

Management Control Systems in Public-Private Partnerships: The Case of Sri Lanka

Ranjith Appuhami

B.Com (USJP), MBA (AIT), MSc in Finance (ESCP Europe)

A dissertation submitted to the Faculty of Business and Economics at Macquarie University in fulfilment of the requirements for the degree of Doctor of Philosophy.

May 2011

TABLE OF CONTENTS

Synopsis.....	V
Certificate of Originality	VII
Acknowledgements	VIII
Dedication	X
List of Tables.....	XI
List of Figures	XII
List of Abbreviations.....	XIII

CHAPTER ONE

OVERVIEW OF THE THESIS	1
1. 1. Introduction	2
1. 2. Motivation for the research	6
1. 3. Aim and objectives	9
1. 4. Overview of the three papers.....	10
1. 5. Thesis organisation.....	15

CHAPTER TWO

COERCIVE POLICY DIFFUSION IN A DEVELOPING COUNTRY: THE CASE OF PUBLIC-PRIVATE PARTNERSHIPS IN SRI LANKA.....	16
ABSTRACT	17
1. INTRODUCTION.....	18
2. THEORETICAL FRAMEWORK.....	20
2. 1. Policy diffusion	20
2. 2. Coercive policy diffusion	21
2. 3. Local policy adoption.....	23
3. PPP POLICY INNOVATION IN INDUSTRIALISED COUNTRIES	25
3. 1. PPP policy innovation.....	26

4. COERCIVE PPP POLICY DIFFUSION: THE CASE OF SRI LANKA	29
4. 1. Background	29
4. 2. NPM developments	31
4. 3. PPP policy	35
4. 4. Challenges to PPP policy adoption in Sri Lanka.....	38
5. SUMMARY AND CONCLUDING REMARKS	51
APPENDIX 1 - PPP PROJECTS IN SRI LANKA.....	52
REFERENCES	55

CHAPTER THREE

MANAGEMENT CONTROLS IN PUBLIC PRIVATE PARTNERSHIPS: AN ANALYTICAL FRAMEWORK.....	68
ABSTRACT	69
1. INTRODUCTION	70
2. LITERATURE REVIEW	74
2. 1. Risks associated with PPPs	74
2. 2. Contingent factors generating behavioural risk in PPPs	76
2. 3. Control archetypes	80
2. 4. Control strategies to minimise risks	82
3. THE USE OF MANAGEMENT CONTROLS IN PPPs	89
3. 1. The market control archetype.....	89
3. 2. The bureaucratic control archetype	93
3. 3. The clan control archetype	99
4. SUMMARY AND CONCLUDING REMARKS	106
REFERENCES	108

CHAPTER FOUR

MANAGEMENT CONTROLS FOR MINIMISING RISK IN PUBLIC- PRIVATE PARTNERSHIPS IN A DEVELOPING COUNTRY: EVIDENCE FROM SRI LANKA	117
ABSTRACT	118

1. INTRODUCTION	119
2. LITERATURE REVIEW	124
2. 1. Risk associated with PPPs.....	124
2. 2. From risk transferring to minimising	127
2. 3. Management control systems in PPPs.....	130
3. RESEARCH METHOD	138
3. 1. The selection of the case study organisation	138
3. 2. Method of data collection.....	139
4. CASE DESCRIPTION - ELECTRICITY POWER PROJECT	141
4. 1. Background	141
4. 2. The initiation of the electricity power project.....	143
4. 3. Selecting phase.....	145
4. 4. Building phase.....	151
4. 5. Operating phase.....	154
5. ANALYSIS AND DISCUSSION	155
5. 1. Selecting phase.....	156
5. 2. Building phase.....	165
5. 3. Operating phase.....	171
6. CONCLUSION	179
APPENDIX 1 - APPROVAL FROM ETHICS REVIEW COMMITTEE	181
APPENDIX 2 - INTERVIEW GUIDE	184
APPENDIX 3 - THE PROCESS OF DATA ANALYSIS	196
REFERENCES	202

CHAPTER FIVE

SUMMARY AND CONCLUSION	213
1. INTRODUCTION	214
2. FINDINGS	215
2. 1. PPP Policy diffusion into Sri Lanka.....	215
2. 2. Management controls used by a public partner of a PPP in Sri Lanka	215
2. 3. Factors influencing public partner's choice of control archetypes in a PPP in Sri Lanka	217
3. CONTRIBUTIONS	218

3.1. Contribution to literature.....	218
3.2. Contributions to practice.....	220
4. IMPLICATIONS.....	222
5. LIMITATIONS OF THE STUDY.....	223
6. SUGGESTIONS FOR FUTURE RESEARCH.....	224
REFERENCES	226

SYNOPSIS

Public-Private Partnerships (PPPs) have increasingly been recognised as a key strategic policy for delivering public infrastructure services in developing countries. PPPs as an important part of the effort of the governments in developing countries are also expected to reduce the burdens on their budgets and excessive debt. With proper management controls, a PPP could further generate efficiency, effectiveness, innovations, and achieve value for money objective in the delivery of public services. However, the progress of PPPs in developing countries has been slow, often failing to achieve value for money objective. In many occasions, PPPs in these countries were either held up or terminated before proceeding to the physical development stage.

The aim of this thesis is to examine the use of management control systems by public partners to minimise risk associated with PPPs with special reference to Sri Lanka. The thesis adopts 'thesis by publication' format and includes three research papers with specific objectives.

The study finds that public partners use control archetypes, namely market, bureaucratic and clan, with control strategies, namely performance evaluation and trust, to minimise relational risk and performance risk in different combinations in different phases of PPPs. The study also reveals that while five contingent factors suggested by transaction cost economic theory are highly relevant in the context of PPPs in Sri Lanka, the institutional environment and the power differential also influence public partners' choice between various control archetypes. Further, the thesis provides evidence suggesting that the PPP policy innovated in industrialised countries was diffused into Sri Lanka with coercion from international aid organisations (IAOs) through the conditionality attached to financial assistance.

The findings of the study contribute to literatures on PPPs, public policy, and new public management in general and management control in particular. The findings also have implications for governments in developing countries, IAOs, managers in both public sector and private sector organisations.

CERTIFICATE OF ORIGINALITY

I certify that the work presented in this thesis has not been submitted for a higher degree to any other university or institution. The sources of information used and the extent, to which the work of others has been utilised, are acknowledged in the thesis. Contribution of co-authors of papers included in the thesis has also been indicated in Table 1.1. The thesis has also received the approval of the Ethics Review Committee (Human Research) at Macquarie University (Reference: HE01MAY2009-D06474) (see Appendix 1 in chapter four).

Ranjith Appuhami

Date

ACKNOWLEDGEMENTS

It is my great pleasure to acknowledge and thank the people who have contributed in providing guidance, assistance and support toward the completion of this thesis.

I would like to express my deepest and sincere gratitude to my supervisors, Associate Professor Sujatha Perera and Professor Hector Perera for providing the motivation, confidence and academic direction throughout the period of this project. Their willingness to read the drafts word-by-word, and provide invaluable suggestions is very much appreciated. This thesis would not have been possible without their support.

I would also like to thank Professor Graeme Harrison at Macquarie University for providing valuable comments on the thesis.

Sincere thanks are extended to Professor Abeyratna Bandara and Professor Sampath Amaratunga at the University of Sri Jayewardenepura in Sri Lanka and Prof. Lakshman R. Watawala at the Institute of Certified Management Accountants of Sri Lanka who have given their kind assistance to organise interviews with personnel at different organisations. I also wish to acknowledge and thank participants of semi-structured interviews for their time.

I am indebted to the Faculty of Business and Economics at Macquarie University for granting me a scholarship to undertake this research. I would also like to thank the personnel in the faculty HDR division for the support given to me during the tenure of my study.

Finally, I would like to express my most heartfelt thanks to my beloved wife Achini and daughter Hansi. Their sincere love, support, encouragement, patience and tolerance over the duration of this thesis are extremely appreciated.

DEDICATION

I would like to dedicate this thesis to my beloved parents for their unconditional love, support and encouragement.

LIST OF TABLES

CHAPTER ONE

Table 1: Research objectives and the three papers of the thesis	14
--	----

CHAPTER TWO

Table 1: Control archetypes under contingent factors.....	91
Table 2: Characteristics of control archetypes in PPPs	104

CHAPTER THREE

Table 1: Profile of interviewees.....	141
Table 2: Risk and the nature of transaction characteristics in different phases of the EPP	157
Table 3: The nature of control archetypes in different phases of the EPP	162

LIST OF FIGURES

CHAPTER TWO

Figure 1: Policy diffusion into a developing country	25
---	----

CHAPTER THREE

Figure 1: Contingent factors leading to behavioural risk	76
Figure 2: Control strategies	82
Figure 3: An analytical framework to examine MCS in PPPs	88
Figure 4: Performance evaluation strategy under different levels of relational and performance risks.....	98

CHAPTER FOUR

Figure 1: An analytical framework to examine MCS in PPPs.....	135
Figure 2: Structure of the EPP	144
Figure 3: Different phases of the EPP	145

LIST OF ABBREVIATIONS

ADB	Asian Development Bank
BII	Bureau of Infrastructure Investments
BOI	Board of Investment
BOOT	Build-Own-Operate and Transfer
DBT	Designed-Building-Transfer
EPP	Electricity Power Project
GDP	Gross Domestic Product
GOSL	Government of Sri Lanka
GPSIP	Guidelines on Private Sector Infrastructure Projects
IAOs	International Aid Organisations
IMF	International Monetary Fund
LTTE	Liberation Tigers of Tamil Eelam
MCS	Management Control Systems
NPM	New Public Management
PES	Performance Evaluation Strategy
PPPs	Public-Private Partnerships
PRI	Private Partner
PSIDC	Private Sector Infrastructure Development Company Ltd
PUB	Public Partner
SAGT	South Asian Gateway Terminal
SIDI	Secretariat for Infrastructure Development and Investment
SLFP	Sri Lanka Freedom Party
SOEs	State-owned Enterprises
TBS	Trust-Based Strategy
TCE	Transaction Cost Economics
UK	United Kingdom
UNP	United National Party
US	United States of America

USAID	United States Agency for International Development
VFM	Value for Money
WB	World Bank
IORs	Inter-Organisational Relationships
DCA	Department for Constitutional Affairs
IT	Information Technology
NHS	National Health Service

CHAPTER ONE

OVERVIEW OF THE THESIS

1. 1. INTRODUCTION

In modern network society, the boundaries between public and private sector organisations are continuously subject to change. Public–private partnerships (PPPs) are network arrangements, which are formed to increase the efficiency and quality of public sector services while reducing the burden on the government’s annual budget and public debt (Lane, 2000). PPPs involve the private sector in the provision of governments’ traditional infrastructure services such as health, education, prisons, roads, electricity and water. The private party to a PPP arrangement enters into a concessionaire contract with a government agency for a long period of time (e.g., 25 years or longer) and often bears the responsibility for designing, financing, constructing, operating and providing other related services (Broadbent *et al.*, 2008).

PPPs emerged as a public policy reform from new public management (NPM), which was popular in most industrialised countries in the late 1980s (Hood, 1991; 1995). In the early 1990s, the policy was widely adopted in industrialised countries such as the United States (US), New Zealand, the United Kingdom (UK) and Australia (Broadbent and Laughlin, 2003; de Bettignies and Ross, 2004). For example, the UK had completed 800 PPP¹ projects with a value exceeding £56 billion by 2008 (HM Treasury, 2008), and Australia had completed more than 127 PPP projects with a value of A\$35 669 million by 2006 (English, 2006).

PPPs have been recognised increasingly as a key strategic policy for the reduction of poverty in developing countries (see, for example, Bhatia and Gupta, 2006; Miraftab, 2004; UNESCAP, 2004). Studies note that the use of PPPs could

¹ There is no universally accepted terminology for PPPs. For example, in the UK, arrangements similar to PPPs are referred to as Private Finance Initiatives (PFIs).

facilitate governments in developing countries to solve macro-economic problems such as large budget deficit, excessive public debt and poor infrastructure services leading to poverty (Jamali, 2004; Nataraj, 2007). South Asian Countries², although the world's second fastest growing region, currently experience severe infrastructure problems and account for 40% of the world's absolute poor (World Bank, 2009). Governments in the region are forced to make infrastructure investments amounting to about 7% of GDP (approximately US\$88 billion) in order to achieve 7.5% of the economic growth required to reduce poverty (World Bank, 2009).

However, the uptake of PPPs in developing countries has been relatively slow and they have often failed to achieve value for money (VFM) (see Beh, 2010; Jamali, 2004; Kumaraswamy and Zhang, 2001; Minogue, 2004). Kumaraswamy and Zhang (2001) note that the application of PPP policy in developing countries is still at an experimental stage, and in many cases PPPs have not proceeded to the physical development stage (see also Mubin and Ghaffar, 2008).

The difficulty for governments in developing countries to transfer risk associated with PPPs to private parties seems to have contributed to their failure to achieve VFM (see Edwards and Shaoul, 2003; Gallimore *et al.*, 1997; Jin and Doloi, 2008). The high level of uncertainty associated with PPPs has been suggested as a factor that makes it difficult to transfer risk to private parties (Bloomfield, 2006; Froud, 2003; Lonsdale, 2005). This uncertainty results not only from characteristics of PPP arrangements such as scale, complexity and their long-term nature, but also from local contextual factors in developing countries such as political instability, poor legal and regulatory frameworks, and a lack of government credibility. Owing to the high level of uncertainty, it has become

² South Asian Countries include Afghanistan, Bangladesh, Bhutan, India, The Maldives, Nepal, Pakistan and Sri Lanka.

difficult for governments in developing countries to draft concessionaire contracts to cover all contingencies influencing PPPs and hence to transfer risk to private parties (see Beh, 2010; Bloomfield, 2006; Hayllar, 2010; Kumaraswamy and Zhang, 2001; Lonsdale, 2005).

In particular, transferring risk to private parties has often been impossible in developing countries due to government guarantees on various aspects of PPPs. In theory, no public authority should give any guarantee on a private party's obligations, and the private party should take responsibility for PPP activities that may include designing, financing, constructing, operating and managing the facility to deliver the service as per the contract (Hood and McGarvey, 2002). However, in addition to contributing to the equity capital of PPPs, governments in developing countries often have to provide guarantees on debt capital³, changes in taxation, sales rates, foreign exchange remittance and performance⁴ of PPPs (McCarthy and Tiong, 1991; RIDA and OECF, 1996; World Bank and PPIAF, 2007).

Transferring risk to a private party is recognised as the key justification for PPPs (Broadbent *et al.*, 2008; English, 2006). By transferring risk, the public partner ensures that the private partner will behave in a manner appropriate for achieving VFM (Buxbaum and Ortiz, 2007; Edwards and Shaoul, 2003; Forrer *et al.*, 2010; Hall, 2010). Pollock and Price (2008: 173) note that 'VFM gains result in lower costs over the life of a project and are attributed to the greater efficiency that results from transferring project risks to the private sector'. If, however, due to the high level of uncertainty and the existence of government guarantees, risks are not transferred, private parties would not be exposed to risk and competition

³ Debt capital in PPPs in developing countries can be as high as 80 percent.

⁴ Aspects on which guarantees are required by foreign investors are most likely to be dependent on the types of risk associated with the project.

throughout the duration of the PPP and may have no incentive to behave efficiently for the achievement of VFM (Hall, 2010). Private parties may also be tempted to avoid any cooperative relationships with the public partners. Further, they might behave opportunistically to recoup investment and generate profit rather than create value for the general public (Buxbaum and Ortiz, 2007; Forrer *et al.*, 2010; Lonsdale, 2005).

In essence, the problem of transferring risk makes it difficult for public partners/governments not only to achieve VFM for the betterment of social welfare but also to legitimise their use of PPP policy. Hence it also becomes difficult for the public partner to address public accountability (see Broadbent and Laughlin, 2003; Edwards and Shaoul, 2003; Forrer *et al.*, 2010). Thus, a wide spectrum of research has highlighted the need for management controls to manage the behaviour of private partners of PPPs in order to minimise (rather than transfer) risk (see Beh, 2010; English and Baxter, 2010; Hayllar, 2010; Jamali, 2004; Johnston and Gudergan, 2007; Kumaraswamy and Zhang, 2001; Lonsdale, 2005; Zheng *et al.*, 2008).

In principle, management control systems (MCS)⁵ can be used to address the problem of goal incongruence which leads to private partners' opportunistic behaviour and/or their failure to work efficiently for the best interests of the partnership (Ouchi, 1979, 1980; Williamson, 1985). MCS can help the public partner to direct, motivate and monitor behaviour of the private partner, thereby minimising behavioural risk⁶ (Clifton and Duffield, 2006; Smyth and Edkins, 2007). MCS can also help public partners to harness private partners' expertise in

⁵ The term management control systems (MCS) refers to the set of procedures and processes that managers and other organisational participants use in order to help ensure the achievement of their goals and the goals of their organisations (Otley and Berry, 1994).

⁶ Behavioural risk is the possibility that the partners will not behave in the best interest of the partnership (see Gulati and Singh, 1998).

achieving VFM (see Das and Teng, 1996, 1999, 2001; Langfield-Smith, 2008; Lonsdale and Watson, 2007; Şngün and Wasti, 2007). Further, MCS can help public partners to deliver infrastructure services as per public standards and to address the issue of public accountability in PPPs.

The focus of this thesis is on the use of MCS by public partners to minimise risk associated with PPPs, with special reference to a developing country, namely Sri Lanka. In mid-1992, the government of Sri Lanka through a Cabinet decision officially introduced PPP policy as a ‘private sector infrastructure development project’ (World Bank, 1996). Since then the government has taken several steps, including the establishment of a PPP unit to facilitate and popularise PPP arrangements in the country. The high-level of risk associated with PPPs seems to have largely influenced the level of progress of PPPs in the country (see Gnanadass, 2008; Kelegama, 2006; Matthias, 2007). Watawala (2006) found that the government had been able to complete only eleven PPP projects by 2006 with a total investment of US\$843 million⁷ (see Appendix 1 in Chapter two). This still remains the case.

1. 2. MOTIVATION FOR THE RESEARCH

This thesis is motivated by several factors. First, the literature suggests that the ways by which policies diffuse between industrialised countries (e.g., coercion, competition, learning and mimicry) are different from those between industrialised and developing countries⁸ (see, for example, Dobbin *et al.*, 2007; Marsh and

⁷ According to publicly available data, currently nine PPP projects are in progress and two PPP projects have failed.

⁸ The way of diffusion of a policy is dependent on various factors such as the influence of other countries, influence of international aid organisations and competition of countries for economic benefits (Dobbin, *et al.*, 2007).

Sharman, 2009; Shipan and Volden, 2008). However, studies on public policy diffusion, and PPP policy diffusion in particular, have been limited to industrialised countries such as the US, the UK and Australia (see, for example, Broadbent and Laughlin, 1999, 2003; English and Guthrie, 2003; Newberry and Pallot, 2003). Although PPP policy is considered highly appropriate for developing countries for the delivery of public infrastructure facilities as a means of reducing poverty (see, for example, Bhatia and Gupta, 2006; Miraftab, 2004; UNESCAP, 2004), very little is known as to how it has diffused into developing countries like Sri Lanka.

Second, the successful adoption of policy innovation depends to a large extent on local contextual factors such as the level of political stability, social support, government commitment and the regulatory framework of the adopter country (Henisz *et al.*, 2005; Marsh and Sharman, 2009). Wejnert (2002) notes that the presence or absence of these contextual factors largely determines the nature of the adoption of a policy. Marsh and Sharman (2009: 279) also highlight that ‘domestic circumstances [factors] affect whether, when and how governments accept transfers from abroad’. The nature of PPP policy adoption is generally different between industrialised and developing countries (see Beh, 2010; Jamali, 2004; Kumaraswamy and Zhang, 2001; Minogue, 2004). However, understanding of the contextual factors affecting the adoption of PPP policy in developing countries, such as Sri Lanka, is very limited.

Third, a PPP is a complex inter-organisational relationship⁹ based on long-term contractual arrangement between a profit-oriented private party (or parties) and a welfare oriented government agency (or agencies) for the delivery of large-scale

⁹ An inter-organisational relationship is ‘any voluntarily initiated cooperative agreement between firms that involves exchange, sharing, or co-development, and it can include contributions by partners of capital, technology, or firm-specific assets’ (Gulati and Singh 1998: 781).

public infrastructure services (see Beh, 2010; Hayllar, 2010). Commensurate with the complexity, various factors (e.g., opportunism and uncertainty) influencing PPPs have made it difficult for public partners to achieve VFM (Edwards and Shaoul, 2003; Gallimore *et al.*, 1997; Greve, 2003; Hall, 1998; Jin and Doloi, 2008; Pollitt, 2002). Although a number of studies notes the importance of using MCS to achieve VFM (Broadbent *et al.*, 2004; Devapriya, 2006; English, 2005; English and Skellern, 2005; Smyth and Edkins, 2007; Zheng *et al.*, 2008), research on MCS in PPPs is extremely sparse.

Fourth, MCS in inter-organisational relationships consist of control archetypes (e.g., market, bureaucratic and clan), sub-control modes (outcome and behavioural) and control strategies (e.g., performance evaluation and trust) (Caglio and Ditillo, 2008; Eisenhardt, 1985). Transaction cost economics (TCE) theorists note that various contingent factors influence choice between different management control archetypes (see, for example, Coase, 1937; Williamson, 1979, 1985, 1991). There is a need for a comprehensive framework, which explains linkages among different control archetypes, control strategies, control modes and contingent factors in the context of PPPs. In particular, little is known about how public partners choose between different control archetypes and control strategies, when various contingent factors influence different phases (e.g., selecting, building, operating and terminating) of a PPP's life cycle.

Fifth, one of the key aspects of MCS is their ability to minimise risk (Gulati and Singh, 1998). Risk is a key factor in determining the success or failure of inter-organisational relationships including PPPs (Das and Teng, 1999, 2000). Recently, many studies on inter-organisational relationships have highlighted the importance of identifying the relationship between risk and management controls (see, for example, Langfield-Smith and Smith, 2003). However, studies on inter-organisational relationships and PPPs in particular, which examine the

relationships between different types of risk and different control archetypes, including control strategies, are extremely limited.

Finally, PPPs in Sri Lanka seem to be subject to high-levels of risk due to various contextual factors (e.g., political uncertainty, underdeveloped capital market and lack of social support). Studies also note the importance of using MCS more effectively in state-owned enterprises, and PPPs in Sri Lanka (see, for example, Hopper *et al.*, 2008). However, very little is known about MCS in PPPs in Sri Lanka in particular.

1. 3. AIM AND OBJECTIVES

The aim of this thesis is to examine the use of MCS by public partners to minimise the risk associated with PPPs with special reference to Sri Lanka. In order to achieve this aim, this study has the following specific objectives:

- I. To examine the diffusion of PPP policy into Sri Lanka and identify the challenges to its successful adoption in the country.
- II. To develop a framework to systematically analyse the use of MCS in PPPs.
- III. To provide empirical evidence on the manner in which the public partner uses MCS in order to minimise risk associated with PPPs in Sri Lanka.

1. 4. OVERVIEW OF THE THREE PAPERS

This PhD thesis uses the ‘thesis by publication’¹⁰ format and includes three papers, one of which has already been published and another paper has been accepted for publication in refereed journals. Each of these papers addresses the objectives identified in Section 1. 3. An overview of each paper is given below.

Paper 1: Coercive Policy Diffusion in a Developing Country: The Case of Public Private Partnership in Sri Lanka

This paper endeavours to achieve the first objective of the thesis: It examines the diffusion of PPP policy into Sri Lanka from a critical perspective, and identifies the contextual factors that are likely to impede the country’s successful adoption of PPP policy.

This paper undertakes a macro-level analysis of the context of PPPs in Sri Lanka and provides background information about PPPs in general, and PPPs in Sri Lanka in particular. In addition, the paper provides a detailed explanation of contextual factors which influence both the risk associated with PPPs and the use of MCS in PPPs, which are discussed in papers 2 and 3 respectively.

The paper develops an analytical framework drawing on policy diffusion theory. The framework identifies linkages among diffusion mechanisms, policy transfer agents and local contextual factors determining the adoption of a policy. The paper is based on a comprehensive survey of research studies and documents including newspaper articles and reports from international aid organisations (e.g., Asian Development Bank, World Bank and International Monetary Fund).

¹⁰ Thesis ‘by publication’ is Macquarie University’s preferred format for higher degree research theses.

The paper shows that PPP policy, innovated in industrialised countries, was introduced to Sri Lanka with coercion from international aid organisations through conditionality attached to financial assistance. It argues that the adoption of PPP policy in Sri Lanka has been considerably slow due to local contextual factors such as lack of state credibility, weak regulatory framework, macro-economic problems, political instability, underdeveloped capital market and lack of social support.

This paper has been accepted for publication in the forthcoming (2011) issue of the *Journal of Contemporary Asia* (ERA rank 'A'). An earlier version of the paper was presented at the *6th International Conference on Accounting, Auditing and Management in Public Sector Reforms* in Copenhagen, September 2010.

Paper 2: Management Controls in Public Private Partnerships: An Analytical Framework

This paper aims to achieve the second objective of the thesis: It develops a framework to systematically analyse MCS in PPPs. The framework is developed by drawing on TCE ideology (Williamson, 1985, 1991, 1996), organisational theory (Ouchi, 1979, 1980), and the notion of trust (Das and Teng, 1998; 2001; Deakin *et al.*, 1997; Gambetta, 1988; Sako, 1992). It is also informed by the literature on MCS in inter-organisational relationships (for instance, Speklé, 2001; van der Meer-kooistra and Vosselman, 2000).

The framework developed in the paper identifies three control archetypes (namely market, bureaucratic and clan), two control strategies (namely performance evaluation strategy and trust-based strategy) and two control modes (namely outcome and behavioural), which constitute a management control system in a

PPP. The framework also categorises risk associated with PPPs into two types (namely relational risk and performance risk) and identifies five contingent factors which influence the two types of risks (namely opportunism, bounded rationality, uncertainty, transaction frequency and asset specificity).

Further, the paper identifies the linkages among control archetypes, control strategies, control modes and the two types of risk. Moreover, the paper argues that public partners of PPPs use performance evaluation as the strategy of both market and bureaucratic control archetypes and trust as the strategy of the clan control archetype to minimise the two types of risk in different phases of PPPs, (namely selecting, building, operating and terminating) in order to ensure that the private partner provides a standard of service that leads to the achievement of VFM.

The paper has been published in the *Australian Accounting Review* (ERA journal rank 'B'), Vol. 21, Issue 1, pp. 64-79 (published in 2011). An earlier version of the paper was presented at the *9th Manufacturing Accounting Research Conference* (MAR conference) in Muenster, Germany, in June 2009.

Paper 3: Management Controls for Minimising Risk in Public– Private Partnerships in a Developing Country: Evidence from Sri Lanka

This paper aims to achieve the third objective of the thesis: Using the framework developed in paper 2, it examines the MCS adopted by public partners to minimise the risk associated with PPPs in developing countries using a case study. The case study is an energy sector PPP project in Sri Lanka. The primary data source was semi-structured interviews that were conducted with 12 personnel from both

public and private sectors involved in the project. Relevant literature and documents (e.g., documents issued by the Ministry of Power and Energy in Sri Lanka, newspaper articles and reports of international aid organisations) provided a secondary data source.

The paper argues that transferring risk to private parties is a questionable justification for PPPs in the context of developing countries mainly because of factors such as government guarantees on various aspects of PPPs (e.g., debt capital, modifications in taxation, sales rates and foreign exchange remittance). Therefore, the paper emphasises the importance of minimising risk rather than attempting to transfer risk to the private parties of PPPs, and the use of MCS in that regard.

The study finds that the public partner in the PPP used control archetypes and control strategies in different combinations in different phases of PPPs to minimise relational risk and performance risk. The study also provides evidence that the public partner used performance evaluation as the strategy of both the market and bureaucratic control archetypes, and trust as the strategy of the clan control archetype in minimising the two types of risk. The findings of the study also reveal that in addition to contingent factors suggested by TCE theory, factors such as institutional environment and power differentials influenced the public partner's choice of control archetypes.

An earlier version of this paper was presented at the *8th International Management Control Research Conference* at the University of Greenwich, London in September 2010.

Table 1 further illustrates the link between the three papers and the objectives of this thesis.

Table 1: Research objectives and the three papers of the thesis

Paper 1	
<i>Objective 1</i>	To examine the diffusion of PPP policy into Sri Lanka and identify the challenges to the country's successful adoption of the policy.
<i>Accepted for publication</i>	Ranjith Appuhami , Perera, S. and Perera, H (2011), 'Coercive Policy Diffusion in a Developing Country: The Case of Public-Private Partnership in Sri Lanka', <i>Journal of Contemporary Asia</i> , forthcoming (ERA Rank 'A').
<i>Conference presentation</i>	Coercive Policy Diffusion in a Developing Country: The Case of Public Private Partnership in Sri Lanka (with Perera, S. and Perera, H.), presented at the <i>6th International Conference on Accounting, Auditing and Management in Public Sector Reforms</i> in Copenhagen, September 2010. (Authors' contribution: Ranjith Appuhami 60%, Sujatha Perera 20% and Hector Perera 20 %)
Paper 2	
<i>Objective 2</i>	To develop an analytical framework to systematically analyse the use of management control systems in PPPs by drawing on ideology of transaction cost economics (TCE) (Williamson, 1985, 1991, 1996), organisational theory (Ouchi, 1979, 1980) and the notion of trust.
<i>Publication</i>	Ranjith Appuhami , Perera, S. and Perera, H (2011), 'Management Controls in Public Private Partnerships: An Analytical Framework', <i>Australian Accounting Review</i> , Vol. 21, Issue 1, pp. 64-79 (ERA Rank 'B').
<i>Conference presentation</i>	Towards a Framework to Analyze the Use of Management Control Systems in Public-Private Partnerships (with Perera, S. and Perera, H.) presented at the <i>9th Manufacturing Accounting Research Conference (MAR)</i> in Muenster, Germany, June 2009. (Authors' contribution: Ranjith Appuhami 60%, Sujatha Perera 20% and Hector Perera 20%)
Paper 3	
<i>Objective 3</i>	To examine how the public partner uses MCS in order to minimise relational risk and performance risk associated with PPPs in Sri Lanka.
<i>Conference presentation</i>	Management Control Systems of Public-Private Partnerships: Evidence on Minimising Relational Risk and Performance Risk (with Perera, S. and Perera, H.), presented at the <i>8th International Management Control Research Conference</i> at the University of Greenwich, London, September 2010. This is an earlier version of the paper. (Authors' contribution: Ranjith Appuhami 80%, Sujatha Perera 10 % and Hector Perera 10%)

1. 5. THESIS ORGANISATION

The thesis is organised into five chapters as set out below. Chapters 2 to 4 comprise the three aforementioned self-contained papers. Each paper is in journal format and includes tables, figures and references. Chapter 5 is the concluding chapter. It summarises the findings of the three papers, draws an overall conclusion, identifies the limitations and provides suggestions for future research.

- | | |
|-----------|--|
| Chapter 2 | Paper 1: Coercive Policy Diffusion in a Developing Country: The Case of Public–Private Partnership in Sri Lanka |
| Chapter 3 | Paper 2: Management Controls in Public–Private Partnerships: An Analytical Framework |
| Chapter 4 | Paper 3: Management Controls for Minimising Risk in Public–Private Partnerships in a Developing Country: Evidence from Sri Lanka |
| Chapter 5 | Summary and Conclusion |

CHAPTER TWO

(PAPER 1)

COERCIVE POLICY DIFFUSION IN A DEVELOPING COUNTRY: THE CASE OF PUBLIC-PRIVATE PARTNERSHIPS IN SRI LANKA

ABSTRACT

Over the last two decades, Public-Private Partnership policy has been adopted in developing countries to a lesser degree than in industrialised countries. This paper argues that this policy has been diffused to developing countries like Sri Lanka with coercion from international aid granting organisations through conditionalities attached to financial assistance. It details the country-specific challenges faced by Sri Lanka in responding to conditionalities as it has sought to implement this policy. Drawing on policy diffusion theory the paper develops a framework to be used in analysing the issues under investigation.

Keywords: Public-Private Partnership, Sri Lanka, developing countries, coercion, policy diffusion.

1. INTRODUCTION

A public-Private Partnership (PPP) is an institutional arrangement built on the foundation of new public management (NPM). NPM claims objectives such as increased efficiency, quality and competition of public sector services (Lane, 2000). While attempting to achieve the above objectives, PPP specifically aims at achieving a “value for money” objective while reducing the demands on the state budget by involving the private sector in the provision of governments’ traditional infrastructure services such as health, education, prisons, roads, electricity, and water. The adoption of PPP policy in industrialised countries is regarded by orthodox analysts as a tool for the further development of public services (e.g., Hodge, 2004). For developing countries, this orthodox view is that PPP is a way to reduce poverty (e.g., UNESCAP, 2004; Bhatia and Gupta, 2006).

In the early 1990s PPPs became popular as a policy reform and it has been widely adopted in industrialised countries such as the USA, New Zealand, the UK and Australia (Broadbent and Laughlin, 2003; de Bettignies and Ross, 2004). For example, the UK has completed 800 PPP projects with a value exceeding £56 billion (HM Treasury, 2008) and Australia has completed more than 127 PPP projects with a value of almost A\$ 35.7 billion (English, 2006). Subsequently, PPPs have been diffused into developing countries (Kuhnle and Selle, 1992; Thomas *et al.*, 2006).

It is generally considered that PPP policy would be attractive to developing countries, which often experience macroeconomic problems such as poor infrastructure, burden on government budgets and excessive government debt (Jamali, 2004; Nataraj, 2007). However, according to Jamali (2004) and Kumaraswamy and Zhang (2001), in developing countries, the application of PPP policy reform is still in a kind of experimental stage, and in many cases PPPs do

not proceed to the physical development stage (see also Mubin and Ghaffar, 2008). Sri Lanka introduced PPP policy reform in 1992, the same year as the UK, and has been able to complete just 11 PPP projects with a total investment of US\$ 843 million (Watawala, 2006). These eleven projects do not even include important sectors such as roads and telecoms (see Appendix 1).

The purpose of this paper is twofold. It examines how the PPP policy was diffused to Sri Lanka, and it identifies the challenges to successful adoption of PPP policy in Sri Lanka. For this purpose, a framework is developed drawing on policy diffusion theory (e.g., Dobbin *et al.*, 2007; Shipan and Volden, 2008; Marsh and Sharman, 2009). The analysis conducted is based on information gathered through a comprehensive survey of the literature and documents including reports of international aid organisations (IAOs) and newspaper articles. The paper will show that PPP policy, innovated in industrialised countries, was introduced to Sri Lanka with coercion from IAOs such as Asian Development Bank (ADB), World Bank (WB) and International Monetary Fund (IMF). It also argues that the adoption of PPP policy in Sri Lanka has been retarded due to local contextual factors, which are significantly different from those in industrialised countries.

