفة التشغيلية'، 'تكلفة البناء'، 'فترة البناء'. فيما يخص الابتكار والتعلم، عامة المستطلعين ينظرون إلى 'الابتكار التكنولوجي'، 'تدريب الموظفين' و 'الابتكار المالي' على أنها أهم المؤشرات في المراكز الثلاثة الأولى في حين 'الرضا من العميل العام أو الحكومة'، 'الجمهور / الرضا الاجتماعي العام' و 'العلاقة الجيدة بين صاحب الامتياز والمقاولين الفرعيين والمورد' لعنصر تصور أصحاب المصلحة. بالنسبة للمؤشرات الهامة ثلاث لعملية دورة حياة مشروع شراكة القطاعين العام والخاص هي 'إدارة الوقت'، 'إدارة التعاقدية'، 'إدارة التكلفة'. من حيث الاختلافات في التصورات بين مجموعات القطاع العام والخاص، نتائج الاختبار تشير إلى أن هناك فروق ذات دلالة إحصائية لهدف أداء واحد فقط و مؤشرات أداء قليلة لثلاثة من خمسة مكونات مؤشرات أداء. تساهم النتائج التي توصلت إليها الدراسة الحالية إلى كل من المعرفة والممارسة وخاصة لصانعي السياسات لضمان التنفيذ الأفضل لشراكة القطاعين العام والخاص في المستقبل.

APPROVAL PAGE

I certify that I have supervised and read this study and that in my opinion, it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Master of Science in Accounting.

.....
Suhaiza Ismail
Supervisor

.....
Julia Mohd Said
Co-Supervisor

I certify that I have read this study and that in my opinion; it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Master of Science in Accounting.

.....
Norhayati Mohd Alwi
Examiner

.....
Sherliza Puat Nelson
Examiner

This dissertation was submitted to the department of Accounting and is accepted as a fulfilment of the requirement for the degree of Master of Science in Accounting.

.....
Noraini Binti Mohd Ariffin
Head, Department of Accounting

This dissertation was submitted to the Kulliyah of Economics and Management of Science and is accepted as a fulfilment of the requirement for the degree of Master of Science in Accounting.

.....
Maliah Sulaiman
Dean, Kulliyah of Economics and
Management Sciences

DECLARATION

I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Rosnani Mohamad @ Ahmad

Signature

Date

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

**DECLARATION OF COPYRIGHT AND AFFIRMATION
OF FAIR USE OF UNPUBLISHED RESEARCH**

Copyright © 2015 by International Islamic University Malaysia. All rights reserved.

**PERFORMANCE OBJECTIVES AND PERFORMANCE
INDICATORS FOR PUBLIC PRIVATE PARTNERSHIP (PPP)
PROJECTS IN MALAYSIA**

I hereby affirm that the International Islamic University Malaysia (IIUM) holds all rights in the copyright of this Work and henceforth any reproduction or use in any form or by means whatsoever is prohibited without the written consent of IIUM. No part of this unpublished research may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission of the copyright holder.

Affirmed by Rosnani Mohamad @ Ahmad.

.....
Signature

.....
Date

*In the name of Allah, the Most Gracious,
The Most Merciful. I would like to dedicate
this dissertation to my beloved mother, my brothers
and my family.*

ACKNOWLEDGEMENTS

All praise to be Allah, the Most Beneficent and the Most Merciful. Peace be upon Rasulullah s.a.w., his family, his companions, and his followers. I am thankful to Allah for guiding and giving me the strength to complete this dissertation.

I would like to express my deepest appreciation to my supervisor, Associate Professor Dr. Suhaiza Ismail, for her perseverance in supervising and encouraging me to accomplish this dissertation. Without her guidance, patience, positive synergy, valuable comments, and precious time, this dissertation would not have been possible. Special thanks also to Assistant Professor Dr. Julia Mohd Said for her invaluable comments, advice, and suggestions throughout the preparation and completion of this dissertation. My gratitude also goes to all the lecturers who endowed me with precious knowledge throughout the duration of my study at IIUM.