The paper contributes to the NPM literature in two ways. First, it explores how the diffusion of PPPs as a public policy was introduced to Sri Lanka with coercion from IAOs. Prior literature has identified mechanisms of policy diffusion focusing exclusively on industrialised countries. Furthermore, although some studies have explored the development of PPPs at country level (e.g., Broadbent and Laughlin, 1999, 2003; English and Guthrie, 2003; Newberry and Pallot, 2003), very few have examined the diffusion of PPP policy between countries. Second, the study extends the literature on PPP policy diffusion by exploring local contextual factors affecting the adoption of PPP policy in a developing country. Very few studies on PPPs in developing countries have examined contextual factors affecting the

adoption of PPP policy (e.g., Kumaraswamy and Morris, 2002; Jamali, 2004; Mubin and Ghaffar, 2008). This study also has practical implications, as it may help governments in developing countries in making better policy choices by considering country-specific characteristics.

The paper is organised as follows. The next section presents the theoretical background and the development of framework for the study. The literature about PPP policy innovation is reviewed in Section 3. Section 4 critically analyses how the PPP policy was diffused in Sri Lanka, and the challenges faced in its adoption. The final section of the paper provides a summary and some concluding comments.

2. THEORETICAL FRAMEWORK

2. 1. Policy diffusion

The theory of diffusion first became popular in sociological studies (Rogers, 1983) and has spread to areas such as political science, economics, accounting, public policy and marketing (e.g., Lowrey, 1991; Perera *et al.*, 2003; Dobbin *et al.*, 2007). According to Rogers (1983: 5) the sociological view is that “diffusion is the process by which an innovation is communicated through certain channels over time among members in a social system.”

A rapidly growing branch of broad school of diffusion theory is policy diffusion (Shipan and Volden, 2008). Studies on policy diffusion recognise a new policy for a country as an innovation (Berry and Berry, 1990). According to Walker (1969: 881), an innovation is “a program or policy which is new to [the country] adopting

it, no matter how old the program may be or how many other [countries] may have adopted it.” Policy diffusion is seen “as a process through which policy choices in one country affect those made in a second country” (Simmons and Elkins, 2004: 171). Policy diffusion also explains “the pattern of diffusion of particular policies to certain countries at specific points in time” (Dobbin *et al.*, 2007: 450).

Theorists explain the diffusion of policy innovations under two categories: international diffusion and internal/local adoption (Berry and Berry, 1990; Tyran and Sausgruber, 2005). International diffusion is a process where policies diffuse from one country to another. According to Shipan and Volden (2008: 841), “the pressure of policy innovation can come from outside the polity, with the spread of innovation from one government to another.” There are several patterns of international policy diffusion, such as from national to regional, from international to local and from local to local (see Evans and Davies, 1999).

2. 2. Coercive policy diffusion

Policy diffusion theorists identify several mechanisms of diffusion internationally, including learning, competition, mimicry and coercion (e.g., Dobbin *et al.*, 2007; Shipan and Volden, 2008). Learning occurs when one government (policy maker) learns from the experiences of other governments by observing the politics of policy adoption and the impact of those policies. Competition contributes to policy diffusion when countries compete for capital or export market. Mimicry occurs when a government copies the policy of another country (Dobbin *et al.*, 2007; Shipan and Volden, 2008). However, ‘coercion’ has been identified as the most widely used explanation of policy diffusion from industrialised countries to developing countries (Dobbin *et al.*, 2007; Holden, 2009; Marsh and Sharman, 2009). Coercion occurs when powerful actors such as governments and

international organisations influence the policy choices of governments. This influence can be in the form of fiscal force, financial or moral authority, trade practices, economic sanctions and monopolisation of information or expertise (Dobbin *et al.*, 2007; Henisz *et al.*, 2005; Owen, 2002; Shipan & Volden, 2008).

International policy diffusion by coercion requires a *transfer agent* or *change agent* (Evans, 2009; Holden, 2009). According to Rogers (1995: 335), a transfer agent is an individual or organisation that “influences clients’ innovation decisions in a direction deemed desirable.” In policy diffusion studies, IAOs such as the WB and IMF are often identified as transfer agents between industrialised countries and developing countries (Holden, 2009). In the coercive policy diffusion process, transfer agents work mainly for industrialised countries, as they get their resources mainly from those countries.¹¹ Transfer agents control financial resources desperately sought by developing countries, including foreign direct investments, aid, grants, loans and securities. Thus, industrialised countries such as US can coerce developing countries through transfer agents by giving financial assistance (Dobbin *et al.*, 2007; Shipan and Volden, 2008).

Conditionality is an important element of coercive policy diffusion. The conditionality associated with financial assistance to developing countries refers to “the commitments contained within a loan or grant contract that developing countries must adhere to if they are to receive all or part of the funding” (Kovach and Lansman, 2006: 6). According to Vreeland (2003), developing countries are typically subject to the conditionality of IAOs because they need financial assistance to ward off crises or to make infrastructure investments that are difficult to finance through private capital markets. Mosley *et al.* (1991: 65) further point out that transfer agents take various measures to place pressure on developing

¹¹ Industrialised countries retain control over transfer agents through ownership of their resources.

countries, so that the desired policies are executed by those countries. For instance, Kovach and Lansman (2006: 5) state:

The IMF's 'gatekeeper' role makes the conditions the Fund attaches to its program hugely potent. If a poor country does not fulfil the conditions that the IMF attaches to its lending, then not only does it forfeit IMF development finance, it will also potentially forfeit all other sources of much-needed donor finance.

Through conditionality, transfer agents coerce developing countries to adopt policies innovated in industrialised countries (Mosley *et al.*, 1991). According to Biersteker (1995: 186), “there was a pronounced interest in the willingness, especially on the part of the US government, to use the Fund [IMF] and the [World] Bank to force changes in developing country economic policy during the early 1980s.” Further, it is widely known that IAOs have used conditionality to influence developing countries to adopt market-oriented reforms including liberalisation and privatisation that have emerged from industrialised countries (e.g., Haque, 1996b; Henisz *et al.*, 2005).

2. 3. Local policy adoption

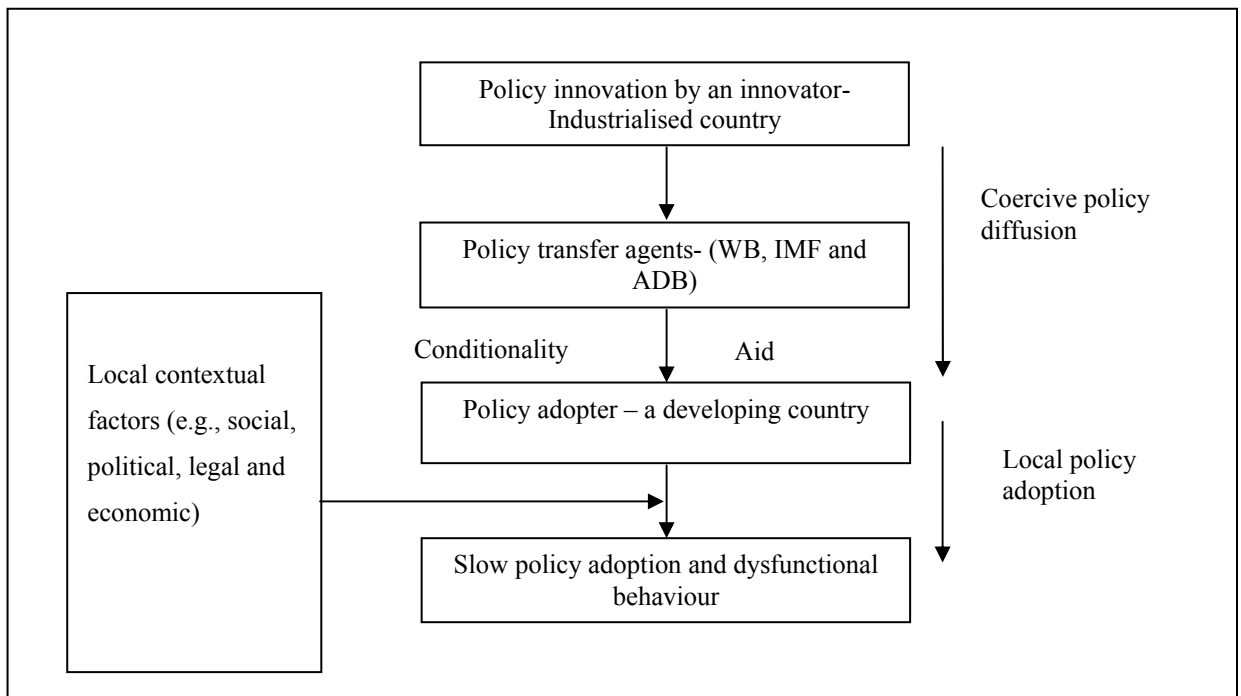
Although a new policy may be successful in an innovating country, it might not achieve the same results in another country (Henisz *et al.*, 2005; Marsh and Sharman, 2009). The successful adoption of a policy innovation depends to a large extent on local contextual factors in the adopter country. Wejnert (2002: 311) notes that contextual factors have a permissive effect, as their presence or absence largely determines the adoption of a policy. Marsh and Sharman (2009: 279) also argue “domestic circumstances affect whether, when and how governments accept transfers from abroad.” Numerous analysts have suggested that these local contextual factors include the political system (Dolowitz and Marsh, 1996: 354), social support (Battaglio and Khankarli, 2008; Bing *et al.*, 2005), fiscal position,

government commitment, political instability, regulatory framework, (e.g., Kumaraswamy and Zhang, 2001; Bing *et al.*, 2005; Jacobson and Choi, 2008) and access to capital markets (McCarthy and Tiong, 1991).

The adoption of policies diffused by coercion from industrialised countries has become a challenge to developing countries, mainly because of differences in contextual factors between industrialised and developing countries (e.g., Ivanova and Evans, 2004). According to Minogue (2004: 172), not only are “developing economies distinctively different in economic, social and political terms from rich countries, but there is considerable variation between cultures within these broad categories.” Smith (1992: 17) argues that coercive policy diffusion into developing countries can result in “inappropriate administration” based on an “expatriate model which has been developed in the context of big business, industrial society and metropolitan government.” Referring to coercive policy diffusion, Heald (1992: 72) also notes that “it should be a question of learning rather than of direct transplanting: differences in political culture, levels of economic development, country size and bureaucratic capabilities will determine which reforms are feasible.”

Figure 1 depicts the conceptual framework developed drawn from the theory discussed above. The framework shows the links between different variables in the coercive policy diffusion process from industrialised countries to a developing country.

Figure 1: Policy diffusion into a developing country



3. PPP POLICY INNOVATION IN INDUSTRIALISED COUNTRIES

PPP policy allows a government to enter into a contractual agreement for the provision of public services/utilities/infrastructures by a private sector consortium, which can be one or more private parties including investors, lenders, constructors, guarantors and operators. Typically, under a PPP contractual agreement, which may last 25 years or more (Broadbent *et al.*, 2008), the government makes a stream of payments to the private party for its services. These services may include designing, financing, constructing and operating.

With PPP policy reform governments seek to achieve two main objectives. The first is to achieve value for money in delivering public infrastructure (Broadbent

and Laughlin, 2003; Froud, 2003). Value for money refers to micro economic objectives which emphasise the cost savings to the government achieved through both harnessing the private partner's expertise, innovation, effectiveness and efficiency (Froud, 2003) and transferring risks (e.g., public risk, asset risk, operating risk, sponsor risk, financial risk, default risk) to the private partner (English, 2006; Khadaroo, 2008).

The secondary objective of PPP policy is to enhance infrastructure-based services while minimising public debt and budget deficit. According to Broadbent *et al.* (2000: 23) this objective focuses on macro fiscal aspects and avoids public expenditure controls, thereby achieving investment that could not be afforded otherwise. The need for public expenditure controls arises as investment in infrastructures increases budget deficit and consequently public debt capital.

3. 1. PPP policy innovation

According to Rogers (1995: 131), “decisions and events occurring previous to [an innovation] have a strong influence on the diffusion process.” Evans and Davies (1999) and James and Lodge (2003) also note that diffusion of a policy (or transfer) is a process that cannot be distinguished from other policy developments and changes in public administration. Similarly, the innovation of PPP policy cannot be investigated independently from previous decisions, events and innovations in public management/ administration.

PPP policy innovation and other changes in public administration that have been implemented by governments over the last 30 years have often been described as *new public management* (NPM) (Broadbent and Laughlin, 2005: 78). English and Guthrie (2003: 507) note that “the nature of PPPs is much more likely to be

understood by the ideological predisposition of the governments towards implementing a NPM reform agenda.” NPM, one of the most striking international trends in public administration originating from industrialised countries, is a “set of ... administrative doctrines, which dominated the bureaucratic reform agenda in many OECD group countries from the late 1970s” (Hood, 1991: 3). In principle, NPM has been claimed to be associated with limiting corruption, waste and incompetence in the public sector (Hood, 1995).

The key distinguishing feature of NPM is the reliance on market-based mechanisms to deliver public services (Common, 1998). This reliance on private sector participation in the economy reflects high trust in private business methods being relevant for public service delivery (Hood, 1995; Pollitt, 2001). Its emphasis on increasing efficiency in government organisations is based on the private sector’s expertise, management practices, innovations and technology, thereby minimising the differences between the private and public sectors (Hood, 1995; Gendron *et al.*, 2001; Broadbent and Laughlin, 2005).

A policy decision made in the early stages of NPM was to privatise government run organisations (Newberry and Pallot, 2003; Maguire and Malinovitch, 2004; Broadbent and Laughlin, 2005). According to Hood (1991: 3), a “megatrend” in NPM is “the shift toward privatisation and quasi-privatisation and away from core government institutions, with renewed emphasis on ‘subsidiarity’ in service provision.” Privatisation involves “the sale of government infrastructure assets, and their associated revenue streams, to a private sector corporation” (English and Guthrie, 2003: 499). Although privatisation became increasingly popular around the globe from the 1980s to the 1990s (Zohlnhöfer *et al.*, 2008), later it was no longer an option for some industrialised countries. For example, according to Broadbent and Laughlin (2003: 37), in the UK, “the commitment to privatisation as a policy was not diminished [in the early 1990s], but arguably there was little

left that could be sold off without generating considerable public concern.” Newberry and Pallot (2003: 468) also note that in the late 1990s the government of New Zealand “halted the unpopular overtly privatising reforms.”

However, governments in industrialised countries seemed to believe that “any involvement with the private sector in public sector business was better than none at all” (Broadbent and Laughlin, 2003: 37). That was the main idea, which led to the innovation of PPP policy. PPP policy therefore, is recognised as a direct spin-off of privatisation (Linder, 1999).

In its early phase, the diffusion of PPP policy occurred mainly among industrialised countries. For example, Linder (1999: 35) states that PPPs were deployed by the federal government in the United States and Maguire and Malinovitch (2004) note that Australia (Victoria) introduced PPP policy in the late 1980s. However, in the early 1990s the interest in PPP policy grew rapidly, particularly after the UK government announced its ‘Private Finance Initiative’ (PFI)¹² policy in the autumn of 1992 (Broadbent and Laughlin, 1999; Torres and Pina, 2001; de Bettignies and Ross, 2004; Timothy *et al.*, 2005). During the same period, the UK PFI (hereafter PPP) policy diffused internationally in many other industrialised countries including Italy, Ireland, Japan and the Netherlands (Torres and Pina, 2001).

¹² PFI is the term used for PPP in the UK.

4. COERCIVE PPP POLICY DIFFUSION: THE CASE OF SRI LANKA

4. 1. Background

Sri Lanka (called Ceylon until 1972) is a country in the South Asian region and an island in Indian ocean with a population of 21 million (WFB, 2008). The WB (2009a) categorises the country among ‘lower-middle-income countries’, with per capita income of \$ 4,460 in 2008. The country gained independence in 1948, after almost five centuries under the domination of three colonial powers (Portuguese, Dutch and British). The legacy of the colonial powers highly influenced the country’s economic, political and administrative structure (Samaratunge *et al.*, 2008b: 110).

Since its independence in 1948, Sri Lanka as a developing country has depended on financial assistance from IAOs such as the IMF and WB. These two organisations have “identical ideological perspectives and similarity of objectives and common programmes under structural adjustment” (Onimode, 1989: 25-6). Both these organisations strongly favoured regimes dominated by the United National Party (UNP) in preference to the Sri Lanka Freedom Party (SLFP) in offering financial assistance (Shaw, 1999; Athukorala, 2007). It was mainly because their import-oriented economic ideology seemed to facilitate the so-called structural adjustments/ stability package of the IMF targeting market oriented reforms.¹³ In contrast, the economic ideology of the SLFP was heavily dependent on the promotion of a national industrial bourgeoisie (Lakshman, 1985).¹⁴

¹³ UNP and SLFP are the major political parties in Sri Lanka.

¹⁴ Since the 1990s, differences in economic ideologies in the two political parties have become less distinct as the SLFP has gradually moved towards market-oriented reforms.

Therefore, there have always been some variations in coercive policy diffusion under each political regime.¹⁵

The power of IAOs to use coercion arose as the country dependence on financial assistance for development activities. Due to poor creditworthiness resulted from debt trap,¹⁶ the country was unable to obtain funds from financial markets. On the other hand, financial markets were opened and funds became available to those developing countries, which had stability credits¹⁷ from the IMF. Consequently, stability credits pushed the country further into the debt trap, hence increasing dependence on financial assistance. As Körner *et al.*(1986: 141) state, “If the government does not reach agreement with the IMF, it risks the loss of its international creditworthiness and an intensification of the economic crisis, which almost inevitably leads to a loss of legitimation.”

In 1965, the government of Sri Lanka (GOSL) faced deteriorated economic conditions and as result the country experienced a severe foreign exchange crisis (Athukorala, 2007). Thus, the GOSL turned to the IMF and adopted stability programmes in order to receive the Fund’s stability credits. The UNP government which was in power in 1965 continuously received financial assistance and became increasingly dependent on the IMF and WB (Lakshman, 1985), leading the country into severe a debt trap (Payer, 1974). Since then, under both government regimes, the GOSL has entered into several standby agreements with the IMF and WB and has signed a letter of intent showing its commitment to

¹⁵ For example UNP was in government during 1965-70 and 1977-94. The SLFP has been in government in 1956-65, 1970-1977, and since 1994 has been a major party in the United People's Freedom Alliance government.

¹⁶ Debt trap is the situation where a country has serious difficulty in repaying debt, or in many cases even the interest on the debt (Milbourne, 1997).

¹⁷ For the purpose of stabilising the economy of developing countries, IMF and WB provide stability credits (loans) which come with “IMF’s seal of approval” indicating to the financial world that the country is prepared to carry out austerity policies to ensure its solvency.

conditionality terms included in those agreements (Athukorala, 2007; Körner *et al.*, 1986).

In principle, all stability agreements of the IMF and WB needed the GOSL to introduce policy reforms, which reduced and minimised state intervention in economic activities and promoted private sector participation in the economy. In other words, conditions attached to the IMF's stability agreements forced the GOSL to implement market-oriented reforms, which were known as NPM developments in industrialised countries.

4. 2. NPM developments

An analysis of PPP policy diffusion in Sri Lanka needs to be undertaken within the context of NPM policy reforms in the country. In Sri Lanka, as in many developing countries, NPM was introduced as a set of policy reforms based on economic stabilisation agreements signed with IAOs (e.g., Sarker, 2006).

Among various policy reforms, the core neo-liberal orthodoxies of economic liberalisation and privatisation can be recognised as two major NPM trends in Sri Lanka (e.g., Balasooriya *et al.*, 2008; Samaratunge *et al.*, 2008b). These came in the same basket as the PPP policy and were highlighted in the conditionalities attached to agreements that the GOSL has signed with IAOs since these were initiated in 1965¹⁸ (see Haggard, 1985; Lakshman, 1985; Athukorala, 2007).

¹⁸ According to Kovach & Lansman (2006), 20 per cent of all World Bank conditions for poor countries are economic policies. Half of these impose some sort of privatisation and trade liberalisation conditions. Further, 43 per cent of all IMF structural conditions focus on economic policy reforms (p. 19). Of these, half are privatisation related.

Economic liberalization

Sri Lanka introduced economic liberalisation in 1977, making it one of the first to do so among developing countries (Kelegama, 1993; Athukorala and Jayasuriya, 1994). This was a remarkable turning-point in the application of NPM in the country. Economic liberalisation required an efficient public sector with a new set of rules ensuring private sector investment and contract management (Samaratunge *et al.*, 2008a: 27).

The introduction of economic liberalisation through coercion associated with IAO agreements was largely underpinned by poor economic conditions in the country in the 1970s. In particular, the world oil shocks of 1973-74 had worsened the country's trade balance (Kelegama, 1989), hence public debt as a percentage of GDP rose from 12.7 in 1970 to 34.1 in 1977 (Embuldeniya, 2000) and the overall budget deficit on average also remained at 14 per cent of GDP (Jayawardena, 1997). Initially the IMF's suggestion was to adjust the exchange rate downwards. However, the GOSL, even under the UNP regime, resisted currency devaluation, largely because of its political implications. But eventually in November 1967, due to strong pressure from the IMF, the GOSL introduced a 20 per cent devaluation of the exchange rate. Yet the IMF was not satisfied with this step and continuously applied coercion to the GOSL to further devalue the currency. According to Corea (2008: 304-5) who had been working as the Secretary of the Ministry of Planning and Economic Affairs at the time (1965-1970):

The proposal of the Fund [IMF] did not find acceptance although the pressure on Ceylon [Sri Lanka] after that date to devalue her currency came to be stronger than ever...[20 per cent devaluation of exchange rate] by the government did not however, satisfy the expectations of the Fund or the requirements for a greater liberalisation of the controls on the foreign trade. Hence the pressure for further action continued.

The use of coercion by the IMF in this policy reform is particularly evidenced in the Central Bank report (1968: 22) which mentions that “the government in consultation with the International Monetary Fund introduced [a] foreign exchange entitlement certificate scheme.” In addition, the increase in the IMF financial assistance received on the introduction of economic liberalisation further attests to the use of coercive mechanisms by the IMF. IMF financial assistance in 1976 before the introduction of economic liberalisation was SDR 15.8 million, which jumped to SDR 93 million in 1977 and then SDR 260.3 million in 1978 (Körner *et al.*, 1986). According to Kovach and Lansman (2006: 7), if the government was to receive all or part of that funding, it had to adhere to conditionality within loans or grant contracts with the IMF.

Privatisation Program

Privatisation in the IMF’s stability agreement for Sri Lanka appeared to also follow trends set by Margaret Thatcher in the UK and Ronald Reagan in the USA in the late 1970s. Both the IMF and WB emphasised that privatisation would not only reduce government expenditure on welfare, but also increase effectiveness and efficiency the previously state-owned enterprises (SOEs) (World Bank, 1998). Increasing public debt further enabled the IMF and WB to use coercion over the GOSL to implement privatisation. Shastri (1997: 489) notes that at “the meeting in 1987, for loans under the structural adjustments facility to implement stabilization plan ... JR [Jayawardena, the President of the GOSL] promised to privatise state enterprises or subject them to commercial discipline” (see also Balasooriya *et al.*, 2008).

From the late 1980s, the GOSL undertook privatisation programs more aggressively. By the end of 2005 it had privatised 98 SOEs and closed down a further 17 SOEs (Balasooriya *et al.*, 2008). In addition to increasing efficiency, the

GOSL's primary objective of privatisation policy was to reduce both public debt and the effect of debt trap (Kelegama, 1997). For this purpose, the GOSL also established institutions such as the Public Enterprises Reform Commission¹⁹ and contributed considerably to promoting privatisation programs, particularly in the plantation, telecommunication, port, power and aviation sub-sectors in the country (ADB, 2009).

However, privatisation did not achieve the expected economic development in the country. It is argued that, as a result of privatisation in Sri Lanka, socio-economic conditions actually deteriorated, creating greater poverty and increased cost of living (Knight-John and Athukorala, 2005). Further, there was instability as employees and labour unions in SOEs protested against privatisation policy due to concerns regarding job security.

There was also strong political opposition due to the corruption allegedly associated with privatisation in the country, mainly because of the lack of transparency and openness in the privatisation process (Balasooriya *et al.*, 2008). Knight-John (2004: 366) states that privatisation expands "the opportunities for excessive rent-seeking and contracts being offered on the basis of political connections rather than on economic competence in several instances."

The use of coercion by aid agencies over the GOSL to speed the execution of privatisation also led to a loss of transparency and contributed further to the level of corruption (Knight-John, 2004). For example, referring to this issue, the WB (1995: iv) notes that "given political sensitivity, the implementation of privatisation could be phased over a longer period through a system of long-term

¹⁹ Public Enterprises Reform Commission was established in 1996 and was abolished in 2009.

management contracts (50 years or more) and gradual sale of assets in the form of shares” (see also ADB, 2004b).

4. 3. PPP policy

By the early 1990s privatisation was becoming increasingly unpopular in Sri Lanka. Further, the GOSL seemed reluctant to privatise SOEs considered nationally important, especially those related to infrastructure facilities such as water and energy, and strategically removed them from the privatisation programme (Balasooriya *et al.*, 2008). This trend led aid agencies to search for an alternative policy to privatisation programme in Sri Lanka (ADB, 2004b)

In mid-1992, the GOSL officially introduced the PPP policy through a Cabinet decision, calling it a ‘private sector infrastructure development project’(World Bank, 1996). As with earlier policies (economic liberalisation and privatisation), the coercion associated with the introduction of PPP policy came with financial assistance and associated conditionality. Knight-John (2004: 278) notes that the “signing of a stand-by arrangement with the IMF, with attached conditionality on structural reforms appeared to have contributed to a more concerted policy effort to embrace public-private partnerships.”

The PPP policy in the country was “strongly supported” by the United States Agency for International Development (USAID) technical assistance project (US\$10 million) in 1992 (World Bank, 1996). This project required the GOSL to undertake institutional building, training, market outreach and a comprehensive public educational program in relation to the new policy. In particular, in its *World Development Report* (1994) the WB further demonstrated the importance of PPP policy and insisted on governments of developing countries promoting PPPs as the

solution for their problem of poor infrastructure facilities. The *World Development Report* (World Bank, 1994: 2) states it:

Public-private partnerships in financing have promise... Government will have a continuing, if changed, role in infrastructure. In addition to taking steps to improve the performance of infrastructure provisions under their direct control, governments are responsible for creating policy and regulatory frameworks that safeguard the interest of the poor, improve environmental conditions and coordinate cross-sectoral interactions – whether services are produced by public or private providers. Governments are responsible for developing legal and regulatory frameworks to support private involvement in the provision of infrastructure services.

The GOSL thus introduced several changes required to facilitate PPP policy. For example, in late 1992, the GOSL established the Secretariat for Infrastructure Development and Investment (SIDI) under the Ministry of Policy and Planning, to facilitate the development of PPPs in the country. Further, in 1995, it established Private Sector Infrastructure Development Company Ltd (PSIDC)²⁰ in order to provide long-term debt to private parties to undertake PPP projects. As a government owned company, the PSIDC administered funds received from aid agencies (e.g., World Bank and KFW of Germany²¹). It extended loans to private organisations to finance up to a maximum of 40% of the cost of PPP projects in areas such as power generation (including power distribution), transport (including highways, ports and railways), telecommunications and urban environmental services.

However, the IAOs were not satisfied with the initial progress and continued to pressure the GOSL. For example, the WB (1996: 8) stated:

²⁰ In 2008, PSIDC was merged with the National Development Trust Fund (NDTF) and SME bank in order to expand the operation of Lanka Putra Bank.

²¹ KFW is a development bank owned by the German government.

A major objective of the World Bank Group is to influence and accelerate the transitional process from public dominated infrastructure to private operation and ownership. The Bank Group's proactive role in Sri Lanka is seen as an innovative one for the promotion of private sector opportunities, given the main emphasis on public sector lending for infrastructure by the other major donors – Overseas Economic Cooperation Fund (OECF) and ADB.

There were also occasions where financial aid was interrupted as a means to coerce the GOSL. For example, USAID cancelled technical assistance to SIDI and demanded that SIDI be given statutory powers and that it be staffed with professionals drawn from the private sector, as a condition to renew funding (Sunday Times, 1997). In another example, the ADB (2004a: 3) notes that “delays in restructuring the power sector have delayed release of the second tranche of \$30 million of an ADB reform program” (see also ADB, 2005a).

In 1996, the GOSL established the Bureau of Infrastructure Investments (BII) to replace SIDI and received US\$ 77 million in financial assistance from the WB. In the same year, the GOSL issued new government tender procedures in which one part “Guidelines and Incentives for Participation in Economic Infrastructure Development,” deals with PPP arrangements in the country²² (Sri Lanka: Tax Guide, 2002). Unlike SIDI, BII was established under the Board of Investment (BOI), which works as a central autonomous statutory institution to facilitate investments in Sri Lanka (Sunday Times, 1997).

BII was expected to “function as a coordination and facilitation point for economic infrastructure projects [PPPs] and thus enabling investors to save substantial time and money” (BII, 1997). BII's structure and functions were clearly defined with respect to the implementation of PPPs. These changes were intended to increase transparency and promote PPPs (Kanes, 2005). Further, in 1996, the GOSL was

²² In January 1998, the Guideline on Government Tender Procedure Part II, Private Sector Infrastructure Projects BOO/BOT/BOOT was revised and is still applicable in Sri Lanka.

able to sign a contractual agreement to initiate its first PPP project with a value of US\$ 68 million. The first PPP had taken approximately three years to contract following a protracted process of negotiation for the project (World Bank, 1996; CEB, 2009).

In 2006, the Cabinet Sub-Committee on Investment Promotion redefined the role of BII and established the Public Private Partnership Unit (PPP Unit) within the BOI. The PPP Unit replaced BII, with additional capacity to carry out transparent bidding processes, to select appropriate private parties, and to undertake assessments of value for money and affordability for the government (Mattias, 2009).

4. 4. Challenges to PPP policy adoption in Sri Lanka

Referring to PPP policy and its related developments in developing countries Minogue (2004: 173) acknowledges that “the application through practical reform programmes will encounter problems of adaptation to complex cultural systems.” The adoption of PPP policy in Sri Lanka can be evaluated by its ability to achieve pre-set objectives within the local social and political context. WB (1996: 4) notes that in Sri Lanka “despite the shift in government policy in favour of private participation, translation into real transactions has been a difficult and contentious process” (see also Haque, 1996a: 319).

There are several challenges for the continuing and effective adoption of PPP policy in Sri Lanka (ADB, 2004b). These challenges include lack of state credibility, a weak regulatory framework, focus on secondary objectives, political instability, an under-developed capital market and lack of social support.

Lack of state credibility

Political support and commitment are crucial for successful PPPs (e.g., Kumaraswamy and Zhang, 2001; Bing *et al.*, 2005; Jacobson and Choi, 2008). For example, Bing *et al.* (2005: 465) state that “a positive political attitude towards the private sector involvement in an infrastructure project would support the growth of PPPs.” However, to be credible, the government should provide its support and commitment to the application of the PPPs, promoting public interest rather than political advantage. Kumaraswamy and Zhang (2001: 199) state that it depends on governments’ commitment to a policy pledge. They also emphasise the importance of the need for the government to avoid undue interference, which could disturb smooth functioning and reduce transparency in the PPP process.

In the Sri Lankan context there were several incidents that raised doubts about the government’s credibility. For example, in 1991, the GOSL called for bids to develop a 350MW coal-fired power plant, a PPP project in *Trincomalee* in the north-east of the country. The proposal from Mihaly International Corporation was selected following rigorous evaluation of 25 proposals received (Suratgar, 2002). By August 1994, Mihaly International Corporation managed to prepare agreements to finance the projects with funding bodies (e.g., National Export Credit Agency USA, Canada, and Italy) and made a submission to the GOSL in advance of the scheduled date. However, in October 1995, after eight draft proposals and two years of negotiation, the government that came to power in late 1994, issued a cancellation letter to Mihaly International Corporation. This led to a legal dispute between Mihaly International Corporation and the GOSL (Daily News, 2003).

State credibility was also damaged when the government abandoned PPP initiatives apparently for benefits in a forthcoming election. In principle, any

government is expected to continue its works for the national interest regardless of the outcome of a forthcoming election. In the mid-1990s, after almost 20 years of Ceylon Electricity Board investigation, the GOSL decided to establish a 900MW coal power plant in *Norachcholai* on the north-western coast of Sri Lanka. The project was expected to address increasing electricity demand and reduce the use of the more expensive thermal power plants in the country. In July 2000, the GOSL officially cancelled the project, even after funding had been approved by the Japanese Bank for International Corporation. Caron and Costa (2007: 440) note that the forthcoming election was one of the main reason for the cancellation. The government seemed to have cancelled the project in order to win the votes of those who opposed it, particularly those residing in the project area. Nevertheless, the government that came into power in November 2005 reactivated the project and signed agreements with relevant parties to start construction in June 2009. The project finally commenced its first phase operation in March 2011.

Weak regulatory framework

The regulatory framework includes government institutions such as ministries, departments, units and divisions, and government laws, regulations, policies and guidelines (Broadbent & Laughlin, 1999; English & Guthrie, 2003). The nature of the regulatory framework of a country is dependent to a large extent on the government's economic and political agenda (Barton *et al.*, 2004; Cassimon and Engelen, 2005; Lobao and Kraybill, 2005) and hence frameworks will differ significantly and systematically across countries (Rafael *et al.*, 1997).

The regulatory framework in a country is likely to influence a government's application of economic policies including PPPs (Bing *et al.*, 2005). English and Guthrie (2003) note that the underlying thrust of a regulatory framework rationalises the introduction and increased use of PPPs. Regulatory frameworks

potentially generate multidimensional benefits. For example, they may ensure fair enforcement of government policy, hold operators accountable for performance, and facilitate monitoring processes and transparency in governments' activities (e.g., Jain, 1993; Balasooriya *et al.*, 2006; Kulshreshtha, 2008). The importance of establishing an appropriate regulatory framework to steer the process of PPPs, which are formed between a social objective oriented public party and a profit motivated private party has been emphasised in several recent studies (e.g., Broadbent and Laughlin, 1999 ; Kumaraswamy and Zhang, 2001; English and Guthrie, 2003).

The weak regulatory framework in Sri Lanka has often been seen as one of the major challenges to the implementation PPPs. According to Kelegama (2006), the progress of PPP arrangements has been slow due to the weak regulatory framework, including procurement procedures in Sri Lanka (see also Kanes, 2005). The WB (2009b) also notes that building a warehouse in Sri Lanka requires 21 procedures, whereas it requires on average 16 procedures in the South Asian Region.

The establishment of an independent unit, which facilitates and promotes PPPs is recognised as a major component of the regulatory framework of a country (The World Bank & PPIAF, 2007). Examples include the PPP Unit in India, Infrastructure Investment Facilitation Center (IIFC) in Bangladesh, Treasury PPP taskforce and Partnerships UK, and Partnerships Victoria, Australia. According to the WB and PPIAF²³(2007: 3), a PPP Unit contributes to “the implementation of a successful PPP program.”