My sincere appreciation to all my beloved friends for their endless moral support, assistance, and friendship. Although this space is insufficient to enumerate all those who assisted in the completion of this dissertation, the following persons were of particular assistance: Nur Fajrina, Hamidah, Noor Muafiza, Yunita, Afiqah, Tahirah, Loke, Baizura, Nur Syaima', Ainul, Ahmar and many others who are too numerous to name individually. I would like to make special mention of sisters Murni and Nor Masaah for being good listeners and supporters throughout my master's degree.

Many thanks go to the Government of Malaysia, particularly the Public Service Department and Accountant General Department for providing me the opportunity and financial assistance. Similar appreciation extends to all my friends in the ministries for their help, especially in collecting the data.

Last but not least, my special appreciation goes to my beloved family members for their endless support, especially my mother, for her *do'a*. My sincere gratitude to all others who have been directly or indirectly involved in this dissertation. May Allah accept and reward your kindness in this life and the hereafter.

TABLE OF CONTENTS

Abstract	ii
Abstract in Arabic	iii
Approval Page.....	iv
Declaration	v
Copyrightage.....	vi
Dedication	vii
Acknowledgements.....	viii
List of Tables	xi
List of Figures	xiii
CHAPTER 1: INTRODUCTION.....	1
1.1 Background of the Study.....	1
1.2 Problem Statement	2
1.3 Motivation of the Study	4
1.4 Objectives and Research Question of the Study	5
1.5 Significance of the Study	6
1.6 Organisation of the Study.....	7
CHAPTER 2: LITERATURE REVIEW.....	8
2.1 Introduction	8
2.2 Definition of PPP	8
2.3 Development of PPP in Malaysia	9
2.3.1 Characteristics of PPP in Malaysia	11
2.3.2 PPP Structure	14
2.4 Empirical Studies on PPP.....	15
2.4.1 Objectives of PPP.....	15
2.4.2 PPP Performance Measurement.....	20
2.5 Gap in the Literature on PPP Performance Measurement	26
2.6 Summary of the Chapter	27
CHAPTER 3: THEORETICAL FRAMEWORK AND RESEARCH METHOD	28
3.1 Introduction	28
3.2 Theoretical Framework	28
3.3 Research Method.....	30
3.3.1 Research Instrument.....	30
3.3.2 Pilot Test	32
3.3.3 Data Collection	32
3.3.4 Test for Non-response Bias.....	34
3.4 Data Analysis Procedures and Statistical Tests	35
3.4.1 Cronbach's Alpha Test.....	35
3.4.2 Normality Test	36
3.4.3 Descriptive Statistics.....	36
3.4.4 Independent-samples T-test	37
3.5 Summary of the Chapter	37

CHAPTER 4: FINDINGS AND DISCUSSION	38
4.1 Introduction	38
4.2 Response Rate and Demographic Profile of the Respondents	38
4.3 Findings and Discussion	40
4.3.1 Performance Objectives of PPP	40
4.3.2 Performance Indicators for PPP	47
4.3.2.1 Performance indicators for before construction begins	49
4.3.2.2 Performance indicators for finance and markets	54
4.3.2.3 Performance indicators for innovation and learnings	59
4.3.2.4 Performance indicators for stakeholders' perception	63
4.3.2.5 Performance indicators for process of life cycle of PPP project.....	67
4.4 Summary of the Chapter	73
 CHAPTER 5: IMPLICATIONS, LIMITATIONS, SUGGESTIONS FOR FUTURE RESEARCH AND CONCLUSION	 75
5.1 Introduction	75
5.2 Summary of the Results and Findings of the Study	75
5.3 Implications of the Study	77
5.4 Limitations of the Study and Suggestions for Future Research	79
5.5 Conclusion.....	80
 REFERENCES.....	 82
 APPENDIX I: QUESTIONNAIRE.....	 88
APPENDIX II: RESULT OF THE NORMALITY TEST	95