²³ PPIAF stands for Public-Private Infrastructure Advisory Facility, which is a multi-donor technical assistance facility aimed at helping developing countries improve the quality of their infrastructure through private sector involvement.

The GOSL has over the last three decades been trying to establish such an independent unit to facilitate PPPs in the country. For example, it established the PPP Unit in 1992 and reformed it twice in 1996 and 2006. Referring to these institutional arrangements, the WB and IMF considered the GOSL needs a cautious approach as these institutions met with little success (FSAP, 2008: 8).

The PPP Unit in Sri Lanka found its decision making process plagued by political interference and often had difficulty in coordinating with other government agencies (Kanes, 2005). Although the objective of the PPP Unit was to facilitate the formation and monitoring of PPPs, there were several occasions where they were established solely by line ministries without consulting the Unit (see Alles, 2008). Further, the PPP Unit seemed to lack strong government backing and lacked influence through the different government agencies to carry out co-ordination function effectively (Alles, 2008). For example, the establishment of a power project in Sri Lanka requires coordinating of activities among urban development authorities, the Ceylon Electricity Board, Ministry of Power and Energy, Central Environmental Authority and Ceylon Petroleum Corporation.

National policy and guidelines for PPPs are fundamental components of the regulatory framework of a country (Abdel Aziz, 2007). They detail the requirements for private party selection, contact management, dispute resolution, payment mechanisms, project financial structure and value for money assessments. In 1992, the GOSL introduced its first national policy document containing guidelines applicable to PPPs as part of national procurement guidelines. However, those guidelines did not cover some important aspects of PPPs such as so-called value for money drivers, optimal risks allocation, and public sector comparator (see Partnerships Victoria, 2001). The GOSL therefore has faced several legal issues in implementing PPPs, especially as there is no PPP law in the

country. One example is the case of Mihaly International Corporation vs Democratic Socialist Republic of Sri Lanka described above.

Macroeconomic objectives

In principle, PPPs are expected to achieve both macroeconomic and microeconomic objectives. While both objectives are important, the main determinant for the initiation of PPPs in industrialised countries is regarded as the ‘value for money’ objective (Broadbent and Laughlin, 2003, 2005; English, 2006; Morillos and Amekudiz, 2008).

However, PPPs in Sri Lanka seem to be more focused on macroeconomic than microeconomic objectives, as PPPs are seen as a strategy to avoid fiscal constraints such as budget deficit and high level of public debt. According to WB and PPIAF (2007), a wrong reason for applying a PPP is to attract private finance when governments find their own budget constraints. The European Commission (2006) also notes that the motive for GOSL’s PPPs (BOT) was primarily to raise capital rather than as a real commitment and coherent private participation policy (see also Jayasundara, 2007).

The GOSL’s macroeconomic motive is also apparent in that it does not seem to have taken the steps required to achieve value for money, such as the transfer of risk from public partner to private partner. As the key justification for PPPs, the transfer of risks accounts for the difference in costs between the fully public financing option and fully private financing (English, 2006; Broadbent *et al.*, 2008). In Sri Lanka, the government has not clearly delineated in its PPP procurement guidelines the mechanism to ensure this transfer of risks. For

example, a public sector comparator,²⁴ used as the central mechanism, which rests heavily on the estimation of transfer of risks in industrialised countries such as the UK and Australia, is not apparent in the PPP procurement guidelines in Sri Lanka.

The GOSL's fiscal constraints including its budget deficit and high level of public debt, are also likely to drive the macroeconomic objective of PPPs. For example, the total public debt was 60 percent of Gross Domestic Product (GDP) in the second half of the 1970s, and increased to 86 percent in 1997 and 100 percent in 2001²⁵ (Kappagoda, 2004). It remained at 90 percent of GDP by the end of 2007, compared to 40 per cent in other developing countries in Asia such as Vietnam, Thailand, China and Bangladesh (WFB, 2008). According to Heald (2003), when government departments face the problem of shortage of public funds, PPPs are used as a solution for it, rather than using the PPP policy to achieve the value for money objective.

Commensurate with its high level of public debt, the country's inadequate investment in infrastructure has been noticeable. In particular, 30 years of north-east war in the country worsened the situation with its mass destruction of infrastructure facilities. According to Matthias (2007), the head of the PPP Unit, the development of infrastructure has become a "daunting challenge" for the country. Kelegama (2006) also notes that Sri Lanka lags far behind many developing countries with regard to infrastructure. On average, Sri Lanka can maintain investments in infrastructure equal to 3.4 percent of GDP, whereas countries like Thailand and Vietnam spend approximately 15.4 percent and 9.9 percent of GDP, respectively (Gavieta, 2006; Alles, 2008).

Political instability

²⁴ The public sector comparator calculates the net present cost of the hypothetical public provision of the infrastructure and the services (English, 2006).

²⁵ The government's public debt outstanding was US\$ 6.64 billion and US\$ 14.52 billion (approximately) in 1997 and 2001 respectively (Central Bank of Sri Lanka, 2004).

Political instability has been a major problem for PPP policy adoption in Sri Lanka and other countries in the South Asian Region (Nataraj, 2007). In Sri Lanka, political instability was caused by two major factions – the separatist movement of the Liberation Tigers of Tamil Eelam (LTTE), and the military movement of Sinhala youth known as JVP (*Janatha Vimukthi Peramuna*)²⁶ (Abeyratne, 2004). Since the early 1980s, in particular, the war with the LTTE created uncertainty in the country with its strategy to destroy both human lives and physical assets, particularly in Colombo, the financial centre of the country (Sri Lanka Country Review, 2003; Abeyratne, 2004).

Political instability negatively has affected PPP policy adoption by increasing risk associated with PPP arrangements. The cost of financing increased in Sri Lanka as private investors often charged risk premiums for their investment in public infrastructure projects, which were often targeted by groups, like LTTE or were caught up in fighting. For example, by 1999, the LTTE had destroyed over a hundred transformers in the country (Silva, 1999). Risks arising from political instability also discouraged some private investors due to lack of security for their investments. According to the WB (1996: 7), investors such as “provident funds or insurance companies are typically averse to undertaking equity-like risks often associated with long-term infrastructure ... financing in developing countries” like Sri Lanka. Discouraged investors are likely to set higher bids for PPPs by including risk premiums.

Since the late 1990s, the GOSL’s efforts to implement a combined power generation cycle on a PPP basis in collaboration with the Japanese Government

²⁶ In the period 1971–1989, JVP attempted twice to capture state power by creating uncertainty in Sri Lanka. Since the early 1990s JVP has been operating as a democratic political party in the country.

and the ADB for approximately 10 years have failed, mostly due to political instability in the country (Gnanadass, 2008). Further, in the latter part of 1990s, it was difficult for the GOSL to find commercial lenders to finance the expansion of the Queen Elizabeth Quay or South Asian Gateway Terminal (SAGT) PPP project due to the political instability in the country. This delayed the signing of a contractual agreement of SAGT with the private party for at least five years (ADB, 2005b). In addition, SAGT's operation was adversely affected following an LTTE attack on the International Airport near Colombo in July 2001, due to the war risk surcharge of the insurance industry on all vessels going into and out of Sri Lanka (UNDP, 2009).

Under-developed capital market

One key aspect of the successful adoption of a PPP policy is the ability to raise finance (McCarthy and Tiong, 1991; Jefferies *et al.*, 2002; Bing *et al.*, 2005). Countries like the UK and Australia with developed capital markets, do not find financing of PPPs as challenging (McCarthy and Tiong, 1991). In developed markets, finance for PPPs can be raised from investors domestically, either by floating the project company in the stock market or by using private investor funds (McCarthy and Tiong, 1991; Kumaraswamy and Zhang, 2001). Sri Lanka, however, with its relatively thin and under-developed capital market, often finds it difficult to raise both equity and debt capital to finance PPPs (World Bank, 1996; ADB, 2009). Market capitalisation in Sri Lanka is approximately 15 percent of GDP in contrast to over 35 percent in neighbouring India (IPS, 2010).

The GOSL therefore, has to depend to a greater extent on external funding sources such as IAOs and foreign commercial investors. Almost all the PPPs in the country have been financed by either IAOs or foreign commercial investors or both. Although there are some benefits associated with foreign investors (e.g., transfer

of technology and skills), it has often become difficult for the GOSL to negotiate with them (e.g., Kanes, 2005; Yatanwala and Jayasena, 2008). For example, Gordon Wu, a foreign mega-investor from Hong Kong, said that “Sri Lanka spends more time negotiating a deal than building the projects” (cited in Kanes, 2005).

One of the most difficult issues faced by developing countries like Sri Lanka is the requirement by foreign investors to have governments guarantees (McCarthy and Tiong, 1991). Foreign investors often request the GOSL to provide guarantees for various aspects of PPPs such as modifications of taxation, sales rates, foreign exchange remittance and performance²⁷ (RIDA and OECF, 1996). For example, one of the factors that contributed to the failure of the Colombo-Katunayake Expressway Project was the inability of the GOSL to provide guarantees to concessionaries (Yatanwala and Jayasena, 2008). Importantly, providing such guarantees mean that the GOSL cannot transfer risks to the private party undertaking the project (McCarthy and Tiong, 1991; World Bank and PPIAF, 2007).

Lack of social support

The importance of social support to successful implementation of PPP policy has been well documented (USDOT, 2004; Bing *et al.*, 2005; Battaglio and Khankarli, 2008). Accordingly, PPPs expect social support from various groups such as employees, environmental groups, religious groups and the general public who are concerned about different outcomes of a PPP, namely safety, health and culture. Social support “is based on the public acceptance of the concept of private provision” Bing *et al.* (2005, p. 466), and for this, public outreach is critically

²⁷ Aspects in which guarantees are required by foreign investors are most likely to be dependent on the types of risk associated with the project.

important during the initial phase and throughout the PPP (USDOT, 2004; Jacobson and Choi, 2008).

In Sri Lanka, the lack of public support for PPPs has been notable. One example to support this suggestion is the 900MW power project in *Kalpitiya* initiated by the GOSL, which in the mid-1990s was identified as the best solution to the problem of ever increasing electricity demand and fuel cost. However, the project had been suspended for more than 20 years, mainly because of lack of social support due to issues around environmental protection, livelihood security and recognition, and religious considerations (Amarawickrama and Hunt, 2005; Caron and Costa, 2007).

Another example is the public protest against the first highway project, the Colombo-Katunayake Expressway, resulted in the loss of lives of three protestors (Environmental Foundation, 2001). Due to these protests the project was suspended in 2003. Following a five-year delay, construction recommenced in 2009, but under the government's traditional infrastructure development basis rather than under a PPP arrangement (Liyanarachchi, 2009).

Moreover, the support from the employees of state enterprises appears to be limited due to negative views held by some of them about the PPP policy (Mattias, 2009). Some believe that PPP policy is a backdoor privatisation program. This was evident from the way employees responded when the employees of Queen Elizabeth Quay were offered employment in SAGT PPP project. The contract for the SAGT port PPP project to manage Queen Elizabeth Quay, required that all Sri Lanka Port Authority workers who previously worked with Queen Elizabeth Quay be offered employment. However, only a portion of employees accepted the offer from SAGT because of their suspicion of the motive of PPPs, leaving it to operate under worker shortage for a period (UNDP, 2009).

Other challenges

In addition to the above challenges, PPPs in Sri Lanka have been affected by economic factors and existing deficiencies in infrastructure facilities. Economic variables include for example, high inflation and unfavourable exchange rate and interest rate. In particular, coupled with the increasing interest rate and unfavourable exchange rate, inflationary conditions in the country have rapidly inflated cost estimations of PPPs (Yatanwala and Jayasena, 2008). For example, the cost estimate for the Colombo-Katunayake Expressway was Rs. 5 billion (US\$50 million) in 1995, and increased to Rs. 13.1 billion (US\$131 million) in 2005, and approximately Rs. 30 billion (US\$ 292 million) in 2009 (Meier and Munasinghe, 2005; Wickramaratne, 2009).

The existing infrastructure facilities in a country also affect the implementation of PPPs (Keong *et al.*, 1997). The inefficiencies and inadequacies of existing infrastructure facilities also affect the implementation of PPPs in Sri Lanka (Arunatilake *et al.*, 2001; Weerakkody *et al.*, 2009). For example, on one occasion, several electricity generators imported by a contractor remained at the port for several months due to lack of transportation facilities (Sunday Times, 1996).

It is important to address all challenges mentioned above to successfully adopt the PPP policy in Sri Lanka. However, the degree of influence of each challenge on the policy adoption is likely to be different. For example, the influence of political instability and weak regulatory framework seemed to be significant in the country. In particular, political instability which mainly resulted from the civil war which ended in 2009 seemed to have exacerbated the influence of other challenges such as macro-economic objectives and underdeveloped capital markets. The government spent a large amount of money on buying weapons and other equipment needed to continue the war (Sri Lanka Country Review, 2003;

Abeyratne, 2004). The war also damaged both local and foreign investors' confidence in capital market in the country and created a vacuum in financing PPPs. Similarly, weak regulatory framework seemed to have caused the erosion of state credibility. This was particularly evident in the case of *Mihaly International Corporation v. Democratic Socialist Republic of Sri Lanka* (described above), where the cancellation of accepted proposal from a private party was not dealt within the regulatory framework.

These challenges mentioned above could affect the time and/or cost of a project and reduce private investors' confidence. Referring to this issue, Kumaraswamy and Zhang (2001) note that PPPs in developing countries are sometimes more costly than traditional government projects. The *Mihaly International Corporation v. Democratic Socialist Republic of Sri Lanka* case (described above) has been mentioned in international PPP history as an example of a dispute with international private investors (e.g., Suratgar, 2002; 2003; Weiler, 2005). With respect to this case, Suratgar (2002: 164) also notes, "if private foreign investors are to be encouraged to pursue transparency in seeking such [PPP] opportunities the international community must address the lessons of this case".

Given the challenges discussed above, the GOSL is not likely to be keen to use the PPP policy widely. The preferred method of the SLFP government for infrastructure development has been the use of foreign loans and aid suggesting reduced support for the promotion of PPPs. However, the massive need for capital to build infrastructure, in particular in war-impacted north and east, could induce changes to government policy towards PPPs. If the government decides to promote the PPP policy in the future, it will need to meet the challenges highlighted above in order to achieve efficiencies in the delivery of public services as well as responding to public opposition and expectations.

5. SUMMARY AND CONCLUDING REMARKS

This paper argues that PPP policy was coercively diffused into Sri Lanka and that the adoption of the PPP policy was problematic due to the impact of various contextual factors such as lack of state credibility, weak regulatory framework, focus on macroeconomic objectives, political instability, under-developed capital markets, lack of social support and limited scope. The paper reveals that international aid organisations have worked as policy transfer agents and have used conditionality as the tool to coerce Sri Lanka to adopt NPM reforms, including the adoption of the PPP policy innovated in industrialised countries. It can be concluded that policies developed in industrialised countries may not be easily transferable to developing countries, and that there is no guarantee that they work equally well in developing countries such as Sri Lanka.

The challenges to the adoption of PPP policy are likely to be different in nature and severity across countries. Future research may examine country-specific differences in the adoption of PPP policy by undertaking comparative studies. Such research might reveal additional challenges arising from the internal environment of PPPs, such as partners' commitment, management control issues, trust between partners, monitoring private partners' activities, performance evaluation and dispute management. Further research may also be undertaken using the conceptual framework developed in this study to examine the diffusion of any other policy or innovation from one country to another.

APPENDIX 1

PPP PROJECTS IN SRI LANKA

Table 1: Completed PPP projects in Sri Lanka

Project Name²⁸	PPP Model	Facility Type	Date of Bid calling	Date of contracting	Date of commencing operation	Project cost (Budgeted US\$)
1. Asian Power (Pvt) Ltd. 51 MW	BOO ²⁹	Energy	1993	1996	July 1998	68 million
2. Colombo Power (Pvt) Ltd 64MW	BOO	Energy	Dec 1995	Feb 1999	July 2000	72 million
3. AES Kelanitissa (Pvt) Ltd Hayleys -163 MW	BOOT	Energy	Nov 1998	June 2001	March 2003	104 million
4. Ace Power Generation Matara (Pvt) Ltd.	BOOT	Energy	Oct 1997	Aug 2000	March 2002	21 million
5. Ace Power Generation Horana (Pvt) Ltd.	BOO	Energy	Oct 1997	-	Dec 2002	27 million
6. Heladanavi (Puttalam) Ltd.	BOO	Energy	Feb 2002	May 2003	Sep 2004	62 million
7. Ace Power Embilipitiya (Pvt) Ltd	BOO	Energy	2002	Early 2004	April 2005	61 million
8. Expansion of the Queen Elizabeth Quay - SAGT	BOT	Transportation	1995	Aug 1999	Dec 2003	240 million
9. Kerawalapitiya combined cycle	BOOT	Energy	July 2002	May 2007	Open cycle – Dec 2008; Combined cycle – Feb 2010	390 million

²⁸ Completed projects have been identified using publicly available data.

²⁹ BOO = Build, Own and Operate; BOOT = Build, Own, Operate and Transfer; BOT = Build, Own and Transfer

Table 2 : PPP projects failed and in progress in Sri Lanka

Name of the project³⁰	Facility Type	Current phase of progress
1. Kandy Colombo Expressway	Transport	Proposal phase
2. Mass Rapid Transit System (MRTS) for Colombo city	Transport	Proposal phase
3. Industrial Park Horana	Commerce	Proposal phase
4. IT Park Malabe	Information technology	Proposal phase
5. IT Park Katunayake	Information technology	Proposal phase
6. Knowledge Henegama City	Information technology	Proposal phase
7. Textile Park Horana	Manufacturing	Proposal phase
8. Waste water facility Seethawaka	Utilities	Proposal phase
9. Colombo Medical Faculty Expansion project	Education	Proposal phase
10. 350 MW Coal power plant in Trincomalee	Energy	Failed
11. Colombo Katunayake Expressway	Road	Failed

³⁰ Projects in the table have been identified using publicly available data.

REFERENCES

- Abdel Aziz A.M. (2007) "Successful Delivery of Public-Private Partnerships for Infrastructure Development," *Journal of Construction Engineering & Management*, 133, 12, pp. 918-931.
- Abeyratne S. (2004) "Economic Roots of Political Conflict: The Case of Sri Lanka," *World Economy*, 27, 8, pp. 1295-1314.
- ADB (2004a) *Country Strategy and Program Update: 2005- 2006 Sri Lanka*. Asian Development Bank.
- _____ (2004b) *Review of Governance and Public Management for Sri Lanka*. Manila: Asian Development Bank.
- _____ (2005a) *Country Strategy and Program Update: 2006- 2008*. Asian Development Bank.
- _____ (2005b) *Equity Investment and Loan to the Colombo Port Development Project in the Democratic Socialist Republic of Sri Lanka*. Asian Development Bank.
- _____ (2009) *Country Assistance Plans - Sri Lanka*. Asian Development Bank.
- Alles L. (2008) "Project Financing in the Sri Lankan Context," *The Chartered Accountant*, 43, 2, pp. 7-11.
- Amarawickrama H.A. and Hunt L.C. (2005) "Sri Lankan Electricity Supply Industry: A Critique of Proposed Reforms," *Journal of Energy and Development*, Spring 2 pp. 239-278.
- Arunatilake N., Jayasuriya S. and Kelegama S. (2001) "The Economic Cost of the War in Sri Lanka," *World Development*, 29, 9, pp. 1483-1500.
- Athukorala P. and Jayasuriya S. (1994) *Macroeconomic Policies, Crises, and Growth in Sri Lanka, 1969-90*. World Bank: Washington, D.C.
- Athukorala P. (2007) "The Role of the International Donor Agencies in the Politics of Sri Lanka," *Japanese Journal of Political Science*, 8, 2, pp. 263-282.

- Balasooriya A., Alam Q. and Coghill K. (2006) "The effectiveness of the Telecommunications Regulatory Regime: The Case of Sri Lanka Telecom," *Public Administration and Development*, 26, pp. 383-393.
- Balasooriya A.F., Alam Q. and Coghill K. (2008) "Market-Based Reforms and Privatization in Sri Lanka," *International Journal of Public Sector Management*, 21, 1, pp. 58-73.
- Barton D., Coombes P. and Wong S.C.Y. (2004) "Asia's Governance Challenge," *McKinsey Quarterly*, 2, pp. 54-61.
- Battaglio J.R.P. and Khankarli G.A. (2008) "Toll Roads, Politics, and Public-Public Partnerships: The Case of Texas State Highway 121," *Public Works Management & Policy*, 13, 2, pp. 138-148.
- Berry F.S. and Berry W.D. (1990) "State Lottery Adoption as Policy Innovations: An Event History Analysis," *American Political Science Review*, 84, 2, pp. 395-415.
- Bhatia B. and Gupta N. (2006) "Lifting Constraints to Public-Private Partnerships in South Asia," 6, May, pp. 1-4.
- Biersteker T.J. (1995) "The Triumph of Liberal Economic Ideas in the Developing World," In: Stallings B. (ed.), *Global Change, Regional Response: The New International Context of Development*. Cambridge University Press: Cambridge, pp. 174-198.
- BII (1997) *Private Sector Participation in Infrastructure Development in Sri Lanka*. Bureau of Infrastructure Investment: Colombo.
- Bing L., Akintoye A., Edwards P.J. and Hardcastle C. (2005) "Critical Success Factors for PPP/PFI Projects in the UK Construction Industry," *Construction Management & Economics*, 23, 5, pp. 459-471.
- Broadbent J., Gill J. and Laughlin R. (2008) "Identifying and Controlling Risk: The Problem of Uncertainty in the Private Finance Initiative in the UK's National Health Service," *Critical Perspectives on Accounting*, 19, 1, pp. 40-78.
- Broadbent J., Haslam C, H. and Laughlin, R. (2000) "The Origins and Operations of the Private Finance Initiative, In Institute of Public Policy Research, Commission on the Public Private Partnerships," *The Private Finance Initiatives: Saviour, Villain or Irrelevance?*, (London: IPPR), pp. 23-47.

- Broadbent J. and Laughlin R. (1999) "The Private Finance Initiative: Clarification of a Future Research Agenda," *Financial Accountability & Management*, 15, 2, pp. 15 - 14.
- ____ (2003) "Control and Legitimation in Government Accountability Processes: The Private Finance Initiative in the UK," *Critical Perspectives on Accounting*, 14, 1/2, pp. 23-48.
- ____ (2005) "The Role of PFI in the UK Government's Modernisation Agenda," *Financial Accountability & Management*, 21, 1, pp. 75-97.
- Caron C. and Costa D.D. (2007) "There's a Devil on Wayamba Beach: Social Drama of Development and Citizenship in Northwest Sri Lanka," *Journal of Asian and African Studies*, 42, 5, pp. 415-445.
- Cassimon D. and Engelen P.-J. (2005) "Impact of the Legal and Institutional Framework on the Financial Architecture of New Economy Firms in Developing Countries," *Information Economics and Policy*, 17, 2, pp. 247-269.
- CEB (2009) Private Power Projects, Available at:
<http://www.ceb.lk/EPT/ept2.htm/>. Accessed on October 2009.
- Central Bank of Ceylon (1968) *Annual Report for 1968*. Colombo.
- Central Bank of Sri Lanka (2004) *Public Debt Management and Debt Profile of Sri Lanka*. Public Debt Department at Central Bank of Sri Lanka: Colombo.
- Common R. (1998) "The New Public Management and Policy Transfer: The Role of International Organizations," In: Minogue M., Polidano C., Hulme D. (eds), *Beyond the New Public Management*. Edward Elgar: Cheltenham, pp. 59-75.
- Corea G. (2008) *Gamani Corea: My Memoirs*. Gamini Corea Foundation: Colombo.
- Daily News (2003) Mihaly International Canada to Sue GOSL. 23/01/2003. Lackhouse, Colombo.
- de Bettignies J.-E. and Ross T.W. (2004) "The Economics of Public-Private Partnerships," *Canadian Public Policy*, 30, 2, pp. 135-154.

- Dobbin F., Simmons B. and Garrett G. (2007) "The Global Diffusion of Public Policies: Social Construction, Coercion, Competition, or Learning?," *Annual Review of Sociology*, 33, 1, pp. 449-472.
- Dolowitz D. and Marsh D. (1996) "Who Learns What from Whom: A Review of the Policy Transfer Literature," *Political Studies*, 44, 2, pp. 243-257.
- EC (2006) *The EC and Sri Lanka: Co-operation Strategy*. The European Commission.
- EF (2001) Killing at Colombo - Katunayake Expressway Worksite: Who is Responsible for These Deaths?. Environmental Foundation: Colombo.
- Embuldeniya D.K. (2000) "Economic Reforms and the Corporate Sector in Sri Lanka," *Contemporary South Asia*, 9, 2, pp. 165-179.
- English L.M. (2006) "Public Private Partnerships in Australia: An independent View of Their Nature, Purpose, Incidence and Oversight," *UNSW Law Journal*, 29, 3, pp. 250-262.
- English L.M. and Guthrie J. (2003) "Driving Privately Financed Projects in Australia: What Makes Them Tick?," *Accounting, Auditing & Accountability Journal*, 16, 3, pp. 493-511.
- Evans M. (2009) "Policy Transfer in Critical Perspective," *Policy Studies*, 30, 3, pp. 243-268.
- Evans M. and Davies J. (1999) "Understanding Policy Transfer: A Multi-Level, Multi-Disciplinary Perspective," *Public Administration*, 77, 2, pp. 361-385.
- Froud J. (2003) "The Private Finance Initiatives: Risk, Uncertainty and the State," *Accounting, Organizations and Society*, 28, 6, pp. 567-589.
- FSAP (2008) *Sri Lanka: Financial Sector Assessment*. World Bank and IMF.
- Gavieta R.C. (2006) "How Contract Rights and Public Sector Governance Affect Infrastructure Investment: The Philippine Experience," *Journal of Structured Finance*, 12, 1, pp. 90-94.
- Gendron Y., Cooper D.J. and Townley B. (2001) "In the Mame of Accountability - State Auditing, Independence and New Public Management," *Accounting, Auditing & Accountability Journal*, 14, 3, pp. 278 - 310.

- Gnanadass W. (2008) Gigantic Leap Forward in Power Generation. *The Nation: Sunday*. Colombo, 14/12/2008.
- Haque M.S. (1996a) "The Contextless Nature of Public Administration in Third World Countries," *International Review of Administrative Sciences*, 62, 3, pp. 315-329.
- _____ (1996b) "Public Service under Challenge in the Age of Privatization," *Governance*, 9, 2, pp. 186-216.
- Heald D. (1992) "The Relevance of Privatisation to Developing Economies," In: Smith B. (ed.), *Progress in Development Administration*. John Wiley & Sons: Chichester, pp. 59-74.
- _____ (2003) "Value for Money Tests and Accounting Treatment in PFI Schemes," *Accounting, Auditing & Accountability Journal*, 16, 3, pp. 342-371.
- Henisz W.J., Zelner B.A. and Guillén M.F. (2005) "The Worldwide Diffusion of Market-Oriented Infrastructure Reform, 1977-1999," *American Sociological Review*, 70, 6, pp. 871-897.
- HM Treasury (2008) *Value for Money Assessment Guidance*. HMSO: London.
- Hodge G.A. (2004) "The Risky Business of Public-Private Partnerships," *Australian Journal of Public Administration*, 63, 4, pp. 37-49.
- Holden C. (2009) "Exporting Public-Private Partnerships in Healthcare: Export Strategy and Policy Transfer," *Policy Studies*, 30, 3, pp. 313-332.
- Hood C. (1991) "A Public Management for All Seasons?," *Public Administration*, 69, 1, pp. 3-19.
- _____ (1995) "The New Public Management in the 1980s: Variation on a Theme," *Accounting, Organizations and Society*, 20, 2/3, pp. 93-109.
- IPS (2010) Developing the Capital Market: Issues and Constraints, Available at: <http://www.ips.lk/macro/reagenda.html>. Institute of Policy Studies: Colombo, Accessed on 26 January 2010.

- Ivanova V. and Evans M. (2004) "Policy Transfer in a Transition State: The Case of Local Government Reform in the Ukraine," In: Evans M. (ed.), *Policy Transfer in Global Perspective*. Ashgate: England, pp. 95-113.
- Jacobson C. and Choi S.O. (2008) "Success Factors: Public Works and Public-Private Partnerships," *International Journal of Public Sector Management*, 21, 6, pp. 637-657.
- Jain R. (1993) "Review the Policy Changes in the Indian Telecom Sector: Implication for Decision Makers," *Journal of Global Information Management*, 1, 3, pp. 33-43.
- Jamali D. (2004) "Success and Failure Mechanisms of Public Private Partnerships (PPPs) in Developing Countries," *International Journal of Public Sector Management*, 17, 5, pp. 414-430.
- James O. and Lodge M. (2003) "The Limitations of Policy Transfer and Lesson Drawing for Public Policy Research," *Political Studies Review*, 1, 2, pp. 179-193.
- Jayasundara P.B. (2007) "Key Policy Issues," In: Madawela R. (ed.), *Public Private Partnerships, Best Way Forward for Sri Lanka*. Research Intelligence Unit: Colombo, pp. 7-15.
- Jayawardena L. (1997) "Sri Lanka: Reforming Public Administration," *The Report on Governance: Promoting Sound Development Management*, ADB: Fukupka, pp. 80-99.
- Jefferies M., Gameson R. and Rowlinson S. (2002) *Critical Success Factors of the BOOT Procurement System: Reflections from the Stadium Australia Case Study*. Emerald Group Publishing Limited: Bingley.
- Kanes (2005) Public-Private Partnership for Growth and Development. *The Island*. Colombo, Sri Lanka, 3/07/2005.
- Kappagoda H. (2004) "Public Debt: Institutional Issues," In: Kelegama S. (ed.), *Economic Policy in Sri Lanka: Issues and Debates*. Sage: New Delhi, pp. 153-176.
- Kelegama S. (1993) *Privatization in Sri Lanka: The Experience During the Early Years of Implementation*. Sri Lanka Economic Association: Colombo.

- Kelegama S. (1989) "The Speed and Stages of a Trade Liberalization Strategy: The Case of Sri Lanka," *Marga Journal*, 10, 1, pp. 59-93.
- ____ (1997) "Privatization and the Public Exchequer: Some Observations from the Sri Lanka Experience," *Asia Pacific Development Journal*, 4, 1, pp. 14-25.
- ____ (2006) *Development Under Stress: Sri Lankan Economy in Transition*. Sage Publication: New Delhi.
- Keong C.H., Tiong R.L.K. and Alum j. (1997) "Conditions for Successful Privately Initiated Infrastructure Projects.," *In: Proceedings of the Institute of Civil Engineers, Civil Engineering*, 120, May, pp. 59-65.
- Khadaroo I. (2008) "The Actual Evaluation of School PFI Bids for Value for Money in the UK Public Sector," *Critical Perspectives on Accounting*, 19, 8, pp. 1321-1345.
- Knight-John M. (2004) "Privatization and Regulation," *In: Kelegama S. (ed.), Economic Policy in Sri Lanka: Issues and Debates*. Sage: New Delhi, pp. 363 - 378.
- Knight-John M. and Athukorala P. P. A. W. (2005) "Assessing Privatization In Sri Lanka: Distribution and Governance," *In Nellis, J, and N. Birdsall (ed.), Reality Check: The Distributional Impact Of Privatization In Developing Countries*. Center for Global Development: Washington D.C., pp. 389-426
- Körner P., Maass G., Siebold T. and Tetzlaff R. (1986) *The IMF and the Debt Crisis : A Guide to the Third World's Dilemma (Translated from the German by Paul Knight, London)*. Zed Books: London.
- Kovach H. and Lansman Y. (2006) *World Bank and IMF Conditionality: A Development Injustice*. Eurodad: Brussels.
- Kuhnle S. and Selle P. (1992) *Government and Voluntary Organizations: A relational Perspective*. Avebury: Aldershot.
- Kulshreshtha P. (2008) "Public Sector Governance Reform: The World Bank's Framework," *International Journal of Public Sector Management*, 21, 5, pp. 556-567.

- Kumaraswamy M.M. and Morris D.A. (2002) "Build-Operate-Transfer-Type Procurement in Asian Megaprojects," *Journal of Construction Engineering & Management*, 128, 2, pp. 93-102.
- Kumaraswamy M.M. and Zhang X.Q. (2001) "Governmental role in BOT-Led Infrastructure Development," *International Journal of Project Management*, 19, 4, pp. 195-205.
- Lakshman W.D. (1985) "The IMF-World Bank Intervention in Sri Lankan Economy: Historical Trends and Patterns," *Social Scientist*, 13, 2, pp. 3-29.
- Lane J.-E. (2000) *New public management*. Routledge: London.
- Linder S.H. (1999) "Coming to the Terms with the Public Private Partnership: A Grammar of Multiple Meanings," *the American Behavior Scientist*, 43, 1, pp. 35-51.
- Liyanarachchi W. (2009) If CKE Construction Completed Before Schedule: Govt to Offer Incentives to Contractor. *Daily News*, Lakehouse: Colombo, 02/05/2009.
- Lobao L. and Kraybill D.S. (2005) "The Emerging Roles of County Governments in Metropolitan and Nonmetropolitan Areas: Findings From a National Survey," *Economic Development Quarterly*, 19, 3, pp. 245-259.
- Lowrey T.M. (1991) "The Use of Diffusion Theory in Marketing: A Qualitative Approach to Innovative Consumer Behavior," *Advances in Consumer Research*, 18, 1, pp. 644-650.
- Maguire G. and Malinovitch A. (2004) "Development of PPPs in Victoria," *Australian Accounting Review*, 14, 2, pp. 27-33.
- Marsh D. and Sharman J.C. (2009) "Policy Diffusion and Policy Transfer," *Policy Studies*, 30, 3, pp. 269-288.
- Matthias P. (2007) "PPP Arrangements and Its Advantages for Sri Lanka," In: Madawela R. (ed.), *Public Private Partnerships: Best Way Forward for Sri Lanka*. Research Intelligent Unit: Colombo, pp. 39-41.
- Matthias P. (2009) Adopting PPPs in the Sri Lankan Context. *Public Private Partnership (PPP) Awareness Workshop-2009*. Colombo.