LIST OF TABLES

<u>Table No.</u>		<u>Page No.</u>
2.1	Differences between Traditional Procurement, PPP and Privatisation	13
3.1	Questionnaire Distribution and Response Rate	33
3.2	Reliability Test using Cronbach's Alpha Test	35
4.1	Distribution of Respondents	39
4.2	Demographic Information of Respondents	39
4.3	Perception of Survey Respondents Concerning the Relative Importance of Performance Objectives in PPP projects	41
4.4	Summary of Independent T-test Results for the Performance Objectives in PPP Projects	46
4.5	Perception of Survey Respondents Concerning the Relative Importance of Performance Indicators in Relation to Before Construction Begins	48
4.6	Summary of Independent T-test Results for Performance Indicators in Relation to Before Construction Begins	53
4.7	Perception of Survey Respondents Concerning the Relative Importance of Performance Indicators in Relation to Financing and Markets	55
4.8	Summary of Independent T-test Results for Performance Indicators in Relation to Financing and Markets	58
4.9	Perception of Survey Respondents Concerning the Relative Importance of Performance Indicators in Relation to Innovation and Learnings	60
4.10	Summary of Independent T-test Results for the Perception of Performance Indicators in Relation to Innovation and Learnings	63
4.11	Perception of Survey Respondents Concerning the Relative Importance of Performance Indicators in Relation to Stakeholders' Perception	65
4.12	Summary of Independent T-test Results for the Perception of Performance Indicators in Relation to Stakeholders' Perception	66

4.13	Perception of Survey Respondents on the Relative Importance of Performance Indicators in Relation to the Process of Life Cycle of PPP Project	68
4.14	Summary of Independent T-test Results for the Perception of the Performance Indicators in Relation to Process of Life Cycle of PPP Project	72
5.1	The Most Important Performance Indicators for each PPP Component and Differences between the Public and Private Sectors	78

LIST OF FIGURES

<u>Figure No.</u>		<u>Page No.</u>
2.1	PPP Structure in Malaysia	14

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

The Public Private Partnership (PPP) has been used worldwide as a mechanism for the public sector to procure public facilities and services. Since the introduction of PPP under the term Private Finance Initiative (PFI) by the Conservative Government in the United Kingdom (UK) in 1992, the scheme has been adopted by many other countries including France, China, India, Singapore, Thailand, and also Malaysia. However, the characteristics and structure of the PPP are unique to each individual adopting country. More importantly, different countries have different justifications and objectives for adopting the PPP scheme (Winch, Onishi and Schmidt, 2012).

In Malaysia, the official introduction of the PPP under the Ninth Malaysia Plan in 2006 had the main objective of encouraging the greater involvement of the private sector in providing infrastructure facilities and public services by streamlining the existing Privatisation Policy (Ninth Malaysia Plan, 2006; PPP Guideline, 2009). Although the Privatisation Policy, which was first introduced in 1983, was reported to be successful and received a positive response from stakeholders, contentious issues regarding the implementation of the Privatisation Policy led to the unveiling of the PPP initiative in 2006 (Ninth Malaysia Plan, 2006; Tenth Malaysia Plan, 2011; Ismail, 2012).

As the PPP initiative is a continuation of the Privatisation Policy, the ultimate justifications for adopting it are similar to the objectives of privatisation; to improve the performance of the public sector in delivering public facilities and services through the participation of the private sector and to reduce government expenditure

on providing public services (Ninth Malaysia Plan, 2006; Takim, Ismail, Nawawi and Jaafar, 2009).

Planning, decision-making and control are three key related management processes (McWatters, Zimmerman and Morse, 2008). At the planning stage, objectives and goals are determined. Subsequently, relevant decisions are made in order to achieve the objectives set. An appropriate control mechanism is needed to monitor the achievement of the objectives. Key Performance Indicators (KPIs) constitute one of the commonly used mechanisms to measure achievement or performance. Applying similar management processes in the context of the PPP, when the objectives for PPP implementation have been formulated, it is essential to monitor the extent to which the objectives are achieved by using relevant indicators. The government and private sector providers are the two key players in a PPP structure. Each of the parties has their own objectives to meet when involved in a PPP scheme. Therefore, to ensure the successful implementation of a PPP project, it is crucial to identify the PPP performance objectives of each party and also to explore the performance indicators used to evaluate the achievement of the pre-determined objectives. Hence, this present study aims to focus on these two critical aspects, namely the performance objectives of PPP and the relevant performance indicators used to evaluate the extent of achievement.