- McCarthy S.C. and Tiong R.L.K. (1991) "Financial and Contractual Aspects of Build-Operate-Transfer Projects," *International Journal of Project Management*, 9, 4, pp. 222-227.
- Meier P. and Munasinghe M. (2005) *Sustainable Energy in Developing Countries: Policy Analysis and Case Studies*. Edward Elgar: Cheltenham.
- Milbourne R. (1997) "Growth, Capital Accumulation and Foreign Debt," *Economica*, 64, 253, pp. 1-13.
- Minogue M. (2004) "Public Management and Regulatory Governance: Problems of Policy Transfer to Developing Countries " In: Cook P. (ed.), *Leading Issues in Competition, Regulation, and Development*. Edward Elgar Publication: Northampton, pp. 165 - 181.
- Morallos D. and Amekudz A. (2008) "The State of the Practice of Value for Money Analysis in Comparing Public Private Partnerships to Traditional Procurements," *Public Works Management & Policy*, 13, 2, pp. 114-125.
- Mosley P., Harrigan J. and Toye J. (1991) *Aid Power: The World Bank and Policy Based Lending*. Routledge: London.
- Mubin S. and Ghaffar A. (2008) "BOT Contracts: Applicability in Pakistan for Infrastructure development," *Pak. J. Engg. & Appl. Sci*, 3, pp. 33-46.
- Nataraj G. (2007) *Infrastructure Challenges in South Asia: The Role of Public-Private Partnerships*. ADB Institute: Tokyo.
- Nellis J. (2003) Effects of Privatisation on Income and Wealth Distribution. *World Bank Energy Week 2003*. Washington DC.
- Newberry S. and Pallot J. (2003) "Fiscal (ir) Responsibility: Privileging PPPs in New Zealand," *Accounting, Auditing & Accountability Journal*, 16, 3, pp. 467-492.
- Onimode B. (1989) *The IMF and World Bank and the African Debt*. London: Zed Books.
- Owen J.M. (2002) "The Foreign Imposition of Domestic Institutions," *International Organization*, 56, 2, pp. 375-409.
- Partnerships Victoria (2001) *Partnerships Victoria: Overview: Guidance Material*. Victorian Government.

- Payer C. (1974) *The Debt Trap*. Monthly Review Press: New York.
- Perera S., McKinnon J.L. and Harrison G.L. (2003) "Diffusion of Transfer Pricing Innovation in the Context of Commercialization: A Longitudinal Case Study of a Government Trading Enterprise," *Management Accounting Research*, 14, 2, pp. 140-164.
- Pollitt C. (2001) "Clarifying Convergence. Striking Similarities and Durable Differences in Public Management Reform," *Public Management Review*, 3, 4, pp. 471-492.
- Rafael L.P., Lopez-De-Silanes F., Shleifer A. and Vishny R.W. (1997) "Legal Determinants of External Finance," *Journal of Finance*, 52, 3, pp. 1131-1150.
- RIDA and OECF (1996) Power Sector Policy in Sri Lanka. *The Research Institute of Development Assistance and The Overseas Economic Cooperation Fund*: Tokyo.
- Rogers E.M. (1983) *Diffusion of Innovations*. 3rd Edition. Free Press: New York.
- _____ (1995) *Diffusion of Innovations* 4th Edition. Free Press: New York.
- Samaratunge R., Alam Q. and Teicher J. (2008a) "The New Public Management reforms in Asia: a comparison of South and Southeast Asian countries," *International Review of Administrative Sciences*, 74, 1, pp. 25-46.
- _____ (2008b) "Public Sector Reforms and Accountability: The Case of South and Southeast Asia," *Public Management Review*, 10, 1, pp. 101-126.
- Sarker A.E. (2006) "New Public Management in Developing Countries: An Analysis of Success and Failure with Particular Reference to Singapore and Bangladesh," *International Journal of Public Sector Management*, 19, 2, pp. 180-203.
- Shastri A. (1997) "Transitions to a Free Market: Economic Liberalisation in Sri Lanka," *The Round Table (London)*, No. 344, pp. 485-511.
- Shaw J. (1999) "A World Bank Intervention in the Sri Lankan Welfare Sector: The National Development Trust Fund," *World Development*, 27, 5, pp. 825-838.

- Shipan C.R. and Volden C. (2008) "The Mechanisms of Policy Diffusion," *American Journal of Political Science*, 52, 4, pp. 840-857.
- Silva N.D. (1999) Three Transformers Blasted in City. *The Sunday Times*, Colombo, 24/01/1999.
- Simmons B.A. and Elkins Z. (2004) "The Globalisation of Liberalisation: Policy Diffusion in the International Political Economy," *American Political Science Review*, 98 (February), pp. 171-189.
- Smith B. (1992) "Introduction," In: Smith B. (ed.), *Progress in Development Administration*. John Wiley & Sons: Chichester, pp. 1-21.
- Sri Lanka Country Review (2003) Investment Overview. *Sri Lanka Country Review*. CountryWatch Incorporated: Texas. No. 62.
- Sri Lanka: Tax Guide (2002) International Business Publications: Washington DC.
- Sunday Times (1996) In the Dark: CEB Power Plans. *Sunday Times*, 26/05/1996. Colombo.
- _____ (1997) Promoting Investment is Everybody's Business. *Sunday Times*, Colombo, 12/01/1997.
- Suratgar D. (2002) "Individual Concurring Opinion by Mr. David Suratgar," *Foreign Investment Law Journal: ICSID Review*, pp. 161-165.
- Thomas A.V., Kalidindi S.N. and Ganesh L.S. (2006) "Modelling and Assessment of Critical Risks in BOT Road Projects," *Construction Management & Economics*, 24, 4, pp. 407-424.
- Timothy D., Gaye P. and Alan J. (2005) "Lessons from the Private Finance Initiative in the UK: Benefits, Problems and Critical Success Factors," *Journal of Property Investment & Finance*, 23, 5, pp. 412-423.
- Torres L. and Pina V. (2001) "Public-Private Partnership and Private Finance Initiatives in the EU and Spanish Local Governments," *European Accounting Review*, 10, 3, pp. 601-619.
- Tyran J.-R. and Sausgruber R. (2005) "The Diffusion of Policy Innovations -An Experimental Investigation," *Journal of Evolutionary Economics*, 15, 4, pp. 423-442.

- UNDP (2009) Colombo, Sri Lanka Case Study (Port Expansion). *Public Private Partnerships: Case Studies for Sustainable Development* United Nations Development Programme.
- UNESCAP (2004) Partnership for Poverty Reduction: Pro-Poor Public Private Partnerships. *United Nations Economic and Social Commission for Asia and the Pacific*. Thailand.
- USDOT (2004) Report to Congress on Public-Private Partnerships. US Department of Transport: Washington DC.
- Vreeland J.R. (2003) *The IMF and Economic Development*. Cambridge University Press: New York.
- Walker J.L. (1969) "The Diffusion of Innovations among the American States," *The American Political Science Review*, 63, 3, pp. 880-899.
- Watawala L.R. (2006) "Foreword," In: Madawela R. (ed.), *Public Private Partnerships: The Best Way to Forward Sri Lanka*. Research Intelligen Unit: Colombo, pp. 3-4.
- Weerakkody V., Dwivedi Y.K. and Kurunananda A. (2009) "Implementing E-Government in Sri Lanka: Lessons from the UK," *Information Technology for Development*, 15, 3, pp. 171-192.
- Weiler T. (2005) *International Investment Law and Arbitration: Leading Cases from the ICSID*. Cameron May: London.
- Wejnert B. (2002) "Integrating Models of Diffusion of Innovations: A Conceptual Framework," *Annual Review of Sociology*, 28, 1, pp. 297-326.
- WFB (2008) World Fact Book, <https://www.cia.gov/library/publications/the-world-factbook/index.htm>, Accessed on 22 July 2008.
- Wickramaratne R.D. (2009) The First Ever Expressway Project in Sri Lanka Resumes Construction Programme: People's Republic of China Extends Her Hand of Friendship To Help Sri Lanka. *Sinhale Hot News*, Colombo, 06/04/2009.
- World Bank (1994) *World Development Report: Infrastructure for Development*. Oxford University Press: New York.

- ____ (1995) *Promoting Growth in Sri Lanka: Lessons from East Asia*, Paper No. 1478. Washington, DC: World Bank.
- ____ (1996) *Private Sector Infrastructure Development Project: Staff Appraisal Report Sri Lanka*, Report No. 15391-CE.
- ____ (1998) *World Development Report 1998*. Oxford University Press: New York.
- ____ (2009a) Data and Statistics. Available at:
<http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS>,
 Accessed on 18 December 2009.
- ____ (2009b) *Doing Business: Country Profile for Sri Lanka*. The World Bank: Washington DC.
- World Bank and PPIAF (2007) *Public Private Partnership Units*. Washington DC.
- Yatanwala Y.W.S.R. and Jayasena H.S. (2008) Failure of Applying PFI in Colombo Katunayake Expressway Project. *International Conference on Building Education and Research: Building Resillience*. Colombo, Sri Lanka.
- Zohlnhöfer R., Obinger H. and Wolf F. (2008) "Partisan Politics, Globalization, and the Determinants of Privatization Proceeds in Advanced Democracies (1990-2000)," *Governance*, 21, 1, pp. 95-121.

CHAPTER THREE

(PAPER 2)

MANAGEMENT CONTROLS IN PUBLIC PRIVATE PARTNERSHIPS: AN ANALYTICAL FRAMEWORK

ABSTRACT

Drawing on transaction cost economics and organisational theory, this paper proposes a framework to analyse management controls in Public-Private Partnerships (PPPs). The paper contributes to the related literature at a conceptual level by showing how three control archetypes, namely market, bureaucratic and clan, in conjunction with two control strategies, namely performance evaluation and trust-based strategies, could be used by public partners to minimise relational and performance risk, thereby achieve value for money objective. Practitioners could also use the linkages identified in this paper to develop management control systems for PPPs.

Keywords- Public-Private Partnerships; Control Archetypes; Management Control Systems; Relational Risk; Performance Risk.

1. INTRODUCTION

Over the last two decades, the number of Public Private Partnerships (PPPs) in both industrialised and emerging economies has increased significantly (World Bank, 2008). While the PPP concept goes back many decades, it came into currency in many parts of the world in the 1990s (de Bettignies and Ross, 2004). In general, PPPs are used to provide infrastructure in services such as health, education, prisons, roads, electricity and water, which are traditionally seen as the responsibility of the public sector.

A PPP is a type of inter-organisational relationship (IOR) built on the foundation of new public management with the objective of increasing the efficiency, quality, and competitiveness of public sector services while solving macroeconomic problems (Lane, 2000). The main objective of PPPs is to achieve value for money (VFM) (Broadbent and Laughlin, 2003; Froud, 2003) which concerns (and measures) the cost savings to the government achieved through harnessing ‘the economies of the private sector’ (Bing and Akintoye, 2003, p. 4). A PPP, as a form of business organisation, enables governments to invite a private sector partner to participate in the delivery of public infrastructure. It is based on a concessionaire contract between a government entity and a private sector partner that may last 25 years or more (Broadbent *et al.*, 2008). The private partner’s contribution may include financing, designing, building, operating, maintenance and managing services for public infrastructure. Although the phases in the life cycle of PPPs differ across projects, a typical PPP project involves four phases, namely selecting, building, operating and terminating.

In the selecting phase, the public partner follows certain procedures to select a suitable private partner to undertake the activities to be shared and to draw up a

concessionaire contract. Construction activities take place during the building phase. In the operating phase, necessary activities are undertaken to deliver the expected services. The terminating phase includes activities such as transfer of assets and related facilities of the PPP to the public partner, training the public partner's staff, withholding payments and payment of compensation on any default.

PPPs play a key role in governments' modernisation agenda in many industrialised nations (Broadbent and Laughlin, 2005; English and Skellern, 2005; English and Guthrie, 2003). In particular, Australia and the United Kingdom (UK) appear to have achieved considerable success with the implementation of PPPs (see Pollitt, 2005; English and Baxter, 2010; Auditor-General of New South Wales, 2006). For example, in Australia, Auditor-General of New South Wales (2006) has noted the cost effectiveness of building schools by PPPs compared with traditional infrastructure projects. However, empirical evidence in support of the PPP model as a means of gaining VFM is relatively scarce (Shaoul, 2005; Reeves and Ryan, 2007; McQuaid and Scherrer, 2010). On the contrary, a growing body of literature reveals that many PPPs have not achieved the expected VFM objective (Edwards and Shaoul, 2003; Greve, 2003; Pollitt, 2002; Hall, 1998). The difficulty of managing risks associated with PPPs has been identified as a factor that has contributed to such failure (Gallimore *et al.*, 1997; Edwards and Shaoul, 2003; Jin and Doloi, 2008). Risk in PPPs arises mainly due to goal incongruence between partners, which increases the potential for partners to behave opportunistically and/or fail to work for the best interest of the partnership (see Lonsdale and Watson, 2007; Langfield-Smith, 2008; Das and Teng, 2001, 1999, 1996; Das, 2006; Şngün, and Wasti, 2007). These behaviours are likely to exacerbate the complexity associated with PPPs (as noted by Shaoul *et al.*, 2008), leading to an increase in risk.

A PPP could achieve VFM objective by introducing a management control system (MCS)³¹ to address goal incongruence problem (see Clifton and Duffield, 2006; Smyth and Edkins, 2007) as MCS could help direct, motivate and monitor behaviours (Merchant and van der Stede, 2003). Because of the nature of PPP arrangements (for example, complexity, potential for opportunistic behaviour, long-term duration), a mix of controls may have to be used to influence the behaviour of the partners involved. The type and the degree of use of these controls would vary across different phases of a PPP project depending on the nature of the potential risk associated with those phases.

A number of studies has highlighted the need for effective management of risks in PPPs (Broadbent *et al.*, 2008; Shen *et al.*, 2006; Jones, 2005; Hood and Mcgarvey, 2002; Kunreuther, 2001) and the use of MCS for that purpose (English, 2005; English and Skellern, 2005; Broadbent *et al.*, 2003; Zheng *et al.*, 2008; Smyth and Edkins, 2007; Devapriya, 2006). However, hardly any systematic analysis has been undertaken so far of the use of MCS in managing risks in the PPP context. The purpose of this paper is to develop an analytical framework to systematically analyse the use of MCS in PPPs. The framework is developed by drawing on transaction cost economics theory (TCE) (Williamson, 1985; 1991; 1996), organisational theory (Ouchi, 1979; 1980) and the notion of trust. The reason for drawing on two theories is that it is often noted that a single theoretical perspective sometimes provides only a limited understanding of the complexities associated with the phenomena under examination (Chiles and McMackin, 1996; Smith *et al.*, 1995), and that the use of multiple theories in a coherent way could enables a more comprehensive analysis.

³¹ The term 'Management Control Systems refers to the set of procedures and processes that managers and other organisational participants use in order to help ensure the achievement of their goals and the goals of their organisations (Otley&Berry, 1994).

The framework developed in this paper identifies a number of contingent factors that could influence the achievement of the VFM objective of PPPs. Such influence results from various levels of behavioural risk caused by each of those contingent factors. The framework also highlights control archetypes and control strategies that could be applied to manage those behavioural risks. The proposed framework is designed to examine management controls in PPPs from the public partner's perspective, mainly because the public partner often bears the ultimate ownership and risk of the PPP.

This paper makes a contribution to the literature on controls in PPPs at a conceptual level by focusing on how three control archetypes, namely market, bureaucratic and clan, in conjunction with two control strategies, namely performance evaluation and trust-based strategies, could be used by the public partner to help minimise behavioural risk, thereby achieving VFM objective. Further, practitioners could use the linkages identified in this paper to develop MCS to minimise behavioural risk in PPPs.

The paper is organised as follows. Based on a review of the literatures related to TCE, organisational theory and the notion of trust, section two discusses the types of risks associated with PPPs and contingent factors affecting those risks, and introduces control archetypes and control strategies applicable to PPPs. The way in which a public partner in a PPP could use management control archetypes in conjunction with control strategies is explained in section three. The final section of the paper provides a summary of the paper and some concluding remarks.

2. LITERATURE REVIEW

2. 1. Risks associated with PPPs

The concept of risk has received considerable attention in the literature on IORs and in particular PPPs, because it is seen as the key feature to understand and analyse the operations of those organisations (Froud, 2003; Broadbent *et al.*, 2008). The term ‘risk’ refers to all “negative possibilities” resulting from the unexpected behaviour of individuals that affect the VFM objective of PPPs (Froud, 2003, p.584). The literature highlights a variety of sources of risk that affect the performance of PPPs in the areas of designing, financing, constructing, operating, maintenance and demand for services.

In PPPs, the public sector and private sector partners are expected to work together towards achieving the VFM objective of the partnership (Koppenjan, 2005). However, it is often possible that the partners will not behave in the best interest of the partnership, leading to the “chance of incurring increased costs” (Froud, 2003, p. 585), which is referred to as *behavioural risk* (Gulati and Singh, 1998; Kale *et al.*, 2000; Jin and Doloi, 2008). The costs that could be subject to such variations include costs associated with designing, financing, building, operating, writing contracts and other documents related to a project, monitoring and enforcing the concessionaire contract (see Edwards and Shaoul, 2003; Dekker, 2004). Behavioural risk in PPPs is largely caused by appropriation concern of parties who have different objectives (see Lonsdale and Watson, 2007; Johnston and Gudergan, 2007). Such risk could also be caused by the complexity of decomposing activities and integrating activities of different parties and across different phases in PPPs (see Hayllar, 2010; Blanken and Dewulf, 2010; Dekker, 2004; Gulati and Singh, 1998). The cost efficiency over the life cycle of PPPs (hence achieving VFM) largely depends on the private partners’ behaviour

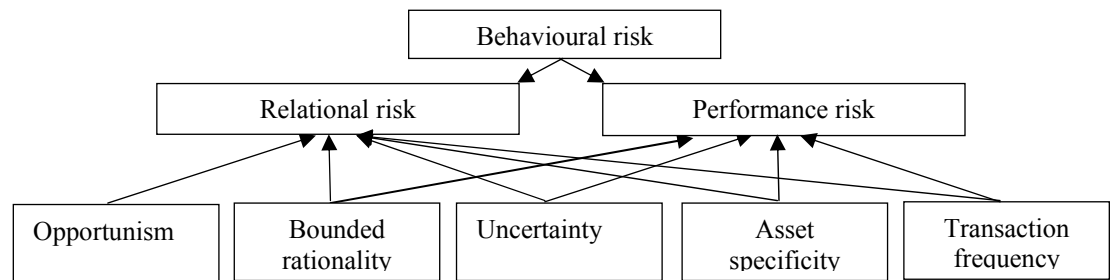
emanating from their expertise, knowledge, economies of scale, competitive efficiency, innovativeness (see Froud, 2003; Hayllar, 2010), and the ability to deal with various uncertainties and complexities.

In principle, behavioural risk arises because of goal incongruence between the partners, which makes partners behave either opportunistically or in a way that is not in line with the objective of the organisation (PPP) (Ouchi, 1979; 1980; Williamson, 1985). Accordingly, two factors could contribute to behavioural risk in general: (1) the possibility that “people will do something the organisation does not want them to do”; and (2) the possibility that people “fail to do something that they should do” (Merchant and van der Stede, 2003, p.7). While the risk arising from the former is called ‘*relational risk*’, which is the possibility of opportunistic behaviour that could arise in the form of “shirking, cheating, distorting information, appropriating resources, and so on” (Das and Teng, 2001, p.253), the risk arising from the latter is called ‘*performance risk*’, which is the possibility that partners fail to work or neglect to work for the best interest of the partnership without being opportunistic but due to various other factors including uncertainties in the political, social, technological and economic environments, and complexity associated with decomposing and integrating activities related to the project (see Das and Teng, 2001; Langfield-Smith, 2008; Dekker, 2004; Gulati and Singh, 1998). Consequently, opportunism is the main factor that separates relational risk from performance risk (Das and Teng, 2001). Both relational and performance risk can exist across different phases in a PPP project to varying degrees depending on the nature and the extent of the effect of various contingent factors in those phases.

2. 2. Contingent factors generating behavioural risk in PPPs

Behavioural risk could be caused by five contingent factors, namely opportunism, bounded rationality, uncertainty, asset specificity, and transaction frequency (Williamson, 1985; 1991; 1996). Opportunism and bounded rationality are human characteristics and are treated as behavioural assumptions which are not transparent (Williamson, 1985; 2005; 1996). On the other hand, uncertainty, asset specificity, and transaction frequency are transaction characteristics. As shown in Figure 1, while one component of behavioural risk - relational risk - could be affected by all five contingent factors, the other component - performance risk - could be affected by all, except opportunism.

Figure 1: Contingent factors leading to behavioural risk



Opportunism of the private partner

Opportunism has been defined as “self-interest seeking with guile” which leads to ‘incomplete or distorted disclosure of information, especially to calculated efforts to mislead, distort, disguise, obfuscate or otherwise confuse’ (Williamson, 1985, p. 47-48). Humans tend to engage in behaviour that serves their own interests when they see an opportunity to do so. TCE presumes that opportunism could exist at

any time since differential trustworthiness of individuals is not transparent ex ante (Williamson, 1985). In the PPP context, opportunism of the private partner is the main factor that creates relational risk. The private partner may do things that ‘they should not do’, for example providing distorted information about their technical knowledge.³²

Bounded rationality of the public partner

Human beings are typically incapable of acquiring perfect knowledge and processing all information that would support optimisation. In general, they are unable to identify all alternatives that are available for action, and have only incomplete knowledge about the environmental variables, present and future, that will determine the consequence of their choices. Further they would be unable to make the computations required for optimal choice even if they had perfect knowledge (Simon, 1993).

The public partner in a PPP needs to select a private partner and negotiate a concessionaire contract with that partner. Before signing the contract, the public partner is expected to identify the behavioural risk associated with the partnership in order to introduce necessary rules and procedures to safeguard against those risks. Additionally, during the construction and operating phases, the public partner is expected to ensure that the private partner carries out the required work according to the concessionaire contract. However, limited cognitive ability and the resulting “bounded rationality” (Williamson, 2005, p.24) would make it difficult for the public partner to foresee all the possible relational and

³² The focus of this paper is on control by the public partner of the private partner. However, it is acknowledged that opportunism could be a motive of either partner. For instance, for political reasons, the public partner might be expedient or opportunistic in selecting a private partner, which could lead to not achieving the VFM objective.

performance risks associated with complex long-term PPPs, and cover them in the concessionaire contract. Williamson (1996, p. 614) states “economic actors do not, and cannot contemplate and contract for every contingency”, thus leaving room for behavioural risk. Imperfect information, on the one hand enables parties to a concessionaire contract to operate opportunistically by exploiting any information asymmetry (e.g., when information about the true costs or quality of supply is not available to all parties), and on the other hand makes it difficult for the parties to ‘behave efficiently’ (for example, unable to adopt new technological developments to minimise costs and improve quality) (Parker and Hartley, 2003, p. 99).

Uncertainty

Broadbent *et al.* (2008, p. 42) note that “where there is *no* possibility of placing a numerical probability on something occurring or not, the unclear future state is referred to as an uncertainty”. PPPs could be affected by uncertainties associated with project specific features such as design, construction, operations, and technology, as well as uncertainty associated with the general environment including economic, political, technological and social. These uncertainties could give rise to both relational and performance risk in PPPs. For instance, a private partner might behave opportunistically to gain personal benefits from the uncertain environment (i.e., relational risk), and/or might fail to take necessary measures to minimise or eliminate the negative impact of uncertainty on the VFM objective of the PPP (i.e., performance risk) (see Froud, 2003; Lonsdale, 2005).

Asset specificity

This refers to the absence of alternative uses for the asset except for the purpose for which it has been built (Williamson, 1985). Asset specificity could make the partners of a PPP dependent on each other due to lack of alternative uses for the

relevant assets. The dependence on the private partner due to asset specificity could lead to a “lock in” situation and transfer the power to the private partner (Lonsdale, 2005). This could give rise to both relational risk and performance risk (see Gulati and Singh, 1998). Relational risk arises when private partners opportunistically exploit their monopoly power, for instance, by charging excessively for extra services beyond the original contractual requirement, or by insisting upon an extension to the original contract (Parker and Hartley, 2003). Performance risk in this situation arises when the public partner loses the competitive pressure on the private partner to maintain high performance (see Bloomfield, 2006).

Transaction frequency

This refers to the number of repetitions of a particular transaction in a given period of time (Speklé, 2001). In the context of PPPs, transaction frequency refers to the number of PPP projects/ transactions undertaken by the same parties. If the parties have a history of long-term, repeat contracts, both relational and performance risk associated with such concessionaire contracts will be considerably low since the parties are familiar with, and understand each other relatively well. In contrast, if the private partner is unknown to the public partner, and has no history of goodwill between the parties, the possibility of both relational risk and performance risk will be high.

The five contingent factors discussed above may not exist simultaneously, and the level of their influence on behavioural risk may differ across PPPs.

2. 3. Control archetypes

Control archetypes in this paper draws on TCE and organisational theory, more specifically Ouchi's (1979; 1980) theory of organisations. Over many decades TCE has provided insights into both the organisational and management accounting literatures (for example, Johnson, 1983; Seal, 1993; Speklé, 2001; van der Meer-Kooistra and Vosselman, 2000; Dekker, 2004; Das and Teng, 2001). The aim of TCE is to identify the particular form of organisational structure that is more appropriate to execute transactions than any other form (Williamson, 1985; Speklé, 2001). Accordingly, TCE explains which control structure is the most cost efficient for a particular contractual relationship by analysing the relevant contingent factors discussed above.

TCE outlines three distinct forms of organisational structures namely market, hierarchical and hybrid, which can be used at varying degrees when different human and transaction characteristics exist. While the market form is based on the *market control archetype*, which uses free market competition as the main device of control, the hierarchical form is based on the *bureaucratic control archetype*, which involves "close personal surveillance and direction of subordinates by supervisors" (Ouchi, 1979, p. 835). The bureaucratic control archetype also includes continuous supervision, performance measurement and feedback (van der Meer-Kooistra and Vosselman, 2000; Langfield-Smith and Smith, 2003; Speklé, 2001). Moreover, authorisation has been recognised as another tool to assert control under the bureaucratic control archetype (Gulati and Singh, 1998). The hybrid form on the other hand requires specific contractual agreements based on different control archetypes including market and bureaucratic (van der Meer-Kooistra and Vosselman, 2000). TCE has, however, been criticised for not providing a comprehensive understanding of control structures in IORs (Larson, 1992; Dekker, 2004). In particular, it has often been noted that the three generic

forms are limited in their ability to explain control structures in organisations (Dekker, 2004).

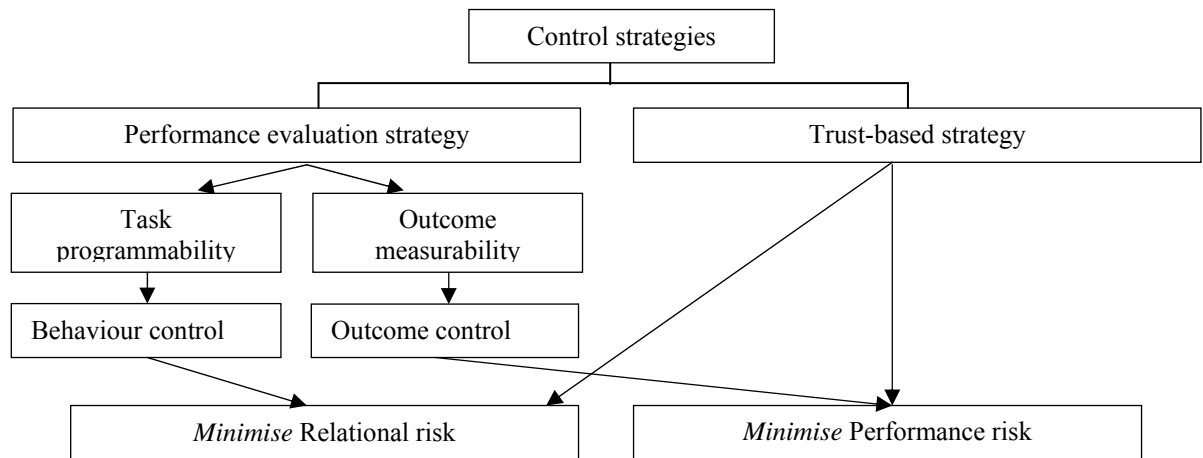
Ouchi (1979; 1980), whose views have been widely adopted in organisational theory, extends TCE by including the clan control archetype, and presents a framework that comprises three control archetypes namely market, bureaucratic and clan. The clan control archetype is based on a deep level of common agreement among parties on what constitutes proper behaviour, with a high level of commitment on the part of each individual to those socially prescribed behaviours (Ouchi, 1979). It also is derived from the social structures, which include beliefs, values, and norms, that contribute to the control of human behaviours in organisations (Ouchi, 1979, 1980). Ouchi's classification has contributed significantly to subsequent research in both management accounting and organisational theory (see for example, Eisenhardt, 1985; Dekker, 2004; Das and Teng, 2001).

Control archetypes aim to manage behavioural risk so that transaction cost can be minimised (Williamson, 1991; Gulati and Singh, 1998). However, control archetypes need specific control strategies to effectively minimise behavioural risk. Based on TCE and organisational theory, two control strategies namely performance evaluation and trust, to facilitate the three control archetypes in minimising relational risk and performance risk can be identified. Two control strategies are tools of control archetypes used to minimise behavioural risks. While control archetypes can be used to achieve various objectives (e.g., addressing accountability), two control strategies of control archetypes are specifically used to achieve the objective of minimising behavioural risk. The application of the two strategies in conjunction with the three control archetypes in the PPP context will be explained in the section that follows.

2. 4. Control strategies to minimise risks

Goal incongruent behaviour leads to behavioural risk, and therefore it is necessary that the public partner introduces appropriate measures to effectively minimise goal incongruence and associated risks. Eisenhardt (1985) identifies two strategies, namely the performance evaluation strategy (PES), which induces goal directed behaviour (i.e., minimising the effects of goal incongruence), and the trust-based strategy (TBS),³³ which changes the state of mind of the partners (i.e., minimising goal incongruence) (see Figure 2). According to Barnard (1968, p. 141) “[A PPP] can secure the efforts necessary to its existence [...] either by *objective inducement* or by *changing states of mind*”, where the former represents PES and the latter TBS. Similarly, Ouchi (1979, p.846) states that “people must be able to either trust each other [i.e., TBS] or closely monitor each other [i.e., PES] if they are to engage in cooperative enterprises”.

Figure 2: Control strategies



³³ Eisenhardt, (1985) suggests an alternative social control strategy, which is similar in meaning to trust-based strategy. Trust-based strategy is also similar in meaning to the term trust-based control mechanism identified in recent management control literature (see van der Meer-Kooistra and Vosselman, 2000; Langfield-Smith and Smith, 2003).

Performance evaluation strategy

PES refers to “the cybernetic process of monitoring and rewarding performance” (Eisenhardt, 1985, p. 135) in order to induce the desired behaviour. This strategy involves goal setting, performance measurement, monitoring, and provision of feedback. It can be applied only if performance is measurable. Performance can be measured on the basis of the behaviour of individuals as well as on the outcome of those behaviours (Ouchi, 1979; Thompson, 1967). Accordingly, PES can be applied by using two modes of control namely, *behaviour controls* and *outcome controls*. The current literature recognises these two control modes as fundamental to the existence of both traditional organisations and IORs (see Bello and Gilliland, 1997; Celly and Frazier, 1996; Hernandez-Espallardo and Arcas-Lario, 2008).

Behaviour controls can be exercised effectively when the public partner has a relatively clear understanding of the behaviour necessary to undertake specific tasks, and is also able to pre-determine the standards with respect to those behaviours (i.e., task programmability in Figure 2). Accordingly, the public partner should be able to determine relevant activities and processes ranging from “simple routine activities to more complex behaviours” (see Challagalla and Shervani, 1997, p. 160). Behaviour controls are expected to minimise relational risk as they are exercised with a clear understanding of the behaviour necessary to undertake a specific task, pre-determine the standards with respect to those behaviours, and use them to control the behaviour.

Outcome controls can be exercised when the public partner enforces performance measurement based on outcomes such as service or product quality, net profit and sales revenue. In doing so, the public partner should be able to predict the outcomes with certainty if the private partner follows pre-determined

“transformation steps” (see Ouchi, 1979, p. 843). To use outcome controls effectively, the public partner should not only be able to identify the outcomes with certainty, but also measure those outcomes relatively precisely (i.e., outcome measurability in Figure 2). Outcome controls are expected to minimise performance risk as they are supposed to be based on a clear identification of performance measurement standards. As the public partner measures performance based on outcome, a private partner is likely to react promptly to the uncertainties in the environment as best as they can to enable them to attain the performance standard, which could result in minimisation of performance risk.

The effectiveness of PES in minimising goal incongruent behaviour, however, depends on information availability. A behaviour control mode can be applied effectively only if the public partner has “the knowledge of transformation” (see Ouchi, 1979, p. 843), and the information to assess that transformation. Hence, this strategy is less effective if the public partner has limited information about the behaviour of the private partner. Similarly, the outcome control mode is possible only if the public partner has information about the level of expected and actual outcomes. Consequently, the effectiveness of PES depends on “task programmability” and “output measurability” (Ouchi, 1979, p. 843).

Trust-based strategy

TBS involves ‘changing the state of mind’ of an individual in order to address the problem of behavioural risks (relational risks and performance risks) arising from goal incongruence (Barnard, 1968, p. 141). While PES assists in minimising the impact of goal incongruence, the TBS helps in encouraging goal congruence and thereby minimising both relational risks and performance risks. When partners of a PPP have a trust-based relationship, the private partner tends not to behave opportunistically (minimise relational risks) and react to changing circumstances

by focusing on goals (minimise performance risks). van der Meer-Kooistra and Vosselman (2000) note that the higher the trust between partners of an IOR, the lower the need for ex post inspection as the problem of goal incongruence is likely to disappear when trust exists (see also Ouchi, 1979, 1980; Eisenhardt, 1985).

The notion of trust is recognised as “essential for stable social relationships” (Blau, 1964, p.99) since transactions are “possible only on the basis of far-reaching personal confidence and trust” (Eisenstadt, 1968, p.114). Rousseau *et al.* (1998) define trust as “a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another” (p. 394).

Management scholars acknowledge that trust contributes to business organisations, including PPPs, in several ways (see, for example, Rousseau *et al.*, 1998). For instance, trust facilitates cooperative behaviour (Gambetta, 1988), minimises harmful conflict, decreases transaction costs, and facilitates group formulations (Meyerson *et al.*, 1996). In particular, trust can play an important role in IORs, including PPPs, as a high degree of interaction and interdependence between parties with different interests (van der Meer-Kooistra and Vosselman, 2000; Langfield-Smith and Smith, 2003; Dekker, 2004) is necessary for their success. Unlike other organisational forms, IORs tend to experience a relatively high degree of instability (Das and Teng, 2000), partly because of the possibility of the lack of cooperation between parties. Trust is recognised as the key for the development of cooperation in IORs (Das and Teng, 1998; Ring and van de Ven, 1994).

Sako (1992) identifies three types of trust, namely contractual trust, competence trust and goodwill trust, all of which are directly applicable to PPPs. Contractual trust is based on honesty and “keeping your word” (van der Meer-Kooistra and

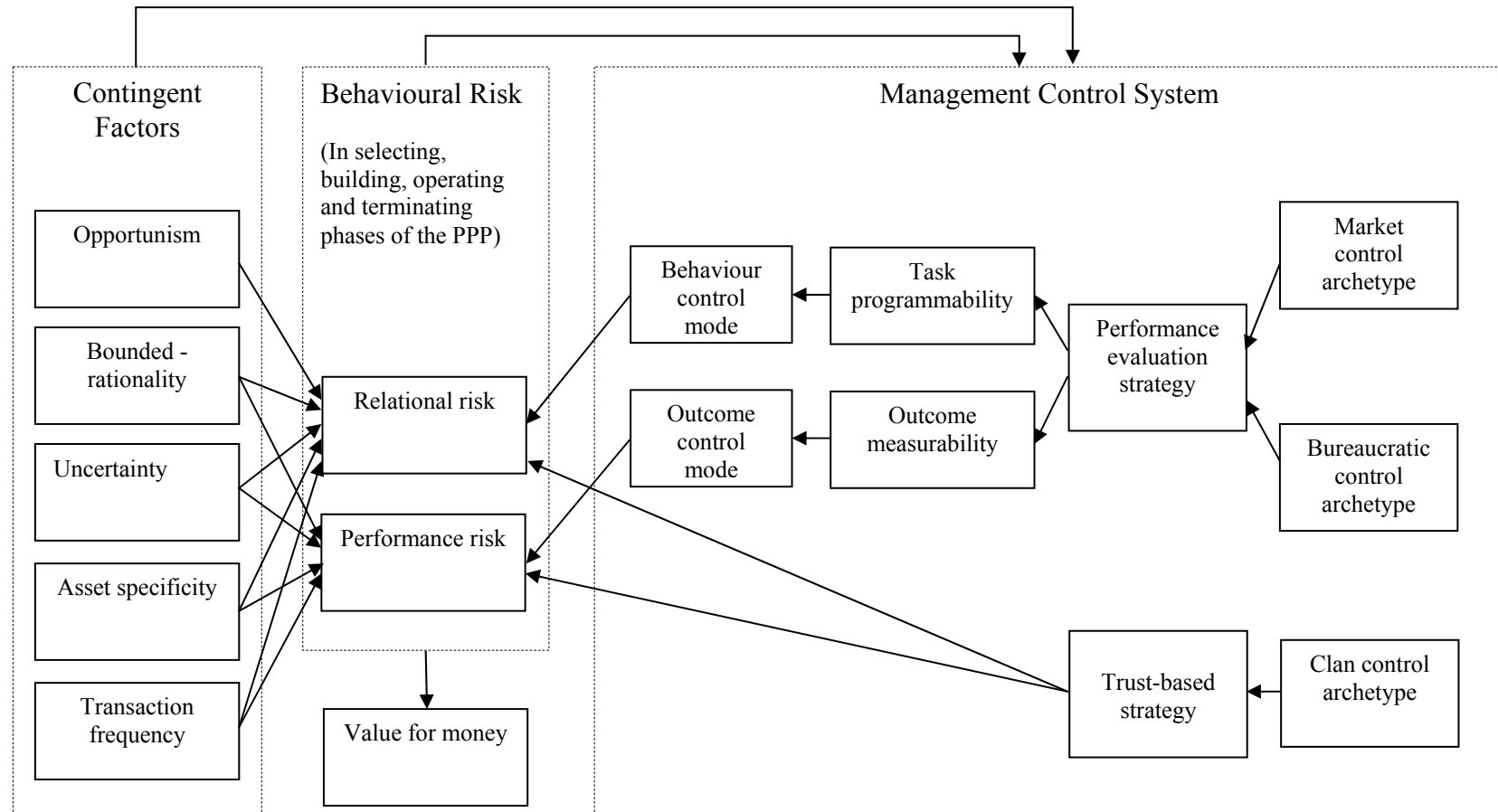
Vosselman, 2000, p.57). When contractual trust exists, one party expects the other party to fully honour the conditions in the oral or written agreement. Contractual trust seems to be high when parties rely on an oral agreement, which cannot be enforced by legal sanctions. Competence trust is based on the expectation that the partner has the competence (for example, technical and management) required to carry out the transaction (Vélez *et al.*, 2008). According to Das and Teng (2001), competence trust is based on the partners' competence derived from resources such as financial capital, human capital, physical properties, market power, and technology. Goodwill trust exists when parties expect commitment to each other (van der Meer-Kooistra and Vosselman, 2000) based on “good faith”, “good intention” and “integrity” (Das and Teng, 2001, p. 256). Commitment is “readiness” to work more towards a mutual objective than what is expected in the concessionaire contract (Das and Teng, 2001, p. 258). Das and Teng (2001) and Vélez *et al.* (2008) suggest that the main cause for goodwill trust is the partners' reputation for fair dealings. These three types of trust enable addressing behavioural risks as they promote goal congruent behaviours. Additionally, if information is available to allow the PES to be adopted, the need for TBS will be minimal. Likewise, if the level of trust between the public and the private partners is high, the need to adopt costly PES will be low.

Based on both TCE and organisational theory, this paper develops a framework to analyse the use of MCS in PPPs highlighting the possibility of using three control archetypes, namely market, bureaucratic and clan in conjunction with two control strategies in order to minimise behavioural risk affecting their VFM objective. As depicted in Figure 3, the degree of behavioural risk is caused by the five contingent factors, which in turn would determine the MCS, adopted by the public partner of a PPP. Since behavioural risk associated with different phases of a PPP varies, the public partner is likely to use control archetypes and control strategies

in different combinations across those phases. As such, the following proposition is developed.

Proposition: *The public partner of a PPP should use different combinations of control archetypes in conjunction with control strategies at different phases of the PPP in order to minimise associated behavioural risk.*

Figure 3: An analytical framework to examine MCS in PPPs



3. THE USE OF MANAGEMENT CONTROLS IN PPPS

The MSC used by the public partner of a PPP to manage behavioural risk throughout the life cycle of the PPP project could include three types of control archetypes (i.e., market, bureaucratic and clan) and two control strategies (i.e., PES and TBS). The nature of the control system (for example, the mix of control archetypes and control strategies) as well as the importance placed on each control archetype and control strategy across different phases of a PPP project would be determined by the potential behavioural risk associated with those phases, which in turn would be dependent on the five contingent factors identified earlier.

3. 1. The market control archetype

Contingent factors leading to the market control archetype

The effectiveness of market controls depends on the nature and the extent of contingent factors pertaining to the situation to be controlled. Market control is more appropriate for transactions related to non-specific assets (Williamson, 1979). When the asset is non-specific, it is available to a large number of alternative users in the free market. As the asset specificity increases, market controls become less effective, leaving room for opportunism for parties to the transaction. Market controls can also be exercised irrespective of the level of uncertainty (Speklé, 2001; Sartorius and Kirsten, 2005) and the frequency of transactions with the other party. For instance, if the asset is non-specific, uncertainty becomes less relevant as a contingent factor, since parties can switch easily in order to avoid uncertainty. Further, as many parties can provide non-specific assets in the market, frequency of transactions also becomes irrelevant. Hence, the market control archetype could be used when transaction frequency is high (van der Meer-Kooistra and Vosselman, 2000) as

well as low (Sartorius and Kirsten, 2005). Table 1 shows the links between market control archetype and the five contingent factors.

The market control archetype with the performance evaluation strategy to minimise risks

Free market works as an invisible hand to safeguard parties from opportunism by providing them with the opportunity to switch to alternatives at a low cost (Caglio and Ditillo, 2008; van der Meer-Kooistra and Vosselman, 2000). In PPPs, when the selection is made based on competitive bids, the private partner has only limited room for opportunism and hence the relational risk associated with the selecting phase is minimal. The need for the PES to minimise relational risk is also low.

While relational risk at the selecting phase is likely to be low when using market controls, performance risk during the selecting phase may still exist notwithstanding market forces. Performance risk is mainly caused by uncertainties, for instance, unpredictable changes in government policies, political environment, technological environment and social environment (Partnership Victoria, 2001). Such uncertainties could affect the selecting phase, particularly if the relevant processes take a considerable length of time. When negotiations take place over a lengthy period, failure to consider uncertainties in the external environment during that period could result in the submission of proposals that are not realistic, leading to performance risk.

Table 1: Control archetypes under contingent factors

Control archetype	Contingent factors										Bounded rationality ³⁵
	Asset specificity			Transaction frequency			Uncertainty			Opportunism ³⁴	
	<i>Low</i>	<i>Medium</i>	<i>High</i>	<i>Low</i>	<i>Medium</i>	<i>High</i>	<i>Low</i>	<i>Medium</i>	<i>High</i>		
Market	√			√	√	√	√	√	√	√	√
Bureaucratic		√	√	√	√			√	√	√	√
Clan			√	√					√	√	√

³⁴ Opportunism exists at any time since differential trustworthiness of individuals is not transparent and exist equally under each control archetype (Williamson, 1985)

³⁵ As an inherent human characteristic, bounded rationality exists under each control archetype equally (Williamson, 2005, 1996)

The public partner would be able to exert some degree of control over the selecting phase to minimise performance risk through the PES based on outcome by setting precise goals and outcomes in order to evaluate the private partner's proposal. These outcomes may include financial model/public sector comparator³⁶ and governments' budgets, which can be considered as benchmarks for the project. The outcome control-based PES under the market control archetype would encourage the private partner to react to uncertainties and come up with a proposal that satisfies the objectives of the partnership, thereby reducing performance risk.

It is also possible for the public partner to use the market control archetype in the other three phases of the PPP (i.e., building, operating and terminating). The public partner may also call for bids during the building and operating phases of a PPP project, either to estimate the potential demand for the service on the completion of the project or to find a new private partner on the maturity of the first agreement period (English and Baxter, 2010). The use of market control during the building and operating phases increases cost efficiency in two ways. First, calling for bids could discipline the private partner who may fear of losing the next contract. Second, it provides current information so that the next contract can be prepared more accurately (English and Baxter, 2010). In the terminating phase, the public partner can also call for bids for the project to further extend the concessionaire contract with a new value, select a new private party, or sell the facilities.

While the market control archetype may be applied over all four phases of the PPP, it is more commonly used in the selecting phase. Therefore, the discussion of the market control archetype in this paper is mainly focused on the selecting phase.

³⁶ Public sector comparator is a financial model that represents the total cost of the proposed PPP project if it is entirely undertaken by the government.

Nevertheless, the explanation for using the market control archetype and the two control strategies in the other phases would be similar.

3. 2. The bureaucratic control archetype

Although it is argued that the cost efficiency achieved through market control is best aligned with the VFM objective of PPPs (Parker and Hartley, 2003), it is not possible to use market controls for all transactions related to PPPs. As the nature of contingent factors changes (for example, increase in asset specificity), the market control archetype may not be adequate to manage the resulting behavioural risk (Ouchi, 1979, 1980; Williamson, 1985; van der Meer-Kooistra and Vosselman, 2000).

Contingent factors leading to the bureaucratic control archetype

Although market control is regarded as the optimum control archetype, the nature of contingent factors may make it irrelevant or less effective compared to other control archetypes. For instance, when asset specificity is high, the public partner cannot rely on external markets. In 1996, the Department for Constitutional Affairs (DCA) in the UK initiated a call for bids for a PPP project to develop national information technology (IT) systems and received only three responses. At the final stage of bidding, two bidders withdrew their proposals due to the specificity of the IT systems. This increased the pre-contractual power of the remaining bidder who demanded to change the bid price from £146 million to £184 million (Lonsdale, 2005).

The market control archetype is also inappropriate when the level of market uncertainty is high enough to incur a significant amount of costs in changing to

alternatives (van der Meer-Kooistra and Vosselman, 2000; Speklé, 2001; Langfield-Smith and Smith, 2003; Sartorius and Kirsten, 2005). Referring to the previous example, the DCA decided to continue with the remaining bidder since uncertainty in the IT environment was changing rapidly, creating additional behavioural risk in a new bidding process (cited in Lonsdale, 2005). Further, the existing literature suggests that the level of frequency of a transaction in relation to an asset that is regarded as highly specific could generate behavioural risk when using market controls (van der Meer-Kooistra and Vosselman, 2000; Langfield-Smith and Smith, 2003; Sartorius and Kirsten, 2005). Table 1 shows the links between the bureaucratic control archetype and the five contingent factors.

The bureaucratic control archetype with the performance evaluation strategy to minimise risks

PES is appropriate in minimising behavioural risk when adopting the bureaucratic control archetype. According to Moll and Humphrey (2007, p.310), as part of bureaucratic controls, PPPs are subject to “rigorous performance evaluation” in order to ensure that behavioural risk is minimal and the desired performance level is achieved. The PES in conjunction with bureaucratic controls could be based on both behaviour and outcome controls, and could minimise both relational and performance risks. In doing so, the public partner may use both quantitative information (in the form of budgets, standard costs, and other cost related information) and qualitative information (such as dead-lines, completion dates, and quality measures).

Identification of key performance indicators associated with behaviour and outcomes is vital when employing the PES. According to the HM Treasury Task Force (undated) in the UK, the criteria for performance indicators must be based on the potential risk areas or events (Moll and Humphrey, 2007). National Savings

and Investments in the UK had identified 42 key performance indicators in its PPP concessionaire contract with Siemens Business Service (Lonsdale, 2005). These performance indicators represent both outcome and behaviour-based measures.

The public partner could use the bureaucratic control archetype in conjunction with the PES in all four phases of PPPs. At *the selection phase*, the public partner could follow a rigorous bureaucratic control procedure as part of the PES in selecting a private partner. Unlike the market control archetype which focuses mainly on the lowest bid, the behaviour control-based PES under the bureaucratic control archetype may include checking the degree of the private partner's compliance with government requirements, lengthy negotiations, audit procedures, monitoring by various committees, and detailed and rigid concessionaire contracts. Such procedures help to ensure that the private partner to be selected has less room for opportunism leading to relational risks. For example, referring to Ireland's first PPP school projects, Reeves and Ryan (2007, p. 333) note that 'the bids were not solely judged on contract price; indeed, the lowest bid was rejected on the basis of inferior design'.

Performance risk in the selecting phase is also minimised by using the outcome control-based PES in conjunction with the bureaucratic control archetype. The public partner may use rigorous and lengthy evaluations based on outcomes (for example, financial model/public sector comparator and technical specifications) as a part of the PES. In contrast to the market control archetype, the application of the bureaucratic control archetype in the selecting phase, with the PES based on both outcome and behaviour controls, is likely to take a longer period of time. For example, as Grimsey and Lewis (2002) point out, the public partner in a water treatment facility PPP project in Scotland took two years to carry out the procurement process before entering into the concessionaire contract.

The public partner could also employ the bureaucratic control archetype over the *building and operating* phases of a PPP. Compared to the selecting phase, the application of bureaucratic control archetype in building and operating phases is likely to be based more on the concessionaire contract of the PPP. A PPP contract would typically specify rules, procedures and directions pertaining to the project (Partnership Victoria, 2001). It would also include information regarding reporting structure, payment mechanisms, performance evaluation, dispute resolution, and termination and renewal of the concessionaire contract.

As shown in Figure 4, which depicts the PES under different levels of relational and performance risk, a public partner who perceives a high level of relational risk at the building and operating phases may decide to use the PES based on both behaviour controls and outcome controls. For instance, the public partner may precisely define the rules and procedures that the private partner is expected to adhere to, and monitor and evaluate their behaviour closely in order to address relational risk. The PES based on the behaviour control mode alone does not ensure that performance risk associated with the building and operating phases are minimised effectively. According to Eisenhardt (1985, p.136) “poor outcomes can occur despite the good efforts”. For example, the private partner of the PPP arrangement with the National Health Service (NHS) Trust in the UK was found to have installed a cheaper hospital lift causing higher maintenance costs and operating problems in the long-term (Zheng *et al.*, 2008). The reason for this situation was that, although the NHS precisely specified the process related to the installation of the lift, it failed to emphasise the desired outcomes (for example, durability, costs and user-friendliness) of the lift.

Additionally, there are certain activities in the PPP process where the behaviour control-based PES strategy cannot be applied effectively, for instance where the relationship between processes and outcome cannot be precisely identified. In such

situations, the public partner may consider evaluating PPPs using the outcome control-based PES rather than focusing on the behaviour control-based PES in order to minimise performance risk. However, here the public partner should be able to (a) clearly identify the requirements of the PPP project at different phases; (b) convert them into measurable outcomes (Moll and Humphrey, 2007), and (c) evaluate the performance of the private partner based on these outcomes (for example, meeting deadlines and achieving service quality standards)³⁷. Moll and Humphrey (2007) note that the focus of performance evaluation on outcomes such as delivery of quality services on a timely basis could help reduce risk (performance risk) associated with PPPs.

A public partner can also use the PES with the bureaucratic control archetype in *the terminating phase* to minimise behavioural risk and “ensure continuation of efficient project operation and quality service provision beyond the concession period” (Zhang, 2005, p. 79). As part of the behaviour control-based PES to minimise relational risk in this phase, a public partner may specify procedures in the concessionaire contract to be followed by the private party, such as training the staff of the public partner, transferring assets and facilities, making payments related to compensation or penalty and withholding payments. Performance risk can also be minimised in the terminating phase by using measures related to outcome control-based PES, such as standards of project facilities, balances of debt and other liabilities, value of assets of previous similar projects and other benchmarking measures (see Pollock and Price, 2008; Zhang, 2005).

In relation to all phases, if the public partner has a clear understanding of the process or the behaviour needed to achieve the VFM objective (i.e., task

³⁷ Most long-term projects undertaken by PPPs would not be high on task programmability and outcome measurability and this is likely to affect the effective use of performance evaluation strategy based on behaviour controls and outcome controls.

programmability), and perceives a high level of relational risk arising from opportunism, the behaviour control-based PES would be more appropriate than the outcome control-based PES to reduce such risks. On the other hand, if the public partner can precisely measure the outcomes (i.e., outcome measurability), and perceives a high level of performance risk from all other factors except opportunism and low level of relational risk, the outcome control-based PES would be more appropriate to reduce the associated risks. Further, if both task programmability and output measurability are high and both relational and performance risks are also high, the public partner may use the PES based on both outcome and behaviour controls (Ouchi, 1979; Eisenhardt, 1985). Moreover, if both relational risk and performance risk are low, the public partner is indifferent and may use the PES on the basis of either outcome or behaviour controls. Figure 4 summarises the relationships discussed above.

Figure 4: Performance evaluation strategy under different levels of relational and performance risks

		Relational Risk	
		High	Low
Performance Risk	High	PES based on outcome control and behaviour control	PES based on outcome control
	Low	PES based on behaviour control	PES based on outcome control or behaviour control

Adapted from Ouchi (1979) and Das and Teng (2001).

3. 3. The clan control archetype

Contingent factors leading to the clan control archetype

In PPPs, there could be transactions, activities and behaviours that cannot be controlled effectively by either market or bureaucratic control archetypes. The bureaucratic control archetype, for instance, is not effective when there is a high level of behavioural risk compounded by the five contingent factors (Williamson, 1975). The concessionaire contract, which provides the basis for the bureaucratic control archetype, has limited use under high levels of uncertainty and opportunism. When there are high levels of uncertainty, PPPs may fail to comply with pre-determined plans, time schedules, activities and budgets, which are considered as important components of the bureaucratic control archetype (see, for example, van Merrewijk *et al.*, 2008). Additionally, due to the complexity associated with long-term PPP contracts, public partners may find it difficult to specify measurable performance (Bloomfield, 2006; Shaoul *et al.*, 2008). Consequently, the bureaucratic control archetype in conjunction with the PES becomes less effective when behavioural risk is high due to the influence of a number of contingent factors. Table 1 shows the links between the clan control archetype and the five contingent factors.

When market and bureaucratic control archetypes provide limited assistance in addressing the risks caused by various contingent factors, PPPs necessarily turn to clan controls. The literature on IORs suggests that when asset specificity and uncertainty are high, the risk arising from human behaviour can be successfully managed by the clan (social) control archetype (Speklé, 2001; van der Meer-Kooistra and Vosselman, 2000; Langfield-Smith and Smith, 2003). Ouchi (1979) notes that the need for control archetypes such as clan control arises as a result of the ambiguity of tasks emanating from low task programmability and output

measurability. Das and Teng (2001) find the clan control archetype suitable for organisations where parties have to work closely together, such as in IORs. Broadbent *et al.* (2003) and Deakin *et al.* (1997) also acknowledge the need for social controls such as clan controls in IORs as details in contracts are often not sufficient to control ongoing long-term relationships, as they do not usually cover the social aspects of the partnerships.

The clan control archetype with trust-based strategy to minimise risks

Trust is recognised as the principal control strategy in the clan control archetype (Adler, 2001; Ring and van de Ven, 1992). It emerges from common systems of values and norms developed by the clan control archetype (Sako, 1992; Ouchi, 1980). According to van der Meer-Kooistra and Vosselman (2000, p.57), parties to a transaction can develop trust by inculcating moral standards based on “socialization and education”. The literature suggests that the public partner in a PPP often exercises the clan control archetype by applying the TBS (see Broadbent *et al.*, 2003; Edelenbos and Klijn, 2007; English and Baxter, 2010; Zheng *et al.*, 2008). With the TBS, both parties would have a high commitment to the partnership leading to a reduction in relational and performance risks. Partners who have trust-based relationships are likely to work in the best interest of the PPP, even in the absence of a PES based on behaviour or outcome.

In the *selecting phase*, in order to reduce both relational and performance risks, a public partner may prefer to select a private partner who can be trusted or with whom trust relationship can be developed, irrespective of the value of the bid. This would largely depend on whether a particular private partner has a reputation for “fair trading” with the public partner (i.e., goodwill trust) (Parker and Hartley, 2003, p. 101), and has “prior history” of working co-operatively, and also has a

“matching culture” (Dekker, 2004, p. 45). For example, a private partner with a clear understanding of the values and norms of the public sector (due to previous experience) may show a high level of commitment to the PPP and reduce the need for costly surveillance. Current literature suggests that trust has recently become more important than bid value for governments when selecting a private partner (see English and Baxter, 2010).

In the *building and operating phases* the TBS is also expected to minimise both relational and performance risks. For example, in the building phase, behavioural risk may arise due to the fact that the role of professional and civil servants in PPP projects involves “very complex operations, paradoxes, uncertainties, influence and ambiguities” (van Marrewijk *et al.*, 2008, p.597). It may also be difficult to define output [or behaviour] specifications for many “grey areas” in the building phase (Zheng *et al.*, 2008, p. 49). Zheng *et al.* (2008) cite two examples of the actions that can be taken by the public partner to develop trust between parties in the building and operating phases. First, the public partner may introduce different practices/ways that help to develop trust between parties in these phases. For example, parties may organise off-site “away-day” activities in order to develop and shape the trust relationships (Zheng *et al.*, 2008, p. 48). Second, the public partner may decide not to exercise the rights according to the concessionaire contract, if that involves imposing a penalty for damages caused by the private partner. In addition to such actions, parties may agree to prepare a “flexible” concessionaire contract, thereby developing trust. For example, according to Broadbent *et al.* (2003) the UK government allowed the private partner to decide 50 per cent of facility indicators of a hospital maintenance PPP project³⁸.

³⁸ However, it should be recognised that TBS could be problematic in certain circumstances. For example, when there is a high staff turnover experienced by the public partner, the oral agreements entered into by the previous staff, as a part of trust relationship, may not be available to the new staff.

In the *terminating phase* a public partner may use the TBS with the clan control archetype to minimise both relational and performance risks, particularly when the project is technically complex and it becomes difficult to specify certain aspects of the project, for example procedures on training the public partner's staff for technological operation, transfer of ownership of different assets and estimation of salvage value of facilities. Further, a public partner who uses TBS with the clan control archetype may work cooperatively with the private partner in the terminating phase, and further extend the concessionaire contract instead of either selecting a new private partner through costly and time consuming bureaucratic or market control archetypes or selling the facilities (see Zhang, 2005).

Although each control archetype can serve independently in minimising risks in certain situations, they can also coexist in each phase of a PPP. For example, in a situation where the market control archetype is most appropriate, the bureaucratic archetype and/or the clan archetype also can be used. Zheng *et al.* (2008) found that in the emergency service training centre PPP project in the UK, although tenders were called for and a comprehensive concessionaire contract was drawn up using bureaucratic control procedures, the government also carried out informal negotiations with the private partner based on their trust relationship.

Further, while the public partner can use different combinations of control archetypes, one control archetype may dominate throughout the partnership or during certain phases, even with the same private party. For example, even where the selection of the private partner is made using bureaucratic controls, the clan control archetype may become prominent in the operating phase as a result of the relationship developed between the public and private partners during the building phase. Finally, the effectiveness of the control system in minimising behavioural risk in PPPs would largely depend on whether an appropriate control mix is used

based on a clear assessment of the level of likely risks that would be encountered by the PPP.

Table 2 provides a summary of the characteristics of the three control archetypes within the context of PPPs.

Table 2: Characteristics of control archetypes in PPPs

	Market control archetype	Bureaucratic control archetype	Clan control archetype
Main focus	Competitive bidding	-Rules -Authority -Regulations -Procedures -Laws	-Common agreements -Beliefs -Norms -Values
Nature of the contract	-Non-detailed contract -Short term	-Detail contract -Long term	-Flexible contract -Long term
Monitoring	No specific monitoring	-Direct intervention -Personnel surveillance -Formal negotiations and meetings -Detailed reports	-Informal discussions and meetings -Non-detailed reports
Control strategy	Performance evaluation	Performance evaluation	Trust-based
Focus of control strategy - <i>selecting phase</i>	Outcome controls: -Budgets -Public sector comparator -Bids	Outcome controls: -Budgets -Public sector comparator -Bids -Technical, designing and quality specifications -Financial proposals Behaviour controls -PPP guidelines -Laws and regulations -Negotiations -Meetings -Audit procedures	Establishing trust: -History of previous contract -Popularity for fair trading, -Localness -Matching culture -Risk sharing attitude
Focus of control strategy - <i>building</i>	Outcome controls: -Budgets -Public sector comparator -bids	Outcome controls -Budgets -Performance targets/goals -Specifications as per the contract Behaviour controls -Procedures -Rules and regulations -Specified activities/tasks (constructions)	Developing trust: -Risks sharing -Informal meetings/negotiations -Cooperative working
Focus of control strategy - <i>operating phase</i>	Outcome controls: -Budgets -bids (to estimate demand for the facility or to find a new private party.	Outcome controls -Service standards -Budgets -Performance targets/goals -Specifications as per the contract Behaviour controls -Procedures -Rules and regulations -Specified activities/tasks (e.g., maintenance)	Developing trust: -Risks sharing -Informal meetings/negotiations -Cooperative working

Focus of control strategy - terminating phase	Outcome controls: -Budgets -bids (to transfer the project to another private party or to amend the concessionaire contract with new values)	Outcome controls -Specifications as per the contract including standards of project facilities, balances of debts and other Behaviour controls -Procedures, rules and regulations, specified activities/tasks related to training staff, transferring assets and facilities, making payments related to compensation or penalty and withholding payments.	Developing trust: -Risks sharing -Informal meetings/negotiations (further extend the concessionaire contract)
Feedback (incentives/penalties)	N/A	-Incentives and penalties specified in the contract -Service fees linked to outcome	-Incentives are specified -Penalties may be not applied - No service fees linked to outcome
Dispute/issues resolution	Formally, based on institutional infrastructure (e.g., contract law and intellectual property right)	Formally as per the contract	Informally by discussions

4. SUMMARY AND CONCLUDING REMARKS

While there has been an increase in the number of PPPs in both industrialised and emerging economies, the growing body of literature on PPPs suggests that a considerable number of PPPs have failed to achieve the VFM objective mainly due to their inability to manage behavioural risk. This paper develops a framework to analyse the use of MCS in managing behavioural risk associated with PPPs by drawing on TCE and organisational theory, in particular Ouchi (1979; 1980). The proposed framework shows how control archetypes (i.e., market, bureaucratic and clan controls) could be used in conjunction with control strategies (i.e., performance evaluation and trust) to manage behavioural risk (i.e., relational risk and performance risk) in PPPs. It also shows that the nature and extent of behavioural risk is contingent upon a number of factors, including bounded rationality, opportunism, uncertainty, transaction frequency and asset specificity. Further, it shows how MCS helps to achieve the VFM objective of PPPs.

The control configurations (control archetypes, control strategies and control modes) of the proposed framework are aimed at addressing the complexity of PPP arrangements resulting from certain characteristics which are different from other inter-organisational arrangements, for instance joint ventures formed between private parties. Such characteristics may include different objectives (public partner has social objectives and private partner has profit objectives), long-time span (typically more than 25 years), and the nature of services (public infrastructure). The frameworks developed to examine controls in other inter-organisational relationships are typically less complex than those developed for PPPs and concentrate on either control archetypes or control modes (e.g., Kamminga and Van der Meer-Kooistra, 2007; Johansson and Silverbo, 2011).

The discussion in this paper suggests that in order to manage behavioural risk in a PPP, the public partner should first identify the contingent factors and their relative strengths, then consider what behavioural risk the particular mix of contingent factors is likely to bring to the project under review, and finally determine an appropriate MCS.

The framework developed in this paper can be used to facilitate systematic examination of MCS in PPPs and also to design an appropriate MCS for PPPs. Further, future research may examine the proposition outlined in this paper by using the proposed framework. Future researchers may also consider using the proposed framework to analyse MCS in public or private sector organisations with any amendments deemed necessary.

REFERENCES

- Adler, P. S., 2001, 'Market, Hierarchy, and Trust: The Knowledge Economy and the Future of Capitalism', *Organization Science*, 12, 2: 215–234.
- Auditor-General of New South Wales, 2006, *The News Schools Privately Financed Project*, Auditor-General's Report Performance Audit, March, Sydney.
- Barnard, C., 1968, *The functions of the executive*, 30th anniversary ed., Harvard University Press, Cambridge.
- Bello, D.C. and Gilliland, D.I., 1997, 'The Effect of Output Controls, Process Controls, and Flexibility on Export Channel Performance', *Journal of Marketing*, 61, 1: 22–38.
- Bing, L. and Akintoye, A., 2003, 'An Overview of Public-Private Partnerships', in A. Akintoye, B. Matthias and C. Hardcastle (eds), *Public-Private Partnerships: Managing Risks and Opportunities*, Blackwell Publishing, Oxford: 3-30.
- Blanken, A. and Dewulf, G., 2010 'PPPs in Health: Static or Dynamic?', *Australian Journal of Public Administration*, 69, 1: 35-47.
- Blau, P.M., 1964, *Exchange and Power in Social Life*, John Wiley and Sons, New York.
- Bloomfield, P., 2006, 'The Challenging Business of Long-Term Public-Private Partnerships: Reflections on Local Experience', *Public Administration Review*, 66, 3: 400-411.
- Broadbent, J. and Laughlin, R., 2003, 'Control and Legitimation in Government Accountability Process: The Private Finance Initiative in the UK', *Critical Perspective of Accounting*, 14, 1-2: 23-48.
- Broadbent, J. and Laughlin, R., 2005, 'The Role of PFI in the UK Government's Modernisation Agenda,' *Financial Accountability & Management*, 21, 1: 75-97.
- Broadbent, J., Gill, J. and Laughlin, R., 2003, 'The Development of Contracting in the Context of Infrastructure Investment in the UK: The Case of the Private Finance Initiative in the National Health Service', *International Public Management Journal*, 6, 2: 173-197.

Broadbent, J., Gill, J. and Laughlin, R., 2008, 'Identifying and Controlling Risk: The Problem of Uncertainty in the Private Finance Initiative in the UK's National Health Service', *Critical Perspective on Accounting*, 19, 1: 40-78.

Caglio, A. and Ditillo, A., 2008, 'A Review and Discussion of Management Control in Inter-Firm Relationships: Achievements and Future Directions', *Accounting, Organizations and Society*, 33, 7-8: 865-898.

Celly, K.S. and Frazier, G.L., 1996, 'Outcome-based and Behaviour-based Coordination Efforts in Channel Relationships', *Journal of Marketing Research*, 33, 2: 200-210.

Challagalla, G. N. and Shervani, T. A., 1997, 'A Measurement Model of the Dimensions and Types of Output and Behavior Control: An Empirical Test in a Sales Force Context', *Journal of Business Research*, 39, 3: 159-172.

Chiles, T.H. and McMackin, J. F., 1996, 'Integrating Variable Risk Preferences Trust and Transaction Cost Economic', *Academy of Management Review*, 21, 1: 73-99.

Clifton, C. and Duffield, C. F., 2006, 'Improved PFI/PPP Service Outcomes through the Integration of Alliance Principles', *International Journal of Project Management*, 24, 7: 573-586.

Das, T. K., 2006, 'Strategic Alliance Temporalities and Partner Opportunism', *British Journal of Management*, 17, 1: 1-21.

Das, T. K. and Teng, B.S., 2001, 'Trust, Control and Risk in Strategic Alliances: An Integrated Framework', *Organizational Studies*, 22, 2: 251-283.

Das, T. K. and Teng, B.S., 2000, 'Instabilities of Strategic Alliances: An Internal Tensions Perspective', *Organization Science*, 11, 1: 77-101.

Das, T. K. and Teng, B.S., 1999, 'Managing Risks in Strategic Alliances', *Academy of Management Executive*, 13, 4: 50-62.

Das, T. K. and Teng, B.S., 1998, 'Between Trust and Control: Developing Confidence in Partner Cooperation in Alliances', *Academy of Management Review*, 23, 3: 491-512.

Das, T. K. and Teng, B.S., 1996, 'Risk Types and the Inter-Firm Alliance Structures', *Journal of Management Studies*, 33, 6: 827-843.

Deakin, S., Lane, C. and Wilkinson, F., 1997, 'Contract Law, Trust Relations and Incentives for Co-operation: A Comparative Study', in Deakin, S. and J. Michie, (eds), *Contracts, Co-operation and Competition: Studies in Economics, Management Law*. Oxford University press, Oxford: 105-139.

de Bettignies, J.E. and Ross, T.W., 2004, 'The Economics of Public-Private Partnerships', *Canadian Public Policy*, 30, 2: 135-154.

Dekker, H., 2004, 'Control of Inter-organizational Relationships: Evidence on Appropriation Concerns and Coordination Requirements', *Accounting, Organizations and Society*, 29, 1: 27-49.

Devapriya, K.A.K., 2006, 'Governance Issues in Financing of Public-Private Partnership Organizations in Network Infrastructure Industries', *International Journal of Project Management*, 24, 7: 557-565.

Edelenbos, J. and Klijn, E.H., 2007, 'Trust in Complex Decision-making Networks: Theoretical and Empirical Exploration', *Administration and Society*, 39, 1: 25-50.

Edwards, P. and Shaoul, J., 2003, 'Partnerships: for Better, for Worse?', *Accounting, Auditing and Accountability Journal*, 16, 3: 397-422.

Eisenstadt, S. N., 1968, *Max Weber on Charisma and Institution Building*, Chicago, University Press. Chicago.

Eisenhardt, K. M., 1985, 'Control: Organizational and Economic Approaches', *Management Science*, 32, 2: 134-149.

English, L. M., 2005, 'Using Public-Private Partnerships to Achieve Value for Money in the Delivery of Healthcare in Australia', *International Journal of Public Policy*, 1(1/2): 91-121.