1.2 PROBLEM STATEMENT

In the 2012 Auditor General's Report, various weaknesses in the implementation of government projects were highlighted (National Audit Department, 2012). In particular, one of the issues raised was the lack of good project planning, which

resulted in negative impacts on projects, such as project delay, low quality output and inefficient use of resources. The report states:

“...the weaknesses observed include improper payments, works/supplies did not adhere the specifications or of inferior quality, unreasonable delays, wastages and weaknesses in the management of revenue and assets. These weaknesses were caused by negligence in complying with Government regulations and procedures; lack of meticulous planning on projects/activities and in determining the scope and specification of tenders; lack of close and effective monitoring on works of contractors/consultants/suppliers; lack of...”(National Audit Department, 2012, p. 10).

The specific case referred to in the Auditor General’s Report was the project to construct the Faculty of Public and Sports Facilities of the University Tun Hussien Onn Malaysia (UTHM), which was delivered using the PPP scheme (National Audit Department, 2012). Another related issue addressed in the Auditor General’s Report (2012) in relation to PPP procurement and implementation was the lack of enforcement of performance-based payment in repaying the private sector consortium upon completion of the construction of PPP projects.

In sum, the issues addressed in the Auditor General’s Report (2012) pertaining to PPP project implementation concern a lack of proper planning and insufficient performance monitoring. These are critical issues for PPP implementation, as emphasised by Jones (2013), who states that inadequate procurement planning and lack of monitoring and evaluation may result in negative consequences to a project. Due to the highlighted problems with PPP implementation in Malaysia, the importance of using performance objectives and performance indicators to assess the performance of PPP projects is the focus of the present study.

1.3 MOTIVATION OF THE STUDY

This study is undertaken to fill a gap in literature on PPP in developing countries (i.e. Malaysia), particularly with respect to works on the perception of the public and private sectors, as the two key players, of PPP performance objectives and indicators to evaluate the achievement of PPP objectives in the context of PPP performance evaluation, which are currently scarce. The involvement of many stakeholders, a long concessionary period coupled with many phases in the PPP implementation process makes PPP procurement more complex than the traditional procurement method. Therefore, it is important to understand the stakeholders' expectations of the performance objectives of the PPP project to ensure that public and national interests are met. Furthermore, the objectives of the project constitute a fundamental aspect that needs to be clarified before a PPP project begins (Takim, Abdul-Rahman, Ismail and Egbu, 2008).

In addition, even though the adoption of the PPP scheme was officially announced in 2006 with an emphasis on performance-based payment, a systematic performance measurement such as KPIs has yet to be established for PPP projects. Even though the Public Private Partnership Unit or *Unit Kerjasama Awam Swasta* (UKAS) has issued a guideline, the guideline only provide the broad objectives for PPPs and a general mechanism to evaluate PPP projects to ensure the achievement of Value for Money (VFM).

More importantly, as mentioned above, the lack of proper planning and performance evaluation of PPP projects are the highlighted problems of PPP implementation in Malaysia. These problems have motivated and inspired the researcher to focus on the performance objectives and performance indicators of PPP projects in order to attempt to explore and provide evidence on how these issues are

perceived and addressed. The following section provides the specific objectives of the current study.

1.4 OBJECTIVES AND RESEARCH QUESTION OF THE STUDY

The present study focuses on the performance objectives and performance indicators for PPP projects in Malaysia. The study identifies the importance of performance objectives and performance indicators for five aspects, that are, (1) before construction begins, (2) financing and markets, (3) innovation and learnings, (4) Stakeholders' perception, and (5) Process of life cycle of PPP project. In particular, the four objectives of this study are as follows:

1. To identify the important performance objectives of PPP in Malaysia;
2. To investigate the differences in the perception of the public and private sectors of the importance of the performance objectives;
3. To identify the important performance indicators used in assessing PPP performance in terms of the five aspects of PPP;
4. To investigate the differences in the perception of the public and private sectors of the importance of the performance indicators in terms of the five aspects of PPP.

To achieve the study's objectives, the following research questions have been developed:

1. What are the important performance objectives of PPP implementation in Malaysia?
2. Are there any differences in the public and private sectors' perception of the performance objectives?

3. What are the important performance indicators for evaluating PPP performance in terms of the five aspects of PPP?
4. Are there any differences in the public and private sectors' perception of the performance indicators used in assessing PPP performance?

1.5 SIGNIFICANCE OF THE STUDY

This study is significant as it is expected to contribute in a number of ways. First, it contributes to the existing literature on performance measurement particularly in the context of the PPP in a developing country, namely Malaysia. Thus, it is hoped that this research to some extent will fill the gap in the literature and provide some empirical evidence concerning PPP performance specifically from a developing country, namely Malaysia.

Second, the findings of the study can provide inputs to assist the relevant government authorities such as UKAS with respect to improving the existing PPP guidelines, which could help to ensure the achievement of PPP objectives through the effective monitoring of relevant performance indicators.

Third, identifying the performance objectives and performance indicators that are perceived by the public and the private sectors as important will assist in preparing both of these key stakeholders to have a better and common understanding concerning the PPP project performance objectives and indicators used to assess PPP project performance, which should lead to better decision-making.

1.6 ORGANISATION OF THE STUDY

The study is organised into five chapters, which are structured as follows:

- Chapter 1: **Introduction:** This chapter presents the background of the study, problem statement, study motivation, objectives and significance of the study, and the organisation of the study.
- Chapter 2: **Literature Review:** This chapter contains a discussion of the PPP concept and the characteristics and issues involved in implementing PPP schemes in Malaysia by analysing documents and reviewing the literature. It also presents a review of the literature on issues pertaining to performance objectives and performance indicators for PPP projects.
- Chapter 3: **Theoretical Framework and Research Method:** This chapter discusses the goal-setting theory proposed by Edwin A. Locke. It also provides information on the research process and procedures carried out in this study.
- Chapter 4: **Findings and Discussion:** This chapter presents the data gathered by this study. It also discusses the results and findings of the statistical analysis.
- Chapter 5: **Implications, Limitations, Suggestions for Research and Conclusion:** This chapter highlights the implications of the study for the various PPP stakeholders as well as the limitations of the study. It also offers suggestions for future research and some concluding remarks.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter reviews the relevant literature on the Public Private Partnership (PPP) and the performance measurements for PPP projects. The chapter is organised as follows: Section 2.1 provides a definition of PPP, while Section 2.2 describes the development of the PPP scheme in Malaysia as well as the characteristics and structure of Malaysia's PPP projects. Section 2.3 presents a review of the literature on the objectives and performance measurements of PPP projects, while Section 2.4 highlights the gaps in the literature concerning PPP performance measurement, and finally, Section 2.5 summarises the chapter.

2.2 DEFINITION OF PPP

The PPP is a popular procurement method used by the public sector worldwide to provide public facilities or services (Shaoul, 2009, p. 27). Under a PPP, the government engages the private sector by transferring a certain level of responsibilities to them. Grimsey and Lewis (2002) define PPP as “a long-term business relationship between the government and private sector to provide public services whereby the risks and returns are shared”.

In addition, the PFI scheme, which was introduced in the UK in 1992 by the Conservative Government, has been referred to as a method of using private finance and skills to provide public services that were traditionally provided by the public sector. In this scheme, the private sector is responsible for designing, building, financing and operating facilities based on output specifications determined by the

public sector. On the other hand, the public sector is obliged to make regular payments to the private sector providers for the use of the facilities throughout the contract period, which normally runs for 25–30 years. The ownership of the assets either remains with the private sector or is passed to the public sector based on the terms of the original contract (Ismail and Pendlebury, 2006; Ismail, 2011, p. 51).

In the context of Malaysia, the PPP is defined as “the transfer to the private sector of the responsibility to finance and manage a package of capital investment and services, including the construction, management, maintenance, refurbishment and replacement of public sector assets such as buildings, infrastructure, equipment and other facilities, which creates a stand-alone business” (Ninth Malaysia Plan, 2006, p. 230). Even though the PFI is a subset of the PPP principle, the terms have been used interchangeably around the world (PPP Guideline, 2009). In the context of the present study, the PPP is defined as the collaboration and partnership between the public sector and private sector in providing public services.