English, L. and Baxter, J., 2010, 'The Changing Nature of Contracting and Trust in Public-Private Partnerships: The Case of Victorian PPP Prisons', *ABACUS*, 46, 3: 289-319.

English, L. M. and Guthrie J., 2003, 'Driving Privately Financed Projects in Australia: What Makes Them Tick?', *Accounting, Auditing & Accountability Journal*, 16, 3: 493-511.

English, L. M. and Skellern, M., 2005, 'Public Private Partnerships and Public Sector Management Reform: A Comparative Perspective', *International Journal of Public Policy*, 1, 1/2: 1-21.

Froud, J., 2003, 'The Private Finance Initiatives: Risk, Uncertainty and the State', *Accounting, Organizations and Society*, 28, 6: 567-589.

Gallimore, P., Williams, W. and Woodward, D., 1997, 'Perceptions of Risk in the Private Finance Initiative', *Journal of Property Finance*, 8, 2: 164-176.

Gambetta, D., 1988, 'Can We Trust?', in D. Gambetta (eds), *Trust: Making and Breaking Cooperative Relations*, Blackwell, New York: 213-237.

Greve, C., 2003, When Public-Private Partnerships Fail: The Extreme Case of the NPM-inspired Local Government of Farum in Denmark, paper for the EGPA-conference, 3-6 September, Oerias, Portugal.

Grimsey, D. and Lewis, M.K., 2002, 'Evaluating the Risks of Public Private Partnerships for Infrastructure Projects', *International Journal of Project Management*, 20, 2:107-118.

Gulati, R. and Singh, H., 1998, 'The Architecture of Cooperation: Managing Coordination Costs and Appropriation Concerns in Strategic Alliances', *Administrative Science Quarterly*, 43, 4: 781-814.

Hall, J., 1998, 'Private Opportunity, public benefit?', *Fiscal Studies*, 19, 2: 121-140.

Hayllar, M.R., 2010, 'Public-Private Partnerships in Hong Kong: Good Governance - The Essential Missing Ingredient?', *Australian Journal of Public Administration*, 69, 1: 99-119.

Hernandez-Espallard, M. and Arcas-Lario, N., 2008, 'Outcome and Behaviour Control in Distribution Partnerships: The Role of Trust and Dependence and Their Effects on Performance', *The International Review of Retail, Distribution and Consumer Research*, 18, 1: 63-86.

Hood, J. and McGarvey, N., 2002, 'Managing the Risks of Public-Private Partnerships in Scottish Local Government', *Policy Studies*, 23, 1: 21-35.

Jin, X-H. and Doloi, H., 2008, 'Interpreting Risk Allocation Mechanism in Public Private Partnership Projects: An Empirical Study in a Transaction Cost Economics Perspective', *Management and Economics*, 26, 7: 707-721.

Johansson, T. and Siverbo, S., 2011, 'Governing Cooperation Hazards of Outsourced Municipal Low Contractibility Transactions: An Exploratory Configuration Approach', *Management Accounting Research*, forthcoming.

Johnson, H. T., 1983, 'The Search for Gains in Markets and Firms: A Review of the Historical Emergence of Management Accounting Systems', *Accounting, Organizations and Society*, 8, 2-3: 139-146.

Johnston, J. and Gudergan, S.P., 2007, 'Governance of Public—Private Partnerships: Lessons Learnt from an Australian Case?', *International Review of Administrative Sciences*, 73, 4: 569-582

Jones, O., 2005, 'Managing Public-Private Partners: The Enactment of a New Business Venture', *Technovation*, 25: 587-597.

Kale, P., Singh, H. and Perlmutter, H., 2000, 'Learning and Protection of Proprietary Assets in Strategic Alliances: Building Relational Capital', *Strategic Management Journal*, 21, 3: 217-237.

Kamminga, P.E. and Van der Meer-Kooistra, J., 2007, 'Management Control Patterns in Joint Venture Relationships: A Model and an Exploratory Study', *Accounting, Organizations & Society*, 32, 1/2:135-158.

Koppenjan, J.F.M., 2005, 'The Formation of Public—Private Partnerships: Lessons from Nine Transport Infrastructure Projects in the Netherlands', *Public Administration*, 83, 1: 135-157.

Kunreuther, H., 2001, 'Incentives for Mitigation Investment and More Effective Risk Management: The Need for Public-Private Partnerships', *Journal of Hazardous Materials*, 86, 1-3: 171-185.

Lane, J-E., 2000, *New public management*, Routledge, London.

Langfield-Smith, K. and Smith, D., 2003, 'Management Control Systems and Trust in Outsourcing Relationships', *Management Accounting Research*, 14, 3: 281-307.

Langfield-Smith, K., 2008, 'The Relations between Transactional Characteristics, Trust and Risk in the Start-up Phase of a Collaborative Alliance', *Management Accounting Research*, 19, 4: 344-364.

Larson, A., 1992, 'Network Dyads in Entrepreneurial Settings: A Study of the Governance of Exchange Relationships', *Administrative Science Quarterly*, 37, 1: 76-104.

Lonsdale, C. and Watson, G., 2007, 'Managing Contracts under the UK's Private Finance Initiatives: Evidence from the National Health Service', *Policy & Politics*, 35, 4: 683-700.

Lonsdale, C., 2005, 'Post-contractual Lock-in and the UK Private Finance Initiative (PFI): The Cases of National Savings and Investments and the Lord Chancellor's Department', *Public Administration*, 83, 1: 67-88.

McQuaid, R. W. and Scherrer, W., 2010, 'Changing Reasons for Public-Private Partnerships (PPPs)', *Public Money & Management*, 30, 1: 27-34.

Merchant, K. A. and van der Stede, W., 2003, *Management Control Systems: Performance Measurement, Evaluation and Incentives*, Prentice Hall, London.

Meyerson, D., Weick, K. E. and Kramer, H. M., 1996, 'Swift Trust and Temporary Groups', in R. M. Kramer and T. R. Tyler (eds), *Trust in organizations: Frontiers of theory and research*, Sage, Thousand Oaks, CA: 166-195.

Moll, J. and Humphrey, C., 2007, 'Management Accounting and Accounts in the Public Sector: the Challenges presented by Public-Private Partnerships', in T. Hopper, D. Northcott and R. Scapens (eds), *Issues in Management Accounting*. Prentice Hall, London: 297-316.

Otley, D.T. and Berry A.J., 1994, 'Case Study Research in Management Accounting and Control', *Management Accounting Research*, 5, 1: 45-65.

Ouchi, W. G., 1979, 'A Conceptual Framework for the Design of Organizational Control Mechanisms', *Management Science*, 25, 9: 833-848.

Ouchi, W. G., 1980, 'Markets, Bureaucracies, and Clans', *Administrative Science Quarterly*, 25, 1: 129-141.

Parker, D. and Hartley, K., 2003, 'Transaction Costs, Relational Contracting and Public Private Partnerships: A Case Study of UK Defence', *Journal of Purchasing and Supply Management*, 9, 3: 97-108.

Partnerships Victoria, 2001, Guidance material, Available at:
www.dtf.vic.gov.au/dtf/RWP323.nsf/0/ffa08f5c9122d76b4a2569e30022155b,
Accessed on 4 October 2008.

Pollitt, M.G., 2005, 'Learning from the UK Private Finance Initiatives Experience', in: G. Hodge and C. Greve (eds), *The Challenge of Public-Private Partnerships: Learning from International Experience*, Edward Elgar, Cheltenham: 207-230.

Pollitt, M. G., 2002, 'The Declining Role of the State in Infrastructure Investment in the UK', in S. V. Berg, M. G. Pollitt and M. Tsuji (eds), *Private Initiatives in Infrastructure: Priorities, Incentives and Performance*, Edward Elgar, Northampton: 67-100.

Pollock, A.M. and Price D., 2008, 'Has the NAO Audited Risk Transfer in Operational Private Finance Initiative Schemes?', *Public Money & Management*, 28, 3: 173-178.

Reeves, E. and Ryan, J., 2007, 'Piloting Public-Private Partnerships: Expensive Lessons from Ireland's Schools' Sector', *Public Money and Management*, 27, 5: 331-338.

Ring, P. S. and van de Ven, A. H., 1994, 'Developmental Processes of Cooperative Inter-Organizational Relationships', *Academy of Management Review*, 19, 1: 90-118.

Ring, P. S. and van de Van, A. H., 1992, 'Structuring Cooperative Relationships Between Organizations', *Strategic Management Journal*, 13, 7: 483-98.

Rousseau, D. M., Sitkin, S. B., Burt, R. S. and Camerer, C., 1998, 'Not So Different After All: A Cross-Discipline View of Trust', *Academy of Management Review*, 23, 3: 393-404.

Sako, M., 1992, *Price, Quality and Trust: Inter-Firm Relationships in Britain and Japan*, Cambridge University Press, Cambridge.

Sartorius, K., and Kirsten, J., 2005, 'The Boundaries of the Firm: Why do Sugar Producers Outsource Sugarcane Production?', *Management Accounting Research*, 16, 1: 81-99.

Seal, W. B., 1993, *Accounting, Management Control and Business Organization*, Aldershot, Avebury.

Shaoul, J., 2005, 'The Private Finance Initiative or the Public Funding of Private Profit', in G. Hodge and C. Greve (eds), *The Challenge of Public-Private Partnerships: Learning from International Experience*, Edward Elgar, Cheltenham: 190-206.

Shaoul, J., Stafford, A., Stapleton, P. and McDonald, P., 2008, *Financial Black Holes: Accounting for Privately Financed Roads in the UK*, Institute of Chartered Accountants in Scotland (ICAS), Edinburgh.

Shen, LY., Andrew, P. and Deng, X.P., 2006, 'Role of Public Private Partnerships to Manage Risks in Public Sector Projects in Hong Kong', *International Journal of Project management*, 24, 7: 587-594.

Simon, H. A., 1993, 'Altruism and Economics', *American Economic Review*, 83, 2: 156-161.

Smith, K.G., Carroll, S.J. and Ashford, S. J., 1995, 'Intra- and Inter-organizational Cooperation: Toward a Research Agenda', *Academy of Management Journal*, 38, 1: 7-23.

Smyth, H., and Edkins, A., 2007, 'Relationship Management in the Management of PFI/PPP Projects in the UK', *International Journal of Project Management*, 25, 3: 232-240.

Şngün, A. E. and Wasti, S.N., 2007, 'Trust, Control, and Risk: A Test of Das and Teng's Conceptual Framework for Pharmaceutical Buyer-Supplier Relationships', *Group and Organization Management*, 32,4: 430-464.

Speklé, R.F., 2001, 'Explaining Management Control Structure Variety: A Transaction Cost Economics Perspective', *Accounting, Organizations and Society*, 26, 4-5: 419-441.

Thompson, J. D., 1967, *Organizations in Action*, McGraw-Hill, New York.

van der Meer-Kooistra, J. and Vosselman, E.J.G., 2000, 'Management Control of Inter-Firm Transactional Relationships: The Case of Industrial Renovation and Maintenance', *Accounting, Organizations and Society*, 25, 1: 51-77.

van Marrewijk, A., Clegg, S.R., Pitsis, T.S. and Veenswijk, M., 2008, 'Managing Public-Private Megaprojects: Paradoxes, Complexity, and Project Design', *International Journal of Project Management*, 26, 6: 591-600.

Vélez, M.L., Sánchez, J.M. and Álvarez-Dardet, C., 2008, 'Management Control Systems as Inter-Organizational Trust Builders in Evolving Relationships: Evidence from a Longitudinal Case Study', *Accounting, Organizations and Society*, 33, 7-8: 968-994.

Williamson, O.E., 1979, 'Transaction Cost Economics: The Governance of Contractual Relations', *Journal of Law and Economics*, 22, 2: 233-261.

Williamson, O.E., 1975, *Markets and Hierarchies: Analysis and Antitrust Implications*, Free Press, New York.

Williamson, O.E., 1985, *The economic institutions of capitalism*, Free Press, New York.

Williamson, O.E., 1991, 'Comparative Economic Organization: The Analysis of Discrete Structural Alternatives', *Administrative Science Quarterly*, 36, 2: 269–296.

Williamson, O.E., 1996, *The mechanisms of governance*, Oxford University Press, New York.

Williamson, O.E., 2005, 'Transaction Cost Economics and Business Administration', *Scandinavian Journal of Management*, 21, 1: 19-40.

World Bank, 2008, Available at:

<http://web.worldbank.org/WBSITE/EXTERNAL/WBI/WBIPROGRAMS/PPPILP/0,,contentMDK:20271509~menuPK:461109~pagePK:64156158~piPK:64152884~theSitePK:461102,00.html>, Accessed on 12 December 2008.

Zheng, J., Roehrich, J. K. and Lewis, A. M., 2008, 'The Dynamics of Contractual and Relational Governance: Evidence from Long-term Public-Private Procurement Arrangements', *Journal of Public Management*, 14, 1: 43-54.

Zhang, X., 2005, 'Paving the Way for Public-Private Partnerships in Infrastructure Development', *Journal of Construction Engineering & Management*, 131, 1: 71-80.

\

CHAPTER FOUR

(PAPER 3)

MANAGEMENT CONTROLS FOR MINIMISING RISK IN PUBLIC-PRIVATE PARTNERSHIPS IN A DEVELOPING COUNTRY: EVIDENCE FROM SRI LANKA

ABSTRACT

Effective use of management controls for minimising risks associated with Public–Private Partnerships (PPPs) is particularly important when it is difficult to transfer risk to the private partners. In the case of developing countries, various factors limit the ability of the public partners to transfer risk to the private partners. Focusing on a power PPP project in a developing country namely Sri Lanka, this study examines management controls used by the public partner to minimise the risk that could be caused by the private partner’s behaviour. The study finds that the public partner uses various control types in different degrees in different phases of a PPP to minimise risk and achieve value for money. It also finds that in addition to the influence of contingent factors identified in transaction cost economic theory, power differentials and the institutional environment also influence the degree to which each type of management control is used across different phases of a PPP.

Keywords – Public–Private Partnerships; Management Control Systems; Relational Risk; Performance Risk

1. INTRODUCTION

Public–Private Partnerships (PPPs) have increasingly been recognised as a key strategic policy for the delivery of public infrastructure facilities leading to poverty reduction in developing countries (e.g., Bhatia and Gupta, 2006; Miraftab, 2004; UNESCAP, 2004). PPPs involve private sector participation in financing, building, operating, designing, maintaining and managing services in the provision of governments’ traditional infrastructure services such as health, education, prisons, roads, electricity, security and water. The main objective of PPPs is to achieve value for money (VFM) by harnessing private sector expertise in efficient delivery, logistics, economies of scale, innovation, market, investment knowledge, and management know-how (see Froud, 2003; Hayllar, 2010; Broadbent and Laughlin, 2003). In addition, its rationale for reducing the burden on government’s annual budget and excessive debt has become more attractive to governments in developing countries (Jamali, 2004; Nataraj, 2007).

PPPs as a public policy became popular in the early 1990s (Broadbent and Laughlin, 2003; de Bettignies and Ross, 2004) and have been widely adopted in industrialised countries such as the United States (US), New Zealand, the United Kingdom (UK) and Australia (see English, 2006; HM Treasury, 2008). Although PPPs have also diffused into developing countries (Appuhami *et al.*, 2011a; Kuhnle and Selle, 1992; Thomas *et al.*, 2006), their progress has been very slow, and has lagged far behind Industrialised countries, often failing to achieve VFM (see Appuhami *et al.*, 2011a; Jamali, 2004; Kumaraswamy and Zhang, 2001). Kumaraswamy and Zhang (2001) note that the application of PPP policy in developing countries is still at the experimental stage, and in many cases PPPs have never proceeded to the physical development stage (see also Mubin and Ghaffar, 2008). For instance, Sri Lanka introduced PPP policy reform in 1992, the

same year as the UK, but has been able to complete only eleven PPP projects with a total investment of US\$843 million by 2006 (Watawala, 2006)³⁹, whereas the UK has completed 800 PPP projects with a value exceeding £56 billion by 2008 (HM Treasury, 2008)

The difficulty in transferring risk associated with PPPs to private parties is a factor that has contributed to the failure to achieve VFM (see Edwards and Shaoul, 2003; Gallimore *et al.*, 1997; Jin and Doloi, 2008). In addition to high levels of uncertainty resulting from local factors specific to developing countries such as political instability, poor legal and regulatory frameworks and lack of government credibility, the characteristics of PPP arrangements such as scale, complexity and their long-term nature (see Bloomfield, 2006; Froud, 2003; Hopper *et al.*, 2008; Lonsdale, 2005) have made it difficult for governments in developing countries to draft contractual agreements to cover all contingencies and thereby transfer risk to private parties (see Appuhami *et al.*, 2011a; Beh, 2010; Bloomfield, 2006; Hayllar, 2010; Kumaraswamy and Zhang, 2001). Additionally, it is often impossible to transfer risk in developing countries due to government guarantees on various aspects of PPPs including financing, building and operating (McCarthy and Tiong, 1991; RIDA and OECF, 1996; World Bank and PPIAF, 2007).

Transferring risk to a private partner is recognised as the key justification for PPPs (Broadbent *et al.*, 2008; English, 2006). It is expected that transfer of risk will lead the private partner to behave in a way that will help the public partner to achieve VFM (Buxbaum and Ortiz, 2007; Edwards and Shaoul, 2003; Forrer *et al.*, 2010; Hall, 2010). However, where risk is not transferred, the private partner would not be exposed to risk for a long period of time (e.g., 25 years or more) and may have no incentive to work towards achieving the VFM objective (Hall, 2010). The private partner may also be tempted to act outside the prescribed contractual terms

³⁹ There has not been any completed PPPs in Sri Lanka since 2006.

and behave opportunistically (Forrer *et al.*, 2010; Lonsdale, 2005). In essence, the possibility that private partners will not behave in the best interests of PPPs has raised the issue of public accountability. Regardless of private partners' involvement in the delivery of public services under PPPs, governments retain the ultimate responsibility for the provision of quality service to the general public and for the achievement of VFM, (see Broadbent and Laughlin, 2003; Forrer *et al.*, 2010).

Thus, a wide spectrum of recent research has highlighted the need for using management controls in order to minimise risk rather than transfer risk to a private partner (English and Baxter, 2010 ; Hayllar, 2010; Johnston and Gudergan, 2007; Zheng *et al.*, 2008), and address the issue of public accountability in PPPs (Asenova and Beck, 2010; Broadbent and Laughlin, 2003; Forrer *et al.*, 2010; Hodge and Greve, 2010). The use of appropriate management control systems (MCS)⁴⁰ helps public partners (government agencies) to minimise risk arising from private partners' opportunistic behaviour and/or failure to work for the best interests of the partnership, ensuring the harnessing of private partners' expertise leading to the achievement of VFM (see Lonsdale and Watson, 2007; Langfield-Smith, 2008; Das and Teng, 2001, 1999, 1996; Das, 2006; Şngün, and Wasti, 2007). Effective use of MCS also helps governments to deliver public services as per expected service standards and addresses the accountability issue in PPPs. However, very little is known about the use of MCS for minimising risk in PPPs in developing countries.

The purpose of this study is to examine how public partners use MCS in order to minimise behavioural risks i.e., relational risk and performance risk, associated

⁴⁰ Management Control Systems refer to the set of procedures and processes managers and other organisational participants use in order to help ensure the achievement of their goals and the goals of their organisations (Otley and Berry, 1994).

with PPPs in a developing country with a view to filling this gap in the literature. To achieve this end, the study examines an energy sector PPP project in Sri Lanka based on the theoretical framework of management control systems in PPPs proposed in Appuhami *et al.* (2011b).

There are several frameworks that have been used to examine MCS in inter-organisational relationships (e.g., Speklé, 2001; van der Meer-kooistra and Vosselman, 2000). However, these frameworks focus solely on control systems in inter-organisational relationships formed between private sector organisations, and do not consider different types of risk, which is seen as a key aspect of PPPs. Further, some of these frameworks are developed by drawing on either actor-network theory (e.g., Mouritsen and Thrane, 2006) or institutional theory (e.g., Yiu and Makino, 2002). While actor-network theory focuses on analysing the characteristics of systems of interdependent dyadic relations and concludes about different possible actions of a firm including business strategies (Johanson and Mattsson, 1991), institutional theory places particular emphasis on “legitimation processes and the tendency for institutionalized organizational structures and procedures to be taken for granted” (Oliver, 1992, p. 563). Nevertheless, these frameworks do not consider the control structure that can be influenced by the characteristics of different contexts. Appuhami *et al.* (2011b) developed a comprehensive framework which specifically focuses on MCS in PPPs. This framework draws on transaction cost economics (TCE), organisation theory and the notion of trust, and incorporates three control archetypes, namely market, bureaucratic and clan, and two control strategies, namely performance evaluation and trust. More specifically, the framework identifies linkages between two types of behavioural risk (relational and performance) and the control archetypes and control strategies in the context of PPPs.

This study contributes to the literatures on both management control and PPPs in several ways. First, it makes a contribution by empirically examining the use of management controls in the selected PPP using the analytical framework proposed in Appuhami *et al.* (2011b). The study finds that the public partner uses market, bureaucratic and clan control archetypes in different phases of the PPP. It also finds that the public partner uses performance evaluation as the strategy of both the market and bureaucratic control archetypes and trust as the strategy of the clan control archetype to minimise relational risk and performance risk associated with the PPP. Further, it finds that the public partner uses control archetypes and control strategies in different combinations in different phases of the PPP to minimise relational and performance risk.

Second, studies on inter-organisational relationships formed between private organisations have predominantly been informed by the TCE theory and have identified contingent factors such as asset specificity, transaction frequency, uncertainty, opportunism and bounded rationality to explain management control patterns in those relationships (e.g., Dekker, 2004; van der Meer-kooistra and Vosselman, 2000). However, the findings of this study suggest that in addition to those contingent factors, institutional environments and power differentials between parties also influence the public partner's choice between different control archetypes in the PPP. It also finds that due to the influence of institutional environments, the public partner tends to use the bureaucratic control archetype over other control archetypes in different phases of the PPP.

Finally, while the PPP policy is increasingly applied in many countries, most research studies focus on a few industrialised countries such as the UK, US, Australia and New Zealand. As a result, little is known about MCS in PPPs in developing countries (see Alawattage *et al.*, 2007; Hayllar, 2010; Jamali, 2004). This study, however, pays special attention to PPPs in a developing country by

using a case study of a power sector PPP project in Sri Lanka. In addition to its findings on management controls in PPPs in a developing country, the study also provides insights into the process of adopting PPPs in developing countries, including phases involved, tasks carried out in different phases, the nature of each partner's involvement, issues arising during the PPP life cycle, the private partner selection process and factors considered in evaluating the private partner.

The remainder of the paper is organised as follows. The next section presents the literature review. The research method, including procedures used in data collection and analysis is described in section three. Section four provides a description of the case study. Section five presents an analysis and discussion of the case study findings. The final section of the paper provides some concluding comments and suggestions for future research.

2. LITERATURE REVIEW

2. 1. Risk associated with PPPs

The term 'risk' has been referred to all 'negative possibilities' affecting the VFM objective of PPPs (Froud, 2003, p. 584). Studies on PPPs note different types of risk such as designing risk, political risk, financing risk, constructing risk and operating risk (e.g., Hood and McGarvey, 2002; Van Ham and Koppenjan, 2001). These are broadly termed as 'behavioural risk' (see Das and Teng, 2001; Ouchi and Maguire, 1975; Williamson, 1985).

There are two types of behavioural risk associated with PPPs, namely relational risk and performance risk (Appuhami *et al.*, 2011b). According to Das and Teng, (2001, p. 253), relational risk is the possibility of opportunistic behaviour that could arise in the form of 'shirking, cheating, distorting information, appropriating

resources, and so on'. Performance risk is the possibility that partners failing to work or neglecting to work for the best interests of the partnership without being opportunistic but due to various other factors including uncertainties in the political, social, technological and economic environments, and the complexity associated with decomposing and integrating tasks related to the project (see Appuhami *et al.*, 2011b; Dekker, 2004; Gulati and Singh, 1998; Langfield-Smith, 2008; Merchant and Stede, 2003). In principle, due to goal incongruence between public partners with social welfare objectives and private partners with profit objectives (see Ouchi, 1979; 1980; Williamson, 1985; 1981), parties could do something the PPP does not want them to do (relational risk) and/or fail or neglect to do something they should do (performance risk) (see Merchant and Stede, 2003, p. 07). These two types of risk can exist in different degrees in the three phases of a PPP, namely selecting, building and operating,⁴¹ depending on factors influencing the PPP life cycle.

A variety of factors can cause relational risk and performance risk associated with PPPs. Some, such as political, legal, technological and commercial factors, can be related to the external environment. There could be other factors that are directly associated with the nature of PPP arrangements such as the complexity of the arrangement, differences in motives between the private partner (profit) and the government (social welfare) and the long-term nature of the arrangement (see Beh, 2010; Hayllar, 2010). However, Williamson (1985, 1991, 1996), drawing on TCE theory, identifies five broad contingent factors, namely opportunism, bounded rationality (human characteristics), uncertainty, asset specificity and transaction frequency (transaction characteristics) which influence behavioural risk. Recent studies also note that these five factors have particular relevance to the PPP

⁴¹ The different phases of PPPs also include financing, designing and terminating. However, this paper focuses only on selection, building and operating because control issues involving the private partner are more prominent in these phases.

context in explaining the possibility of the two types of risk (namely relational risk and performance risk) (see Campbell, 1997; Johnston and Gudergan, 2007; Parker and Hartley, 2003). While all five contingent factors could affect relational risk, all other factors except opportunism could affect performance risk⁴² (Das and Teng, 2001).

Opportunism is ‘self-interest seeking with guile’ which results in ‘incomplete or distorted disclosure of information, especially to calculated efforts to mislead, distort, disguise, obfuscate or otherwise confuse’ (Williamson, 1985, pp. 4–48) ‘as well as blatant forms of lying, stealing and cheating’ (Lonsdale, 2005, p. 720). Das and Teng (2001) note that opportunistic behaviour is the key factor leading to relational risk.

Bounded rationality is ‘a semi-strong form of rationality in which economic actors are assumed to be intendedly rational, but only limited so’ (Williamson, 1985, p. 45). According to Appuhami *et al.* (2011b), as a result of bounded rationality, parties to a PPP may not be able to contemplate and contract for every contingency and hence there is room for both relational risk and performance risk.

Uncertainty refers to the unclear future ‘where there is *no* possibility of placing a numerical probability on something occurring or not’ (Broadbent *et al.*, 2008, p. 42). Uncertainty in the PPP environment may create information asymmetry enabling parties to behave opportunistically and/or fail to take necessary measures to minimise or eliminate the negative impact of uncertainty on the PPP.

Asset specificity refers to those investments such as human assets, procedural assets, knowledge, skill and technology made in a relationship that are specific to

⁴² Opportunism is the main factor that separates relational risk from performance risk (Das and Teng, 2001).

the relationship in question and cannot be easily transformed into another relationship without incurring significant switching costs (Lonsdale, 2005; Williamson, 1985). Lonsdale (2005) highlight that asset specificity in a PPP could result in a lock-in situation, which can lead to opportunistic behaviour (relational risk) and minimise competitive pressure on the parties to maintain high performance (performance risk).

Transaction frequency refers to the number of repetitions of a particular transaction in a given period of time (Speklé, 2001). If the parties to a PPP have a history of repetitive transactions and/or projects, the possibility of incurring both relational and performance risks would be low (Appuhami *et al.*, 2011b).

It has been noted that while the level of severity of factors such as uncertainty, asset specificity and transaction frequency may vary from low to high over different phases of a PPP, human characteristics (opportunism and bounded rationality) are assumed to remain at a constant over the whole life of the PPP (Williamson, 1985, 1996, 2005; Lonsdale, 2005).

2. 2. From risk transferring to minimising

Risk transfer to private parties is at the heart of achieving the VFM objective of PPPs. The need for risk transfer results from the potentially higher costs to the public partner in undertaking PPP activities. Edwards and Shaoul (2003, p. 398) argue that ‘risk transfer operates as a kind of insurance policy: if certain aspects of the project go wrong, the private sector will bear the cost, thereby encouraging greater efficiency on the part of the private sector’. Hence, VFM can be achieved by lowering costs over the life of a project and could be gained through ‘the greater efficiency that results from transferring project risks to the private sector’ (Pollock and Price, 2008, p. 173).

However, many studies have questioned the ability of governments to transfer risk to the private sector and achieve VFM. Edwards and Shaoul (2003, p. 414) find that due to the diffused nature of risks among various public agencies and the public, 'in practice risk was not transferred in ways that public agencies had anticipated and the meaning of risk transfer in the context of partnership arrangements is problematic'. Froud (2003, p. 582) also argues that '... the PFI [term used for PPPs in the UK] contract reduces the ability of the public sector to deal with uncertainty, by locking state into contracts typically over 20 or 30 years and reducing the flexibility to respond to a dynamic environment'. Lonsdale (2005, p. 67) arrives at similar conclusions. He argues that government cannot achieve VFM by transferring risks to a private partner since PPPs create a 'locked in' situation, which allows the private partner to become the dominant one and pass back the risks to government. Moreover, in a comparative study on PPPs in the US and the UK, Forrer *et al.* (2002, p. 47) conclude that 'many U.S. PPPs are a means of transferring investment risk from the private sector to the public sector'.

In particular, the logic of transferring risk is increasingly under challenge with the involvement of government guarantees in developing countries. Appuhami *et al.*, (2011a), note that due to under-developed capital market in Sri Lanka, the government has to depend to a great extent on foreign investors who often request government grantees to invest in PPPs. Seemingly, the issuance of guarantee is attractive to the private partner and lending agencies, but is contradictory to the theory of transferring risks to a private partner and achieving VFM under PPP arrangements. According to Hood and McGarvey (2002), in theory, the private partner should take the responsibility for the PPP activities including designing, financing, constructing, operating and managing the facility to deliver the service as per the contract, with no public authority to give a guarantee on the private partner's obligations. However, it has become common in governments in developing countries not only to contribute to the equity capital of PPPs, but also

to provide guarantees on debt capital,⁴³ modifications in taxation, sales rates, foreign exchange remittance and performance⁴⁴ of PPPs (McCarthy and Tiong, 1991; RIDA and OECF, 1996; World Bank and PPIAF, 2007).

Consequently, the inability to transfer risk could undermine achieving the VFM objective of PPPs. The inability to transfer risk means the existence of both relational risk and performance risk in PPPs. According to the IMF (2004), if risks are not transferred, governments can be exposed to hidden costs which may result in the PPP option being more expensive than traditional government projects. Referring to PPPs in Malaysia, Beh (2010, p. 76) notes that due to government guarantees, PPPs may not be successful as the 'private sector frequently seems to be dependent upon the government to provide financial assistance in the event of any disaster or mismanagement'. In essence, the inability to transfer risk makes it difficult for public partners not only to achieve VFM towards the betterment of social welfare but also to legitimise their actions in PPPs. Hence public accountability in PPPs is obscured (see Broadbent and Laughlin, 2003; Edwards and Shaoul, 2003; Forrer *et al.*, 2010).

Boland and Schultze (1996, p. 62), note that accountability is '... the capacity and willingness to give explanations for conduct, stating how one has discharged one's responsibility'. Under PPP arrangements, governments delegate their sovereign authority to the private parties empowering to act in the name of electorates and their representatives (see Lynn, 2006). While the private partner in a PPP makes decisions regarding the delivery of public services, the government retains the ultimate responsibility for the provision of quality service to the general public. A key to addressing accountability in PPPs is the recognition that based on common

⁴³ Debt capital in PPPs in developing countries can be as high as 80 percent.

⁴⁴ Aspects on which guarantees are required by foreign investors are most likely to be dependent on types of risk associated with the project.

law and legislation, the government has a continuing, non-delegatable duty of care to recipients of services provided by the private partner (Partnerships Victoria, 2001), and that ‘the public entity needs to be aware that its responsibility for contract management does not end once the contract has been awarded’ (New Zealand Office of the Auditor General, 2006, p.84). Forrer *et al.* (2010, p. 479) note that ‘PPPs need to be stewarded by the government in order to ensure that public interests are met throughout the agreement’. Accordingly, ‘all arguments to justify [PPP] have led to control mechanisms for [PPP]’ (Broadbent and Laughlin, (2003, p. 43). Broadbent and Laughlin (2003, p.29) also note that governments place more ‘managerial controls over organizational systems for which they are responsible’ in order to legitimise government policy. Thus, the necessity to adopt management controls over the private parties’ behaviour results from the need to minimising risk rather than transferring it to the private sector to achieve VFM and hence address public accountability.

2. 3. Management control systems in PPPs

Historically, there has been a difference in the view of control emerging from public/political accountability in the government sector and managerial accountability in the private sector. Broadbent and Laughlin (2003) note that since the development of network/hybrid arrangements, the government sector has been led to use management controls. In particular, the rise of PPPs has enlarged the scope of MCS used in government-sector activities and blurred the boundary between public and private spheres (Ysa, 2007). To this end, some studies note that PPPs are a mode of control through which governments attempt to restructure the delivery of public services (e.g., Kerr, 1998).

In principle, MCS in PPPs are intended to help achieve VFM by minimising risk, particularly when risk cannot be transferred (English and Baxter, 2010; Hayllar,

2010; Johnston and Gudergan, 2007). This requires detailed information about performance and programs of PPPs and enhances the visibility in the prescription and proscription of the behaviour of the private parties, thereby minimising risks associated with PPPs (see Narayanan *et al.*, 2007; Ysa, 2007). It also incorporates social attributes such as trust, which can influence private parties' behaviour (Johnston and Gudergan, 2007; Zheng *et al.*, 2008). Studies note that the ability of MCS to minimise risk may reflect on public services delivered by the PPPs in terms of cost effectiveness, innovation, timeliness, transparency and security (e.g., Forrer *et al.*, 2010).

However, studies on MCS in PPPs are very limited. Some studies on controls in PPPs have identified two forms of control (governance), namely contractual and relational (e.g., Grimsey and Lewis, 2004). Contractual control emerged from classical contract law which was developed based on the ideas of TCE (Broadbent *et al.*, 2003). Campbell (1997) notes that classical contract law relies on the notion of presentation. It assumes that it is possible to predict the future behaviour of parties and hence to draft and present a complete contract. Terms and conditions included in the concessionaire contract establish the ground rules for ongoing governance (Clifton and Duffield, 2006). Accordingly, contractual agreement of a PPP works as a control mechanism by specifying all necessary information of behaviours/process needed to complete tasks (including safeguards) and outcome measures to minimise relational and performance risks.

There are also studies that question the ability of writing a complete contract for complex PPP arrangements (e.g., Froud, 2003; Lonsdale, 2005). Given the contingent factors of bounded rationality, opportunism, uncertainty, transaction frequency and asset specificity, these studies note the difficulty of writing contracts that reflect all aspects of future possible relationships (e.g., Froud, 2003; Lonsdale, 2005). These studies also argue that 'actual details of a contract are little

used in controlling ongoing relationships' (see Broadbent and Laughlin, 2003, p. 178). Thus, relational control (relational governance/relational contract) is used to cover shortfalls in contractual control.