2.3 DEVELOPMENT OF PPP IN MALAYSIA

In Malaysia, the involvement of the private sector in the development activities of the country began during the period of the Second Malaysia Plan (1971–1975). However, the participation of the private sector during that period until the Third Malaysia Plan (1976–1980) focused on increasing the investment of the private sector in multiple business sectors such as manufacturing, agriculture, mining, construction and others to support employment and output targets (Second Malaysia Plan, 1971; Third Malaysia Plan, 1976).

The introduction of the Privatisation Policy in 1983 under the Fourth Malaysia Plan (1981–1985) as part of the New Public Management (NPM) initiative was aimed

at facilitating the country's economic growth, reducing the financial and administration burden of the Government, reducing the Government's presence in the economy, lowering the level and scope of public spending and allowing market forces to govern economic activities and improve efficiency and productivity in line with the National Development Policy (NDP) (Privatisation Master Plan, 1983). Under the Privatisation Policy, several methods were implemented such as the sale of assets, leases, management contract, build, Built-Operate-Transfer (BOT), Build-Operate-Own, Build-Operate, Build-Lease-Transfer and Land Development or Land Swap (Abdul Rashid, 2013; Ismail and Asuhaimi, 2013). The privatisation programme was continued until the Eight Malaysia Plan (2001–2005), when emphasis was given to projects that would generate multiplier effects and upgrade the quality of services for the population (Eight Malaysia Plan, 2000).

Since then, many initiatives have been undertaken to ensure the presence of an efficient and effective government mechanism for continued economic development and to enhance infrastructure facilities and public services (Eight Malaysia Plan, 2000; Ninth Malaysia Plan, 2006; Tenth Malaysia Plan, 2011). In the Ninth Malaysia Plan (2006–2010), the privatisation programme was streamlined by the introduction of the PPP scheme using the famously used term, PFI, with the crucial aim of encouraging the greater participation of the private sector in government projects (Ninth Malaysia Plan, 2006). While privatisation involves the transferring of activities and functions from the government to the private sector (Seventh Malaysia Plan, 1996), the PFI on the other hand only transfers the responsibility to finance and manage a package of capital investment and services to the private sector (Ninth Malaysia Plan, 2006, p.230). Thus, privatisation and the PFI have unique characteristics, although both fall under the same concept, the PPP (Abdul Rashid, 2013).

The partnership between the public and private sectors to provide public infrastructure and services is further emphasised in the Tenth Malaysia Plan (2011–2015). As announced by Prime Minister, Dato’ Seri Mohd Najib Tun Abdul Razak in 2010, this partnership of equitable sharing of risks and returns was established to drive the economic transformation agenda (Mohd Najib, 2010). In relation to the announcement, 52 high-impact projects worth RM63 billion were identified for implementation using the PPP scheme, including seven highway projects, two coal electricity generation plants and development of the Malaysia Rubber Board’s land (Tenth Malaysia Plan, 2010). In addition, the government is also providing a Facilitation Fund of RM20 billion during the five-year period of the Plan (2010–2015) to help and encourage the private sector to get involved in the identified high-impact PPP projects (Tenth Malaysia Plan, 2010).

2.3.1 Characteristics of PPP in Malaysia

The fundamental characteristics of Malaysia’s PPP as stated in the PPP Guidelines (2009) include partnership relation between public and private sectors; public sector procures specified outputs of a service for a concession period; private sector determines the required inputs to achieve the indicated output, including to introduce innovation into their designs and development to reduce overall costs; payment for services is based on pre-determined standards and performance; concessionaires will be responsible for the long term maintenance of the assets throughout the operational tenure agreed upon; integration of design, construction, finance, maintenance and operation (total package); transfer of assets at the end of the concession period becomes an option to the Government; risk is allocated to the party who is best able to manage it; and whole life cycle costing whereby PPP projects are usually awarded