Grimsey and Lewis (2004) and Johnston and Gudergan (2007) argue that while contractual control is important in economic analysis, relational control is equally important in addressing the social context embedded in PPPs. Relational control is based on norms, trust and cooperation. Zheng *et al.* (2008, p. 44) note that relational control 'emphasises the role of trust in achieving mutual successful supply outcomes'. Accordingly, relational control promotes risk sharing, flexibility and information exchange, thereby minimising both opportunistic behaviour (relational risk) and the failure to work efficiently (performance risk) in PPPs (see Broadbent and Laughlin, 2003; Johnston and Gudergan, 2007; Parker and Hartley, 2003; Zheng *et al.*, 2008).

Recently, Appuhami *et al* (2011b) proposed a framework of management controls in PPPs by drawing on TCE, organisation theory and the notion of trust. Their study also extends control models used in studies on inter-organisational relationships (e.g., Langfield-Smith and Smith, 2003; van der Meer-kooistra and Vosselman, 2000) by incorporating the notions of relational risk and performance risk. To this end, they identify three control archetypes namely market, bureaucratic and clan, and two control strategies namely performance evaluation strategy (PES) and trust based strategy (TBS) (see Figure 1). They further argue how the public partner deploys PES as the strategy of both market and bureaucratic control archetypes and TBS as the strategy of the clan control archetype in minimising relational risk and performance risk in three phases of a PPP (selecting, building and operating).

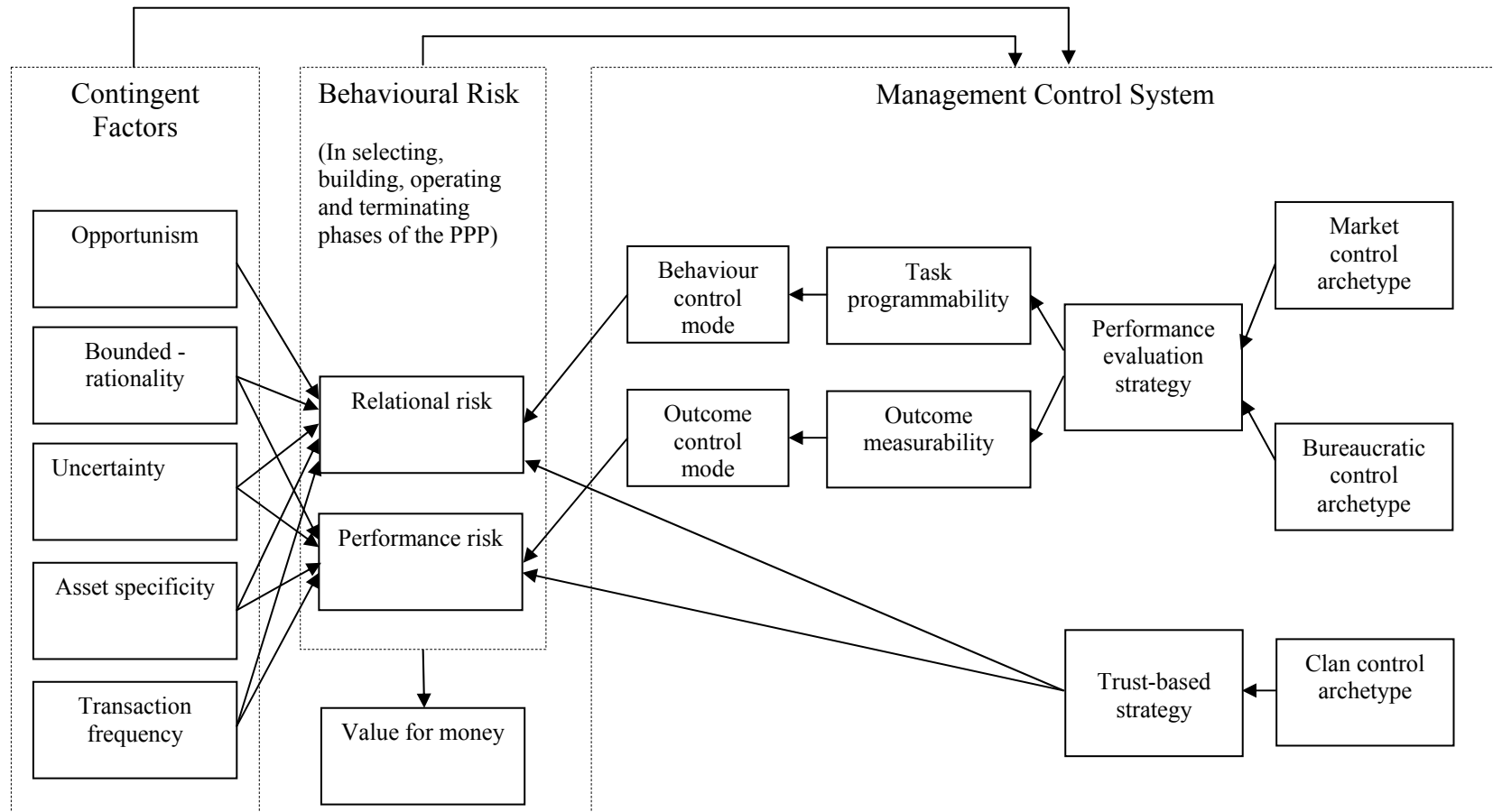
PES refers to “the cybernetic process of monitoring and rewarding performance” (Eisenhardt, 1985, p. 135) in order to induce the desired behaviour of a private partner. According to Appuhami *et al.* (2011b, p. 68), PES involves “goal setting, performance measurement, monitoring, and provision of feedback”. It can be applied only if performance of a PPP is measured in terms of outcomes (outcome control mode) and behaviour (behaviour control mode). Accordingly PES can be based on either outcome control mode or behaviour control mode or both. To “use outcome control effectively, the public partner should not only be able to identify the outcomes with certainty, but also measure those outcomes relatively precisely” (i.e., outcome measurability) (Appuhami *et al.*, 2011b, p. 69). Behaviour controls can be exercised effectively when the public partner has a relatively clear understanding of the behaviour necessary to undertake specific tasks, and is also able to pre-determine the standards with respect to those behaviours (i.e., task programmability) (Appuhami *et al.*, 2011b). While outcome control based PES is expected to minimise performance risk, behaviour control based PES is expected to minimise relational risk associated with a PPP.

TBS involves ‘changing the state of mind’ of the private partner of a PPP in order to address the problem of behavioural risks (relational risks and performance risks) (Barnard, 1968, p. 141). The TBS helps in encouraging goal congruence and thereby minimising both relational risks and performance risks associated with the PPP (Appuhami *et al.*, 2011b).

A public partner may use the *market control archetype* when the contingent factors affecting PPPs are characterised by a low level of assets specificity and high or low levels of both transaction frequency and uncertainty (Sartorius and Kirsten, 2005; van der Meer-kooistra and Vosselman, 2000). In the application of the market control archetype, free market competition safeguards the public partner from the opportunistic behaviour on the part of the private partner, thereby

minimising relational risk. In the presence of an effective market control archetype, a public partner does not need to use a specific control strategy to minimise relational risk (Langfield-Smith and Smith, 2003).

Figure 1: An Analytical Framework to Examine MCS in PPPs



Source: Appuhami *et al.* (2011b)

However, the public partner could use outcome control-based PES with the market control archetype to ensure the minimisation of performance risk (Appuhami *et al.*, 2011b). Outcome control modes in the selecting phase can be based on financial model/public sector comparator, governments' budgets and any other type of benchmarks that can be used to evaluate the free market generated proposal/bid. When there is outcome control-based PES with market control, the private partner would react efficiently to contingent factors (e.g., uncertainties) to improve its performance and hence leading to minimisation of performance risk (Appuhami *et al.*, 2011b). While the market control archetype is common in the selecting phase, it may also be used in the same way in the building and operating phases of a PPP (Appuhami *et al.*, 2011b).

The *bureaucratic control archetype* is suitable for PPP transactions that have medium or high levels of both asset specificity and uncertainty and low or medium levels of transaction frequency (Sartorius and Kirsten, 2005; Speklé, 2001; van der Meer-kooistra and Vosselman, 2000). Studies note that the bureaucratic control archetype involves direction, continuous supervision, performance measurement and feedback (Langfield-Smith and Smith, 2003; Ouchi, 1979; van der Meer-kooistra and Vosselman, 2000). The concessionaire contract of the PPP is a central part of the bureaucratic control archetype, and is prepared in detail with respect to the behaviours of the private partner. The concessionaire contract specifies rules, procedures, directions, payment mechanisms, performance evaluation and dispute resolution methods pertaining to the PPP (Partnership Victoria, 2001).

However, for the purpose of minimising both relational risk and performance risk in the three phases of a PPP, a public partner could use PES based on both outcome control and behaviour control under the bureaucratic control archetype (Appuhami *et al.*, 2011b). If the public partner has the ability to programme the private partner's tasks (and hence measure behaviour) and perceives a high level of relational risk, it could use behaviour control-based

PES with the bureaucratic control archetype (Appuhami *et al.*, 2011b). On the other hand, if the public partner can measure outcomes of the PPP-related tasks and perceives a high level of performance risk, it could use outcome control (instead of behaviour control)-based PES with the bureaucratic control archetype. Public partners can deploy PES under the bureaucratic control archetype in selecting the private partner by using a rigorous evaluation process. PES under the bureaucratic control archetype can also be used in the building and operating phases to minimise relational and performance risk.

The *clan control archetype* is based on social structures including the beliefs, values and norms that contribute to a deep level of common agreement and a high level of commitment on the part of each partner to what constitutes socially prescribed proper behaviour (Ouchi, 1979, 1980). The clan control archetype is suitable for transactions characterised by high levels of both asset specificity and uncertainty and low levels of transaction frequency (van der Meer-kooistra and Vosselman, 2000). When the level of both asset specificity and uncertainty is substantially high, the ability of the public partner to programme tasks and measure outcomes is reduced and hence hinders the ability to use PES strategy based on either outcome or behaviour controls (Langfield-Smith and Smith, 2003). Accordingly, the public partner may use trust as the strategy of the clan control archetype to minimise both relational and performance risk in the three phases of the PPP (Appuhami *et al.*, 2011b). By using the trust-based strategy with the clan control archetype in the selecting phase, the public partner may ‘prefer to select a private partner who can be trusted or with whom trust-based relationship can be developed, irrespective of the value of the bid’ (Appuhami *et al.*, 2011b, p. 74). Similarly, in the building and operating phases, the public partner may try to develop a trust-based relationship with the private partner by having, for example, flexible contracts, informal meetings, non-applying penalties, sharing of risk and non-related payments to outcome (see van der Meer-Kooistra and Vosselman, 2000).

Appuhami *et al.* (2011b) note that the three control archetypes may co-exist in each phase of a PPP. Further, they argue that the mix of control archetypes can vary over different phases of a PPP depending on the level of contingent factors associated with those phases.

3. RESEARCH METHOD

This study uses the case study method to investigate MCS used by public partners in PPPs. The case study research method provides a rich description and explanation of complex phenomenon within a real-life context (Yin, 1989), and enhances the prospect of studying the context in which MCS are used (Lapsley, 2001; Otley and Berry, 1998). Case studies have also been used in an increasing number of studies on MCS in inter-organisational relationships such as PPPs, joint ventures and, more specifically, strategic alliances (e.g., Dekker, 2004; Langfield-Smith, 2008; van der Meer-kooistra and Vosselman, 2000; Zheng *et al.*, 2008). Kaplan (1986) also emphasises the importance of using the case study research method to examine MCS within the real organisational context in which it operates (see also Merchant and Simons, 1986; Otley and Berry, 1998; Speklé, 2001).

3. 1. The selection of the case study organisation

The unit of examination in this case study is an electricity-generating project in Sri Lanka, the largest power project in the country in terms of capital (approximately US\$300 million) and capacity (300MW). It was formed as a PPP between a government agency and a local private partner. This project was chosen for several reasons. First, entry possibility was considered since this is seen as a central problem encountered by field researchers (Marshall and Rossman, 1989; Perera, 2005). Access was negotiated via several top-level managers in both the government agency in charge of the project and the

private sector organisation representing the private partner in the project. Second, the relevance to the aim of the study (e.g., opportunity to study three phases of the PPP) was evaluated based on initial informal discussions with several government officers and the analysis of publicly available documents (Marshall and Rossman, 1989). Third, the continuity of the study of the project was ensured through negotiations with top-level managers in both the government agency and the private sector organisation, since an estimated period of one month was required to complete the data collection process. Fourth, data availability in terms of the number of interviewees and documents covering three phases of the PPP, was also ensured by having initial discussions with several managers from both the public agency and the private sector organisation.

3. 2. Method of data collection

Data for the study was sourced from interviews with key personnel and analysis of relevant documents. The two data sources covered the entire project period from 1994 (the year in which the idea for the project was first presented) to 2009 (the year of data collection).

Twelve semi-structured interviews were conducted. Since MCS in PPPs were examined from the public partners' perspective, nine of the interviews were held with personnel representing the government agency (public partner) of the selected PPP. Three interviews were conducted with personnel representing the private partner of the PPP. Interviews with personnel representing the private partner enabled to check the validity of data collected from the public partner. These interviews also provided additional data on constructs of interest such as trust, which need to be assessed from both partners' points of view (Dekker, 2004). Interviewees from both the public and the private partners included directors, managers, engineers and accountants who were directly involved with functions of the MCS such as designing, monitoring, measuring

performance and giving feedback at the selecting, building and operating phases of the PPP (see Table 1).

An interview guide was developed to facilitate semi-structured interviews (see Appendix 2 for the interview guide). These questions were designed and grouped based on variables included in the theoretical framework used in the study and chronologically ordered in line with the three phases (selecting, building and operating) of the PPP. There was a mixture of open-ended questions and probing questions. Probing questions, in particular, assisted the researcher 'to quiz the subject further about any unsolicited statements that were made, or about a response to a specific question' (McKinnon, 1988, p.51). Each interview took, on average, two and a half hours. Interviews were completed with different time slots over two to three days since interviewees were not available to complete the entire interview in one day. All, but one interview, were recorded with the consent of interviewees and fully transcribed.⁴⁵

Documents analysed included newspaper articles, the concessionaire contract, procurement guidelines, research studies and reports of international aid organisations (World Bank and Asian Development Bank). These documents provided data, which were not able to be collected from the semi-structured interviews.

The benefits of using multiple methods of data collection are twofold. First, the data collected in this study from different sources were triangulated, thereby increasing the reliability of the findings of the study (McKinnon, 1988). Second, the internal validity of the findings of the study was enhanced by providing evidence from different sources (Atkinson and Shaffir, 1998; Birnberg *et al.*, 1990; McKinnon, 1988).

⁴⁵ The researcher himself transcribed the recorded interviews in order to ensure that there is no loss of meaning in transcription.

The data were interpreted using Appuhami *et al.*'s (2011b) analytical framework. The data collected from the two sources were coded as per the variables in the framework (Parker and Roffey, 1997). The study used NVivo research software to assist with data coding and in the classifying process. In total, the variables in the framework in relation to the three phases of the PPP required 45 codes (see Appendix 3 for the data analysis process).

Table 1: Profile of Interviewees

Interviewee	Position	Phase (s) involved in the PPP
1-PUB ⁴⁶	Manager – finance	Selecting
2-PUB	Manager – project	Selecting
3-PUB	Manager – purchasing	Selecting
4-PUB	Engineer	Selecting
5-PUB	General Manager – projects	Selecting
6-PUB	General manager – purchasing	Operating/building
7-PUB	Chief engineer	Operating/building
8-PUB	Engineer	Operating/building
9-PUB	Accountant	Operating/building
10-PRI	Chief finance manager	Selecting/operating/building
11-PRI	Project manager	Selecting/operating/building
12-PRI	Quality control manager	Selecting/operating/building

4. CASE DESCRIPTION - ELECTRICITY POWER PROJECT

4. 1. Background

Sri Lanka is a developing country in the South Asian region⁴⁷ experiencing severe deficits in infrastructure facilities and account for 40 percent of world's absolute poor (World Bank, 2009).

⁴⁶ Terms PUB and PRI denote public and private partners respectively.

⁴⁷ South Asian Countries include Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.

Since the 1980s, the government of Sri Lanka has faced major problems in meeting the growing demand for electricity (Amarawickrama and Hunt, 2005). Increased economic activities resulting from economic liberalisation in 1977 have largely contributed to this situation (Wijayatunga and Jayalath, 2004). For example, during the period from 1978 to 1981, electricity demand grew on average by 12 percent per annum (Fernando, 2002). On average, the growth rate remains at about 8 percent per annum in the country (ADB, 2007). The increasing demand for electricity led to power crises in the country in 1996 and 2001, and adversely affected the economy (Morimoto and Munasinghe, 2005). For example, in a typical year of power shortages, 'output loss of industrial sector can be as high as approximately US\$81 million which is approximately 0.65 per cent of the country's gross domestic product' (Wijayatunga and Jayalath, 2004, p. 235).

The government of Sri Lanka has been the main electricity supplier in the country (Wijayatunga and Jayalath, 2004). It established a government agency to supply electricity in Sri Lanka (hereafter the agency) by a parliamentary act in November 1969 under the jurisdiction of the Ministry of Power in Sri Lanka. The agency is a fully government owned institution for the generation, transmission and distribution of electricity in Sri Lanka. It owns and operates a majority of the electricity generating plants and transmission systems in the country. It supplies electricity to approximately 90 percent of consumers and the balance is supplied by its subsidiary, Lanka Electricity Company (Wijayatunga and Jayalath, 2004).

Initially, the agency's power generation had been predominantly dependent on hydro-power (Morimoto and Munasinghe, 2005). Although cheaper, hydro-power was not a reliable source of energy and was vulnerable to rainfall fluctuations. For example, severe droughts in the country led to the power crises in 1996 and 2001 (ADB, 2007). ADB (2007) also notes that during the period from 1986 to 2005, the supply of energy from hydro-power declined

from 99.7 percent to 39.4 percent. This led the agency to shift its dependence from hydro-power to an alternative source, energy-thermal power (ADB, 2007; Amarawickrama and Hunt, 2005). Thermal power involves burning gas or oil (for example, diesel) to generate electricity.

However, the introduction of thermal power presented a challenge for the agency (Amarawickrama and Hunt, 2005). Thermal power plants required importing expensive fuel and expensive thermal power machines. The operation of several mini power plants had also adversely affected the financial position of the public partner. According to the Asian Development Bank (ADB, (2007, p. 3), '[f]uel costs for [the agency]'s own generation, and the price of purchased thermal power, both of which have significantly deviated from the least-cost plan, have increased the agency's average cost of power'. Therefore, in mid 1992, the government of Sri Lanka officially introduced PPP policy through a Cabinet decision (World Bank, 1996). One of the objectives of introducing PPP policy was to minimise the cost of generating electricity to the agency. While there had been no PPP contracts until 1996, the agency has been able to complete several PPP concept based power projects with different private parties since then.

4. 2. The initiation of the electricity power project

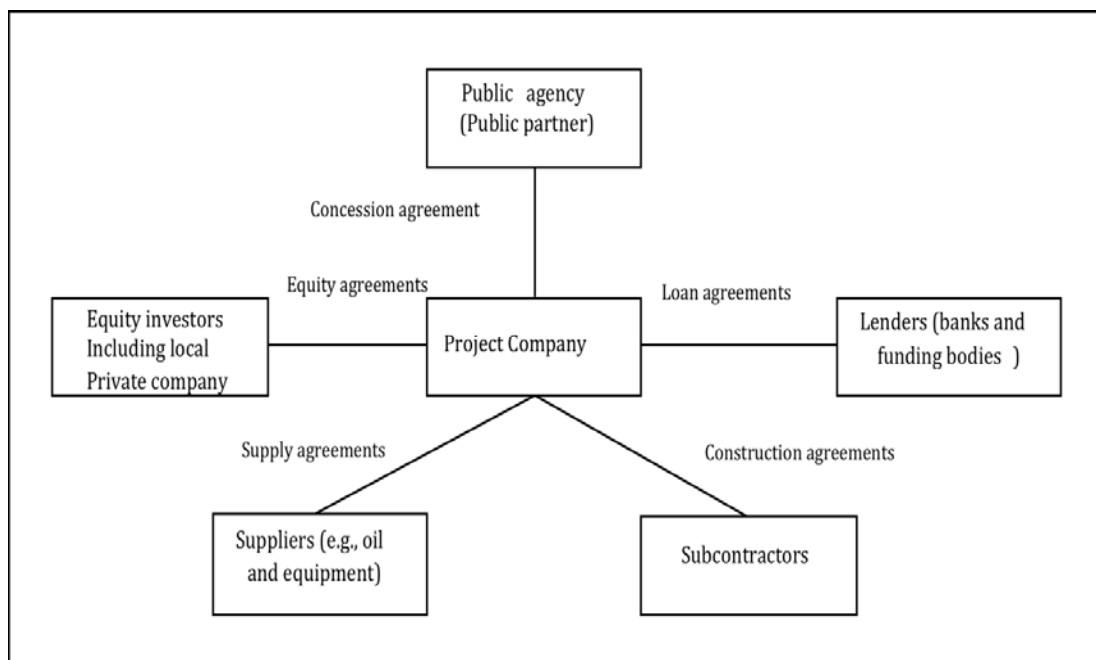
The Electricity Power Project (EPP) is a thermal power plant built on the PPP concept. The EPP was formed between the agency (hereafter the public partner) and a local private company and was based on the Build-Own-Operate and Transfer (BOOT)⁴⁸ model with a time span of 25 years. It was the largest power project in the country, with a value of US\$300 million and was expected to generate 300MW of electricity (Ramanayake, 2008). After an unsuccessful international opening bid calling, the public partner chose a local private

⁴⁸ Under the BOOT model, a private partner is assigned to build, operate and own a project, and after a specific period of time, transfer the project to the public agency (Hallmans and Stenberg, 1999).

company to initiate the project. The company is the first local company to undertake private power projects in Sri Lanka.

The private partner formed a project company, known as a special purpose vehicle (Smyth and Edkins, 2007), which connected different parties to undertake the EPP (see Figure 2). It has been highly leveraged with 70 percent of debt capital mainly from private banks with equity capital contributed by both local companies and several government agencies (*Daily News*, 2008). It also includes oil and equipment suppliers and sub-contractors.

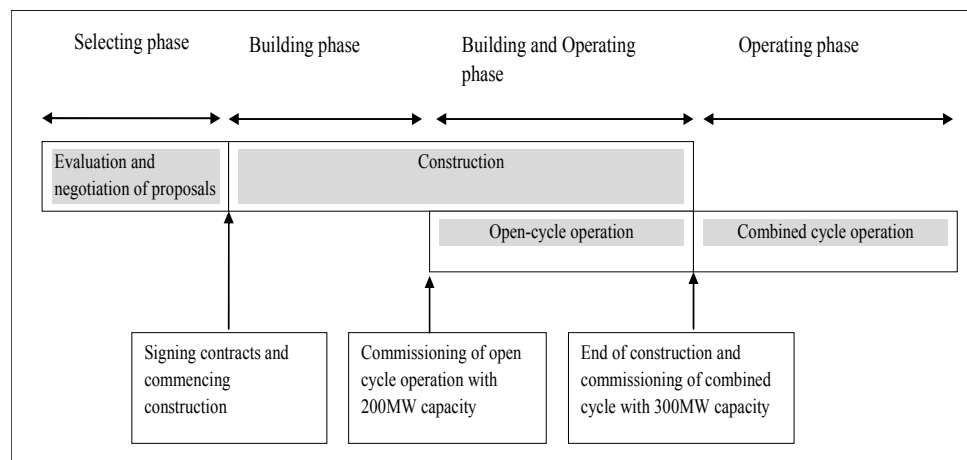
Figure 2: Structure of the EPP



In technical terms, the project is classified as a ‘300MW combined cycle power plant’. ‘Combined cycle’ means the project experiences two cyclical operations. In the first phase, a turbine is used to burn fuel and rotate another turbine with a generator to produce electricity. The amount of electricity

generated by this cycle alone is estimated to be 200MW. However, it has relatively low efficiency as it releases very hot fuel gas to the atmosphere. For that reason, this cycle is also called open-cycle. In the second cycle, the hot fuel gas released from the open-cycle operation is used to heat the water in the ‘Heat Recovery Steam Generator’ to make steam, which can be used to rotate another turbine with another generator to produce electricity. The second cycle alone is expected to produce 100MW, with the total amount of electricity generated by the two cycles of the project estimated to be 300MW. One distinguishing feature of the project is that both the construction of the second cycle and operation of first cycle (open-cycle) take place simultaneously (see Figure 3). Accordingly, three phases of the EPP, namely the selecting, building and operating phases, can be identified.

Figure 3: Different phases of the EPP



4. 3. Selecting phase

In 1994, the public partner initiated the EPP project to meet the growing demand for electricity in Sri Lanka. The public partner also carried out a joint feasibility study with financial assistance from the Japanese government. In 1996, the public partner purchased land in the industrial zone in the capital

city, Colombo. Initially, the public partner planned to develop a project with a capacity of 150MW based on Designed-Building and Transfer (DBT) model. Under the DBT model, designing and building were to be undertaken by a private partner and finance was to come from aid organisations.

Government agencies in Sri Lanka (for example, government departments and ministries) are required to follow guidelines on private sector infrastructure projects (GPSIP, 1998) in selecting private parties for PPP projects. These guidelines are an important part of the regulatory framework in the country (Appuhami *et al.*, 2011a). The guidelines specify the solicitation of proposals based on international competitive bidding. Although the solicitation of proposals based on competitive bidding is recommended, it is not mandatory to follow recommended procedures under every circumstance. As per the GPSIP (1998, no. 237), with special Cabinet approval unsolicited proposals can also be evaluated, ‘but no decision should be taken solely on the basis of unsolicited offers without inviting proposals/bids through public advertisement’. In this case, the government made two attempts to select a private partner for the proposed EPP.

The first attempt to select a private partner for the proposed EPP commenced in April 2002 (nearly eight years after).⁴⁹ By that time the public partner had to increase the capacity requirement of the project from 150MW to 300MW, due to the increased demand for electricity. According to the guidelines (GPSIP, 1998), when the project is large (i.e. if its required capital is equal to or more than US\$100 million) and/or technically complex in nature, the selection process should start with expressions of interest. An expression of interest is intended mainly to provide information about the private partner. The public partner spent a large amount of money in calling for expressions of interest.

⁴⁹ Even though the EPP was formed in 1996, the project was delayed due to various reasons including lengthy negotiations with funding agencies, the preparation of project-related documents with assistance from foreign experts and the limited understanding of PPP arrangements.

The public partner advertised twice in several international journals including *The Wall Street Journal Asia*. In addition, they contacted foreign embassies in different countries to seek expressions of interest from foreign companies. Further, the public partner appointed foreign consultants to draft the contractual agreement and other documents related to the project, since it had inadequate experience in similar projects. Although the public partner had completed power projects under the PPP arrangements earlier, they were different in terms of capacity (163MW) and technology (e.g., fuel used was auto diesel).

By June 2002, the public partner received expression of interests from 22 foreign private companies, which had experience in energy sector internationally. According to interviewee 2-PUB, ‘there were no local companies, which could meet the criteria for international experience outlined in the advertisement inviting expression of interest’. Consultants appointed by the public partner undertook the preliminary evaluation of expressions of interest. The final evaluation and recommendation was carried out by a project committee⁵⁰ and a parliamentary cabinet-appointed negotiation committee, respectively.

In July 2003, the public partner issued a request for proposals from selected parties who had submitted expressions of interest.⁵¹ Unlike calling for expressions of interest, the request for proposals provided information about the project including technical specifications, thereby guiding private parties in the preparation of the project proposal. It also provided private parties with

⁵⁰ The Secretary to the Treasury and the Secretary to the ministry of the relevant field (e.g. energy) appoint project committee (PC) in liaison with the PPP unit. PC is mainly responsible for evaluating expressions of interest and requests for proposals and submitting the evaluation report for the approval of cabinet appointed negotiation committee (CANC). Members of a typical PC include representatives from ministries such as Energy, Finance and Planning, Board of Investment of Sri Lanka (BOI)/PPP unit, Attorney-General’s Department and Central Environmental Authority. The Cabinet determines the composition of a cabinet-appointed negotiation committee. Generally the cabinet-appointed negotiation committee includes Secretaries to the ministries and the Chairman of BOI.

⁵¹ In practice, the first step alone is identified as calling for bids/tenders.

information about the proposal evaluation process, selection criteria and preparation of the contractual agreement. By July 2004, the public partner had received only six proposals. After the first screening, the project committee was able to select only two proposals for further negotiation. Out of these two proposals, only one met the main requirement for 300MW capacity (the other proposal was for 150MW).

The project committee and the cabinet-appointed negotiation committee commenced negotiations with the party who submitted the proposal for 300MW. The first round of negotiations was unsuccessful mainly due to disagreements between the parties about the terms included in the contract. The next round of negotiations was scheduled to be held in December 2004 but was interrupted by factors largely outside the project including the tsunami that swept the coastline of Sri Lanka on 26 December 2004. According to interviewee 3-PUB:

Because of the impact of tsunami, the government's attention was directed towards tsunami rehabilitation programmes. Staff of the government, including the Chairman of cabinet appointed negotiation committee was involved in those programmes.

Consequently, the second round of negotiations was put on hold for another four months. In April 2005, when the public partner contacted the private partner to continue negotiations, the private partner withdrew from the process.

In September 2005, although the public partner initially planned to negotiate with the second shortlisted private partner, it ultimately decided not to proceed further. According to the interviewee 2-PUB the reasons for not proceeding with the second private partner included, the failure of the partner to provide documentary evidences to prove its international experiences and also due to the proposal being for a 150MW project, but not for a 300MW project as required in the request for proposals.

Calling for another bid to select a private partner was not a feasible option for the public partner as the public partner had ongoing financial difficulties and was not in a position to spend a large amount of money for another bidding process. The cost of bidding for PPPs can be as high as 10 percent of the total project cost (Merna and Smith, 1996). In addition, the government officials were fully aware that it would take at least two more years to undertake another bidding process and hence would not be able to complete the project to solve the predicted power crises in 2008 and 2009.

Meanwhile, in late 2005, several changes had taken place in the Sri Lankan political system. In particular, a new President was elected in November 2005. A new minister of power and energy was also appointed, and there were several changes to official government positions. Government officials informed both the new president and the new minister of the potential crisis in relation to the short supply of electricity. The government recognised that solving the energy crisis should be one of the main items in its economic agenda. This led the government to initiate *the second attempt* to select a private partner. Interviewee 5-PUB pointed out that the government, in particular, the president and the minister, had advised the public partner to search for a quick solution to the proposed power project.

Consequently, the public partner decided to select a private partner using unsolicited proposals, the second option outlined in No. 237 of the guidelines (GPSIP, 1998):

When owing to urgent and exceptional circumstances, it becomes necessary to deviate from the above-prescribed procedure [the solicitation of proposal based on international competitive bidding] specific Cabinet approval should be obtained for such deviation.

According to interviewee 5-PUB:

We received one or two unsolicited proposals per day from different private parties. Since we outsource many of its activities including construction, maintenance, and operation of power projects, it evaluates unsolicited proposals received from different private parties in parallel to open bids.

In the case of the EPP project, by the end of 2005, the public partner had received only one unsolicited proposal, which was from a local private company. The minister for energy, however, did not recommend that the cabinet-appointed negotiation committee evaluate this proposal since it could weaken the public partner's negotiation power (Gnanadass, 2008). Thus, in 2006, instead of calling for international bids, the public partner invited proposals from two companies in China and Japan. This enabled the committees to evaluate two foreign proposals along with the proposal from the local private party. While the proposal sent by the Japanese company represented the highest offer price, the Chinese proposal was marginally cheaper than that of the local company (Gnanadass, 2008).

According to the guidelines (GPSIP, 1998), the contract should have been awarded to the lowest offer price as long as the offer satisfied the criteria specified in the request for proposals. In this instance, however, the negotiation committee, with the backing of the project committee, chose to negotiate further with the local company. Consequently, after few negotiations, the local company (hereafter the private partner) was selected as the preferred bidder, and offered them the contract.

The negotiation process between the parties resulted in two major amendments to the initial project proposal. First, the public partner requested the project be changed from Designed-Building-Transfer (DBT) to build-own-operate and transfer (BOOT). The second amendment was in response to the private partner's request that it be allowed to use cheaper furnace oil (heavy oil)

instead of the expensive diesel oil specified in the proposal request. The type of oil required to run the plant was a major component of the project technology, and had changed significantly since the day the first proposal was developed. Private partner's suggestion also had the option of running the plant on either diesel or natural gas. However, according to interviewee 4-PUB, this amendment received criticisms from power industry engineers and delayed the selection phase further.

In early 2007, after more than one year of delay in the negotiation process, the two partners signed the relevant contractual agreements covering 25 years of project life. Among these agreements, the fuel supply agreement, made between a government agency for fuel supply (fully government organisation) and the private partner, specified obligations of both parties to supply and receive fuel over a 25-year period, respectively. The power purchase agreement (hereafter 'the agreement') was the main agreement in the PPP, which was signed between the public partner and the private partner. It specified among other things: (1) the period of the contract and completion dates for different tasks; (2) the obligations of the private partner and the public partner; (3) the arrangements for commissioning and testing at completion; (4) the target performance levels and procedures for meeting during the lifetime of the project; (5) payment method and obligation; (6) standards to be followed by the project company during the operation period; (7) the arrangement for dealing with disputes, arbitration and *force majeure* events; and (8) bonus and penalty clauses.

4. 4. Building phase

Private partner had the responsibility for undertaking most of the tasks in the building phase. These tasks included engineering, arranging finance for the whole project, appointing and managing construction consultants, engineers and other staff, designing and undertaking the overall construction and

operation of the project, obtaining environmental approval, clearing land, and importing equipment (e.g., generators and transformers). However, it had to comply with the contractual agreements signed in the selecting phase in making decisions such as the selection of subcontractors and equipment suppliers, the commencement time of operation of both open and combined cycles, electricity to be generated during each cycle, the type of oil to be used and plant maintenance.

It was apparent that being a local company, the private partner was able to efficiently undertake most of the construction-related activities, in particular obtaining environmental approval and transporting heavy equipment from the port to the project site. Within the first three months of signing the contract, the private partner was able to place orders for major equipment from foreign companies such as General Electric Company and ABB Group and obtain environmental approval for the project. Obtaining environmental approval is a major challenge for implementing power projects in Sri Lanka. Several projects were seized in the past due to the inability to gain approval. Obtaining environmental support has become a difficult process mainly due to the lack of social support in developing countries (Appuhami *et al.*, 2011a).

After obtaining environmental approval, private partner commenced its engineering works on the project site. One major task was to prepare the site for the project. Since it was reclaimed land, 40 000 cubic meters of earth, 1000 piles and an enormous quantity of ready-mix concrete had to be brought in from other places. Another major task involved the transportation of imported turbines for about 15 kilometres from Colombo port to the project site. Since the turbines were heavy equipment, it was not possible to transport them solely along the prevailing road system. Therefore, private partner had to transport the turbines by barge along a river and a canal close to the site before transporting them by road. In order to do so, private partner had to do some repairs to the river and the canal and build a new jetty at the landing point. Appuhami *et al.*

(2011a) note that the inefficiencies and inadequacy of existing infrastructure facilities also affect the implementation of PPPs in Sri Lanka.

There were also tasks undertaken by the public partner in the building phase. One such task was the issuance of government guarantee on debt capital. International lending agencies required the government to issue guarantees on the debt capital, which was about 70 percent of the total capital required for the project. While government guarantees have become common in PPPs in developing countries (see McCarthy and Tiong, 1991), this was the first time the government of Sri Lanka had to issue a guarantee for a PPP project. Interviewee 7-PUB noted that, 'due to the lack of experience in issuing government guarantees, it had to pass through 17 Cabinet papers and took approximately 11 months to finalise'. Interviewee 10-PRI noted that:

Due to delays in the issuance of government guarantees, until December 2007, we were not able to access the debt capital and had to bear extra risk on making advance payments to equipment suppliers, obtaining environmental approval and undertaking other construction activities since the date of agreement.

In the building phase the public partner was also responsible for reclaiming more land and clearing it for a pipeline corridor for the private partner to build a sea water pipeline for the plant's cooling towers. However, since the public partner progressed very slowly in the task, private partner's management voluntarily accepted the risk and completed the project on behalf of the public partner. The task involved evacuating 20 families, and resettling and compensating them accordingly.

Further, the public partner appointed two of its engineers to monitor the private partner's progress in the building phase. According to the contract, the two engineers were expected to visit the plant and hold meetings with the project management of the private partner every month. Additionally, the public partner monitored the private partner's tasks by reviewing monthly progress

reports sent by the private partner. The progress report included targets for the month, the extent of achievement, and tasks undertaken to achieve each target.

4. 5. Operating phase

The EPP launched the operating phase with the commencement of the open-cycle operation in December 2008 (Ramanayake, 2010). Although the construction of the combined-cycle operation continued for another nine months, the open-cycle alone could generate 200MW of electricity (Abeywickrema, 2009). In February 2010, the EPP began its operation with a full capacity of 300MW with the commencement of the combined-cycle operation (Ramanayake, 2010). The operating phase is the longest phase in the EPP life cycle, and it alone covers the 25-year period included in the power purchase agreement. According to interviewee 6-PUB, the power purchase agreement provides detailed information about the role of both the public partner and the private partner over the 25 years of the operating phase.

Compared to the building phase, the number of transactions between the public partner and the private partner increased in the operating phase. The main transaction involved the purchase of electricity generated by the EPP. As per the power purchase agreement, the public partner reviewed the electricity demand in Sri Lanka and sent daily despatch instructions to the private partner. Despatch instructions required the private partner to deliver a specific daily amount of electricity by adding that amount to the national grid. Private partner also sent invoices to the public partner on a monthly basis. The public partner made payments to the private partner on a monthly basis for the amount of electricity purchased daily.

The two engineers who were appointed by the public partner in the building phase were continually involved in monitoring the private partner's work in the operating phase. Similar to the building phase, the agreement specified the role

of the two engineers in the operating phase including, visiting the project site and conducting meetings with the private partner's project management team on a monthly basis. The chief engineer (interviewee 7-PUB) noted that the main purpose of their monitoring in the operating phase was to ensure that the private partner maintained and repaired (if needed) the plant as per the specifications in the agreement. Another engineer (interviewee 8-PUB) also noted that they monitor the oil used by the private partner to run the plant by reviewing the private partner's oil purchased invoices, which private partner received from the government agency (oil supplier to the plant) on the purchase of oil.

5. ANALYSIS AND DISCUSSION

This section provides an analysis of the use of MCS in minimising risk in the PPP selected for the study using the analytical model proposed in Appuhami *et al.* (2011b). It identifies the nature of relational risk and performance risk associated with the selecting, building and operating phases of the EPP and assesses the control archetypes, control strategies and control modes used by the public partner in these three phases to minimise the two types of risk.

The assessment of relational risk and performance risk associated with the three phases of the EPP is dependent on the nature of transaction characteristics such as uncertainty, asset specificity and transaction frequency.⁵² The assessment of the three control archetypes (market, bureaucratic and clan) and two strategies (PES and Trust) used by the public partner in the three phases of the EPP is also based on the nature of interactions between the two parties including the agreement, dispute resolutions, negotiations, risk sharing, payment methods, penalty situations, trust, monitoring and performance measures.

⁵² Two human characteristics, namely opportunism and bounded rationality, are behavioural assumptions and exist equally under different control archetypes (Williamson, 1985, 2005, 1996). Thus, this study does not analyse the two characteristics with the case results.

5. 1. Selecting phase

Relational risk and performance risk

The relational risk associated with the selecting phase was the possibility that the private partner opportunistically provides incomplete or distorted information in the project proposal and/ or during negotiations about, for instance, experience, cost estimations and technology. Performance risk associated with the selecting phase was the possibility that the private partner, without being opportunistic, failing to incorporate new technology, cost estimations, project plans or to submit a realistic proposal for the achievement of the VFM objective of the public partner.

The assessment of transaction characteristics in the selecting phase revealed that there was a high level of both relational risk and performance risk at that stage. This mainly resulted from the high level of asset specificity, which was largely influenced by the nature of technology. According to interviewee 11-PRI, ‘the technology used in the project was applied only in one small project in the country before and was not common even in other Asian countries’. The fact that the public partner had received only one proposal from the initial international bid calling that satisfied all the criteria, with no proposals received from local companies, also indicates the high level of asset specificity. Further, the high switching costs for the public partner indicated the high asset specificity of the EPP leading to a high level of relational risk and performance risk in the selecting phase. As indicated in the previous section, the high cost and lengthy period associated with the international bid calling in selecting a private partner, led the public partner to depend heavily on the private partner in the second attempt of the phase in particular. Table 2 shows the two types of risk and the nature of transaction characteristics in the selecting, building and operating phases.

Table 2: Risk and the Nature of Transaction Characteristics in Different Phases of the EPP

Phase	Selecting phase	Building phase	Operating phase
Relational risk and performance risk ⁵³	High	High	Medium
Asset specificity <ul style="list-style-type: none"> • Switching cost • Specificity in technology • Size of the project in terms capital and capacity 	High	High	Medium
Transaction frequency	Low	Medium	High
Uncertainty <ul style="list-style-type: none"> • Political environment • Technology • Supply of electricity • Financial position 	High	High	Medium

Relational and performance risks in the selecting phase also resulted from a low level of transaction frequency. Transaction frequency refers to the number of similar projects (experience) undertaken by the public partner. Although the public partner had experience in outsourcing most of its activities and undertaking power projects with different private parties including two mini projects completed with the private partner, the EPP was different from other projects and outsourcing activities, particularly in terms of the size and the technology. The low level of transaction frequency in the selecting phase was also evident in the following statement made by the interviewee 2-PUB.

We spent millions of dollars on foreign consultants' services to prepare the project related documents (e.g., request for proposal, agreements and letter of intent) for the first time and currently we intend to use the same documents for other future PPP projects.

Further, the level of relational and performance risks in the selecting phase seemed to be influenced by the high level of uncertainty in the transaction environment. Technological uncertainty was apparent as the public partner had

⁵³ Risk levels were determined on the basis of the nature of potential influence of the transaction characteristics.

decided to change the oil used to run the plant from diesel oil to furnace oil, since it was not able to predict the type of oil to be used with certainty at the beginning of the project. Interviewee 5-PUB described this uncertainty as follows.

Our decision to change the project's technology was challenged by engineers at other local power companies. That led to delay the signing of the project contract. They felt that a diesel plant would be better. However, we had a very clear standing that we wanted a combined power plant to fit into a system. There were also a lot of people supporting this position who said it would be cheaper to have a different technology.

The financial condition of the public partner also contributed to the uncertainty in the selecting phase. Interviewee 1-PUB noted that:

Since we did not receive financial aids from international aid organisations as it initially expected, our financial position had become uncertain. That was why the government decided to change PPP model from DBT to BOOT. Under BOOT model private partner is responsible for financing the project.

Further, political uncertainty in the country influenced relational and performance risks in the selecting phase. The Civil war (from 1980 to 2009), in particular, had created political uncertainty in Sri Lanka and interrupted the progress of the selecting phase (see Abeyratne, 2004; Nataraj, 2007; Sri Lanka Country Review, 2003). Political uncertainty results from the political instability which is recognised as a challenge to implement PPP policy in Sri Lanka (Appuhami *et al.*, 2011a). Moreover, uncertainty in the supply of electricity by the public partner's existing power plants had influenced relational and performance risks in the selecting phase. Since most of the projects were hydropower projects, which depend on rainfall, the supply of power became uncertain (see section 2.1). According to interviewee 5-PUB:

It was not sure whether we have rainfall in years 2008 and 2009 in the country. It means, the supply of power was uncertain in the country. This situation had also influenced us to expedite the selection of a private partner for the EPP.

Management controls

The assessment of MCS used by the public partner to minimise the two types of risk in the selecting phase can be based on the two attempts made in the selection of the private partner. In the first attempt, the public partner adopted a rigorous evaluation process using detailed criteria and followed all steps including issuance of expressions of interest and requests for proposals as outlined in the procurement guidelines. It was also characterised by lengthy negotiation rounds and the refusal of the public partner to deviate from its project's proposal and to change the terms in the drafted agreements (inflexibility). Thus, to minimise the two types of risks in the first attempt of the selecting phase, the bureaucratic control archetype was chosen by the public partner (see Table 3).

Interviewee 5-PUB described the negotiation process as follows.

In the first attempt, basically we tended to stick to transparent procedures. It was a very structured bid. We followed all procedures outlined in the guideline. We advertised in local and international journals and called for expression of interest [which is not compulsory as per the guideline] and request for proposals. We also appointed committees required to evaluate the proposals.

Interviewee 2-PUB also made the following statement.

Actually we received six bids, but only two proposals were shortlisted. Committees took more than two years to evaluate these proposals. We held several negotiations rounds and even asked for additional documents from parties shortlisted to evaluate their proposals.

While bureaucratic control was the dominant archetype, the use of the market control archetype in the first attempt was also evident in the calling for international bids. The public partner attempted to minimise relational risk in the selecting phase mainly by using the competitive pressure of the international bids. It also seemed to use performance evaluation (PES) as the control strategy of both the bureaucratic and market control archetypes to

minimise the two types of risk. PES was based on outcome controls such as financial plan (e.g., structure of debt and equity, and contribution to the capital by each partner), type of technology, capacity (300MW), budgeted cost and target time periods to complete different phases included in the project proposal. In the evaluation process, public partner compared these outcomes with those of private partner's proposal.

Interviewee 2-PUB made the following observation about the proposal evaluation process:

The main consideration was the offer price, other than that, how quickly the partner can complete the project and the experience of the partner in the field was also important ... we had sort of technical parameters to match. I should say it was a performance benchmarking. For instance we needed a 300MW capacity.

However, the public partner was not able to use both the bureaucratic and market control archetypes to minimise relational risk and performance risk in the first attempt of the selecting phase. Owing to the nature of the transaction characteristics in the selecting phase, the public partner was not able to use outcome control-based PES successfully. This was evident as the public partner was able to solicit only one proposal that satisfied all criteria in the request for proposals due to high levels of asset specificity and uncertainty. Further, owing to a high level of uncertainty, the project proposal, which the public partner used as a mode of outcome control, had become outdated in terms of technology (from diesel to furnace oil), capacity (from 150 MW to 300MW) and cost estimation.⁵⁴ Moreover, the entire selection process at the first attempt was interrupted by other factors in the uncertain environment including tsunami and increasing demand for electricity. Thus, the public partner lost its negotiation power and the ability to use competitive pressure over one private partner (one proposal) by using the performance evaluation

⁵⁴ The public partner estimated the project cost at US\$390 million during 2003 and 2005; it is questionable whether the same cost estimation could be used to compare the actual cost of the project started in 2007 (*Daily News*, 2010).

strategy based on outdated outcome measures and hence was not able to minimise relational and performance risks. Accordingly, the unsuccessful first attempt indicates that the public partner could not use both the bureaucratic and market control archetypes to minimise the high level of both relational risk and performance risk when asset specificity and uncertainty was high and transaction frequency was low. Interviewee 4-PUB described the first round of negotiations as follows.

It was apparent with other projects as well. When we have only one proposal, there is no competition for the project and it has become difficult to negotiate with the private partner ... further, we get these problems when we deal with a foreign private partner who was new to the country and field.

Interviewee 2-PUB made the following statement about the termination of the negotiation process.

As I feel, sometimes, outcome would have been different, if we could hold the December meeting ... I see that some issues [raised by the private partner in first round of negotiation] were not big ones, which could have been solved in the first round of negotiation. But, due to some issues in our side also (e.g., postpone meetings, long negotiations and inflexibility), this came to an end.

Table 3: The Nature of Control Archetypes in Different Phases of the EPP

	Selecting phase		Building phase	Operating phase
	First attempt	Second attempt		
Dominant control archetype	Bureaucratic with PES* <ul style="list-style-type: none"> • Rigorous evaluation process • Detailed contracts • Outcome-based measures • Adherence to rules and procedures • Lengthy negotiations • Inflexibility in negotiations 	Clan with TBS** <ul style="list-style-type: none"> • Risk-sharing attitudes • Cooperative amendments to contracts • Short negotiation and evaluation process • High level of trust on the private partner's expertise • Preference for localness, popularity and history of contracts • Less information asymmetry 	Bureaucratic with PES <ul style="list-style-type: none"> • Formal communications • Outcome-based performance evaluation (target completion dates) • Contract is the central document in decision making • Detailed contract • Direct monitoring by visiting the site • Indirect monitoring by checking progress reports 	Bureaucratic with PES <ul style="list-style-type: none"> • Outcome-based payments • Audit procedures on payments/invoices • Formal communications • Application of penalty • Outcome and behaviour controls based on performance evaluation (daily electricity requirement) • Contract is the central document in decision making • Direct monitoring by visiting the site • Indirect monitoring by checking invoices
Other control archetype	Market with PES <ul style="list-style-type: none"> • Competitive international bids • Outcome-based evaluations (e.g., project proposal including budgeted capital and capacity requirement) 	Bureaucratic with PES <ul style="list-style-type: none"> • Outcome-based performance evaluation • Detailed contracting 	Clan with TBS <ul style="list-style-type: none"> • Risk-sharing attitudes • Informal ad hoc meetings • Problem solving by negotiation • High level of trust on private partner's expertise 	Clan with TBS <ul style="list-style-type: none"> • Informal ad hoc meetings • Problems solving by negotiation

* PES - performance evaluation strategy; **TBS - Trust-based strategy

The public partner's second attempt to select a private partner was characterised by elements of the clan control archetype. The public partner used trust-based strategy (TBS) to minimise relational and performance risk in this second attempt in selecting a partner. The use of TBS with the clan control archetype was mainly evident, because the public partner selected a local company whose technology and expertise they believed to be more than that of the foreign company, who submitted the lowest bid.⁵⁵ The public partner also seemed to take into account the successful completion of two previous power projects by the private partner, and the private partner's popularity in the industry. Further, the public partner considered the private partner's knowledge of the market and the local experience of its engineers. Moreover, short and cooperative negotiations between the two parties, which led to a change in technology (from diesel oil to furnace oil) and the PPP mode (from DBT to BOOT), evidenced the use of TBS with the clan control archetype as the dominant control archetype to minimise the two types of risk. The Minister for Energy made the following statement regarding the selection of the local company as the private partner in the project:

I wanted to give this [the project] to a local company as I thought this would be a good opportunity for our local engineers to prove their capabilities, particularly the younger engineers as they have not had a chance to prove themselves yet since for some time there has not been a major electricity project implemented (The Nation, 2008).

Interviewee 10-PRI commented:

I think present government's will of doing this is much higher. We were even disqualified under previous regime. One good thing under this regime is they support and trust local expertise. There is nothing to worry about trusting, because, actually we are capable.

⁵⁵ In the past, the public partner had also faced difficulties in dealing with foreign private parties. For example, owing to uncertainty in the political environment, the public partner had to seize negotiations with a foreign private party in a previous power project, which ended up in a legal dispute between parties (see Appuhami *et al.*, 2011a).

Interviewee 11-PRI confirmed that:

We are called as EPC contractor, since we are the only local company which can undertake engineering, procurement and construction (EPC) in a project. So there were no any local competitors for us.

Interviewee 2-PUB described the cooperative atmosphere in the negotiation process as follows.

Private partner did not question our documents [terms in the contract] since it had experience with public partner and have been in the energy business in the country for several years. It had an understanding of risks allocations and procedures related to the project.

Interviewee 10-PRI confirmed that:

Contractual agreement is internationally accepted and specifically made for the public partner. They might have spent millions of dollars on experts to prepare it. That was the agreement given to us and we did not argue on that.

The second attempt of the selecting phase also indicated the use of PES with the bureaucratic control archetype. Specifically, obtaining two proposals from a Japanese company and a Chinese company through invitation, and the evaluation of those proposals with the proposal received from the private partner based on outcome control based measures such as electricity capacity, offer price and time frames to finish different phases, were indications of the public partner's use of PES with the bureaucratic control archetype. Further, the use of the same detailed contracts, which became an issue in the first attempt was evidence of the bureaucratic control archetype. Accordingly, it seemed that the public partner was trying to use the bureaucratic control archetype in combination with the clan

control archetype in order to minimise relational risk and performance risk in the selecting phase. Interviewee 4-PUB commented on the nature of the contract as follows.

The agreement is a detailed document and it provides information for every aspect of the project. In case a problem cannot be solved by even negotiations guided by the contract, the contract also specifies how the parties can search for arbitration as well.

5. 2. Building phase

Relational risk and performance risk

Relational risk in the building phase was the possibility of the private partner opportunistically undertaking building-phase tasks, such as arranging finance, obtaining environmental approval, clearing the site, evacuating people and exporting turbines and generators, without complying with the quality standards in the agreement. Performance risk in the building phase on the other hand is the possibility of the private partner failing to undertake building-phase tasks efficiently, without being opportunistic.

Both relational and performance risks remained at a high level in the building phase since the transaction characteristics were unchanged between the selecting phase and the building phase. A high level of asset specificity leading to both relational and performance risks was reflected in the public partner's dependence on the private partner's expertise in technology, knowledge and management. Further, issuance of government guarantees on debt capital (70 percent of total capital) and government's investment in equity capital increased the switching cost in the phase. The following comments of interviewees clearly show risk caused by high switching cost.

The government had invested a lot of money and time and did not have any other alternative to go for. A withdrawal of the service by the private partner during construction stage could have brought a big loss to the government and would have had a devastating impact on the EPP (interviewee 6-PUB).

Since the government has given guarantee, it is bearing total risk of loan capital. If the project collapses, lenders will go to the government and ask for their money. They will have to use public money to settle the loan (interviewee 10-PRI).

Low transaction frequency also led to relational and performance risks in the building phase (see section 2.1). This was evident in the very limited transactions between the public partner and the private partner during the building phase. This was mainly because the private partner was responsible for undertaking most of the construction tasks and did not receive any payments from the public partner during the period. Further, uncertainty leading to performance and relational risks in the building phase remained at a high level with regard to technological and political issues, financial position and electricity supply as it was in selecting phase.

Management controls

The dominant control archetype used by the public partner to minimise the two types of risk in the building phase was more similar to the bureaucratic control archetype. The control strategy used under bureaucratic control archetype also had a strong similarity with PES. PES with the bureaucratic control archetype was manifested in the monitoring (through progress reports and visiting the project site), formal communications, adherence to contractual procedures and attempts to impose penalty.

Interviewee 6-PUB described the nature of monitoring in the phase as follows.

We received monthly progress reports during construction so that we could see whether the progress of the plant was going well. We also appointed two engineers [chief engineer and electric engineer] in our branch to monitor the progress of the plant.

The comment made by the interviewee 7-PUB confirmed the above.

Yes, we checked the progress reports to ensure that operations can be started on the agreement date. We also went to the site to see whether the constructions are going on according to the plan and the progress reports received from the private partner. So if there was any delay, we can impose penalty on the private partner.

The public partner seemed to use PES mainly with regard to outcome control. Outcome control measures in the building phase included deadlines to complete different tasks, and total electricity capacity requirements (i.e. 200MW and 100MW).

Interviewee 9-PUB described the control process as follows.

At the end of the construction, we had a commissioning test [test the operation of the plant to deliver the capacity 200MW and/or 100 MW]. According to the agreement, we do all commissioning tests in front of all officials representing the government. We need to witness commissioning before starting operations. If there is any delay in commissioning, we can impose penalties on the private partner.

Interviewee 6-PUB also confirmed the use of outcome control based PES as follows.

There were milestones in the contract. Those were agreed at the time of signing the contract. So, the private partner had to achieve those milestones. If they do not achieve milestones, there are penalties.

It was also evident that the public partner was able to influence the private partner and minimise performance risk by using outcome control-based PES with the bureaucratic control archetype. In particular, the placing of orders by the private partner for major equipment with foreign suppliers and the commencement of construction before finalising financial arrangements and government guarantees were mainly to achieve outcomes such as target time for completion of the project and the generation of 300MW of electricity on completion. Interviewee 10-PRI explained as to why the company had to commence construction work without having confirmation on financial arrangements and government guarantees:

It was a risky task, only because, the management of the company had the mission that this project should be realised somehow. On the other hand, the country needed it desperately at that time, because otherwise there would have been power cuts.

However, there was insufficient evidence to support the fact that the public partner was able to minimise relational risk in the building phase by using behavioural control-based PES with the bureaucratic control archetype. While the agreement had specified some procedures, such as suppliers should be contacted by the private partner to purchase turbines and generators, the use of behavioural control, which can minimise relational risk, was very limited. This was mainly because of the difficulty in programming tasks in the building phase. Commensurate with high levels of both uncertainty and asset specificity, the lack of experience on the part of the public partner in building phases in similar projects (transaction frequency) and the complexity of the technology used in the EPP made it difficult for the public partner to programme tasks or to identify behavioural control measures in the building phase. According to Ladduwahetty (2009):

In a Cabinet Memorandum in 2006, [the public partner has] convolutedly stated that it does not have the experience or the expertise to design and operate the proposed [EPP] combined cycle power plant.

Interviewee 11-PRI also mentioned that:

Construction phase was very complicated. It needed experienced engineers and experts in the technology. We had also obtained the service from foreign experts in the initial phase of the construction. Then we gradually assigned responsibilities to our engineers and monitored their work regularly.

It was also likely that by not providing detailed specifications on different tasks in the phase, the public partner had expected to encourage the private partner to use its expertise in designing, constructing and operating of the project, thereby creating more room for innovations, and thus achieving VFM (see Zhang, 2005).

Interviewee 10-PRI described that:

The agreement does not mention many technical aspects relevant to the construction phase, it mainly specifies capacity requirements, targets and responsibilities and roles of each partner.

Interviewee 7-PUB also confirmed that:

Most of the tasks in construction phase were defined by the private partner. They were on their side and they were responsible to carry out them efficiently with their new technologies and equipments.

However, the public partner used TBS with the clan control archetype in parallel with the bureaucratic control archetype to minimise both relational and performance risk. TBS appeared to have helped to minimise relational risk, which could not be minimised by using behaviour control-based PES with the bureaucratic control archetype. Examples of using TBS with the clan control archetype included informal meetings, cooperativeness in undertaking tasks, risk-sharing attitudes and negotiations to avoid penalty points.

Interviewee 7-PUB described the nature of their meetings with the private partner during the phase:

Meetings were held on ad-hoc basis. The meetings were not very formal and the only purpose of meetings was to make sure that operations could be achieved according to the agreement date and ... as we saw that private partner was doing its construction smoothly, we did not find the need to conduct meetings every month.

Further, Interviewee 6-PUB explained the avoidance of conflict by negotiations:

Commissioning date of open-cycle operation was delayed by two months. We initially said that the private partner should pay liquidity damages⁵⁶ for the two months. Private partner appealed and indicated that the delays resulted from the delays in our side such as delays in opening letter of credit, delays in building sea water pipeline and so on. This led to several negotiations. After that we considered them as acceptable reasons and waived the penalty.

Further, obtaining environmental approval and transporting heavy equipment without facing any protest from the public and incurring any additional costs could be the result of placing trust on localness of the private partner. Interviewee 11-PRI discussed the transporting of heavy equipment:

The proposal from the Japanese company suggested that equipments should be brought along the road. That required an additional road to be constructed from the main road to the project site. To do that, you have to acquire a land. So it will be a lengthy and costly process ... however, as local company we had a good idea about the area. So because of our arrangement, we managed to transport equipment quickly and complete this project on time.

⁵⁶ Liquidity damage is the cost incurred by the public partner on the purchase of electricity from other sources due to delay of the private partner to supply electricity. According to the agreement, the private partner would have to pay liquidity damages for every day delayed since the scheduled date of commencement.

Interviewee 12-PRI described the obtaining of environmental approval:

Fortunately there were not any environmental protestors. We have experience in obtaining environmental approval for two previous projects in Sri Lanka. Foreign companies do not have such experience in the country. So we managed to do a very good evaluation of the environment impacts and therefore we managed to complete the project without any public protest.

Since the public partner had placed trust in the private partner's expertise and knowledge, the private partner was able to carry out those tasks in a relatively short period of time than could have been possible with a foreign partner. Further, private partner's voluntary acceptance to clear land by evacuating residences in the area for the seawater pipeline and resettling them in new locations was evidence of the parties' risk-sharing attitudes and commitment which resulted due to the trust placed on the private partner. Interviewee 11-PRI also explained the private partner's voluntary acceptance to clear land for a seawater pipeline:

We knew the government had a budget for this task. So we did the work on behalf of government and got money from them. May be we spent little more. But we could avoid delaying the project further.

5. 3. Operating phase

Relational risk and performance risk

The relational risk associated with the operating phase was the possibility that the private partner opportunistically undertaking tasks such as power plant maintenance and repair, and pricing and supplying of electricity without complying with the specifications in the agreement. The performance risk in the phase was the possibility that the private partner fails to undertake the tasks in the operating phase efficiently without being opportunistic.

As shown in the Table 2, relational and performance risk in the operating phase fell to medium level. This change in the level two types of risk was a result of changes in transaction characteristics. While asset specificity was relatively high in both the selecting and building phases, it remained at medium level in the operating phase (during both open-cycle and combined cycle operation). The decrease in the public partner's dependency on the private partner was due to the initiation of several other mega power projects with Chinese and Indian companies (Sirimanna, 2010).

The change in transaction frequency also contributed to the medium level of behavioural risk in the phase. Since the commencement of operations (open-cycle), the public partner increased its number of transactions (frequency) with the private partner in terms of purchasing of electricity generated by the project and making payments to the private partner. These transactions were standard and similar to those in the operating phases in other power plants operated by the public partner.

Further, uncertainty in the transaction environment seemed to influence relational and performance risks in the operating phase. Similar to asset specificity, uncertainty level remained at medium. This was mainly because of the decreased uncertainty in the supply of electricity with unpredicted rainfalls (Colombo Page, 2011), and the initiation of other power projects. The increasing political stability with the end of civil war in 2009 also seemed to contribute to the decrease in uncertainty associated with EPP in the phase (*Daily News*, 2010b), thereby causing relational and performance risk to remain at medium level.

Management controls

The bureaucratic control archetype used by the public partner remained dominant in minimising relational risk and performance risk associated with the operating phase of the EPP. The bureaucratic control archetype was mainly manifested in the application of penalties and the use of the agreement as the central document. The PES was also retained as the strategy of the bureaucratic control archetype to minimise both relational and performance risk, which remained at medium level with the decreased influence of transaction characteristics.

However, unlike in the building phase, the public partner used PES based on both outcome control and behavioural control in the operating phase. This was also facilitated by the changes in transaction characteristics (see Table 2) thereby increasing public partner's ability to identify the behaviours necessary to undertake tasks (task programmability) and to measure outcomes (outcome measurability). According to the interviewee 8-PUB:

The transactions in operating phase are very standard and are very similar to the transactions, which we undertake during the operating phases of most other power projects with other private parties. Unlike in construction phase, we know what we need to do once the operation is started.

The use of PES based on outcome control minimised performance risk in this phase. This was mainly characterised by the use of outcome-based performance measures (e.g., daily electricity requirements), and payments based on the outcome (monthly payments to purchased electricity). On the other hand, the use of PES based on behavioural control minimised relational risk in the phase. The use of behaviour control was mainly evident in the direct monitoring by two engineers of the site, and indirect monitoring based on monthly reports and copies of the private partner's invoices on oil purchased, the use of specified procedures in the agreement in buying electricity and making payments, specifications on the type of

oil required to run the plant and the involvement of audit procedures. Interviewee 7-PUB noted the nature of payment system in this operating phase as follows.

For construction we didn't make payments and it was not relevant for payments. However, during the operation, we have a separate equation in the contract to calculate the payments to the private partner. The equation is mainly based on the amount of energy we purchase. It is also based on the electricity capacity available.

Interviewee 9-PUB also described the nature of monitoring during the operating phase as follows.

Since the operation of open-cycle is very costly, the government officials also visited the plant and requested the private partner to complete its constructions for combined-cycle on or before the scheduled date. The secretary to the Ministry of Energy also visited the project site several times.

Further, interviewee 6-PUB explained that:

Our two engineers monitor the performance of the private partner by visiting the project site. They also check monthly invoices from the private partner and recommend payments. There is an accountant in our branch who makes arrangements to pay the recommended amount.

The operating phase was also characterised by some elements of TBS with the clan control archetype used by the public partner. These elements included, for instance, informal and ad-hoc meetings. However, unlike in the previous phases (selecting and building), the public partner's need to use TBS with the clan control archetype in the operating phase to minimise the two types of risk seemed to be minimal. This was mainly because of the decreased influence of transactional characteristics leading to the two types of risk. Commensurate with transactional characteristics, the operating phase did not involve complex and technological tasks, but standard tasks, which were familiar to the public partner. Further, the

phase was mainly based on the operation of power plants (machines), which required fewer employees (human behaviour) to generate electricity.

Overall, the public partner used a combination of control archetypes to minimise relational and performance risk in the selecting, building and operating phases of the EPP. All three control archetypes, namely market, bureaucratic and clan were used in the selecting phase, and two control archetypes (bureaucratic and clan) were used in both the building and operating phases. While the bureaucratic control archetype was used predominantly in the first attempt in the selecting phase and the building and operating phases, clan control became the dominant archetype in the second attempt in the selecting phase. The case also provides evidence that the public partner used PES as the strategy in both the market and bureaucratic control archetypes and trust as the strategy for the clan control archetype to minimise the two types of risk. The public partner minimised relational risk associated with the EPP using behaviour control-based PES and performance risk using outcome control-based PES. It was also able to use TBS to minimise both relational and performance risk in the EPP.

Analysis of the five contingent factors (asset specificity, uncertainty, transaction frequency, opportunism and bounded rationality) largely explained the nature of relational and performance risks in the three phases of the EPP. In particular, three transaction characteristics (asset specificity, uncertainty, transaction frequency) influenced the public partner's choice between three control archetypes in the three phases of the EPP. The transactional characteristics also determined task programmability and outcome measurability in the three phases, and influenced the public partner's choice between outcome control-based PES and behaviour control-based PES. In the selecting phase, due to the nature of transaction characteristics (high level of asset specificity and uncertainty, and low level of transaction frequency), although the public partner was not able to use both market

and bureaucratic control archetypes, it was able to successfully use the TBS with clan control archetype to select the private partner.

Five contingent factors in Appuhami *et al.*'s (2011b) framework were drawn from the theory of TCE (Williamson, 1985; Williamson, 1991; Williamson, 1996), which has predominantly informed the studies on MCS in hybrid organisations formed between public and private organisations (e.g., Dekker, 2004; Langfield-Smith and Smith, 2003; Speklé, 2001; van der Meer-Kooistra and Scapens, 2008; van der Meer-kooistra and Vosselman, 2000). However, this study reveals that there were two additional factors, namely the institutional environment of the public partner and the power differential between the public partner and the private partner that seemed to influence the public partner's choice of control archetypes.

The institutional environment includes legal and regulatory frameworks and procurement guidelines in Sri Lanka⁵⁷ (Henisz, 2000; Oxley, 1999). The public partner as a government agency was obliged to follow rules and regulations including tender procedures which characterise the use of the bureaucratic control archetype in order to maintain transparency and hence to address public accountability. It was evident that due to the influence of the institutional environment, even in the first attempt of the selecting phase of the EPP, the public partner was forced to use the bureaucratic control archetype despite the high level of asset specificity and uncertainty and eventually failed to select a private partner. For the same reason, the public partner used the bureaucratic control archetype predominantly over the private partner in the building and operating phases of the EPP, in spite of the cooperative relationship developed with the private partner by

⁵⁷ The institutional environment is defined as 'the set of fundamental political, social, social and legal ground rules that establishes the basic for production, exchange and distribution. Rules governing elections, property rights, and right of contract are examples...' (Davis and North, 1971, pp. 6-7).

using trust-based clan control archetype in the second attempt of the selecting phase. Interviewee 7-PUB recalls:

Most of the time we followed formal ways since we are responsible for carrying out our part in the agreement and there were audit quarries for invoices as well. For example, we sent letters to communicate with private partner rather than using telephone calls.

A power differential is ‘the ability of one party to a contract to be able to influence the terms and conditions of the contract or subsequent contracts in its own favour’ (Argyres and Porter Liebskind, 1999) (see also Anderson and Dekker, 2005). In the EPP, the public partner seemed to have power over the private partner in particular in building and operating phases. Power on the public partner’s side was mainly the result of the public partner’s monopolistic power as the main supplier of electricity in Sri Lanka. The public partner has 100 percent control over electricity generation, transmission, distribution and retailing in Sri Lanka. Private local electricity companies, including the private partner in this case study, mainly work for the public partner and are largely dependent on the public partner’s outsourcing activities and PPP arrangements. As a result of the power differential, the public partner seemed to use more formal procedures of bureaucratic control than informal procedures in undertaking tasks related to the EPP in the building and operating phases in particular. This was also evident when the public partner penalised the private partner for not delivering the requested daily electricity, while avoiding its penalty payments to the private partner by negotiations.

Interviewee 8-PUB described that:

Payments to private partner have been delayed since the start of the operations. The contractual agreement specifies the penalty on delay payments by our branch. The inclusion of interest is the penalty for delay payments, which should be paid with next month payment. Private partner often makes requests to make the payments on time. On several occasions, the private partner even expressed concerns about getting money from letter of credit⁵⁸. But we discussed and continued as usual.

According to interviewee 7-PUB:

Daily system control in our department issues dispatch instructions to the private partner to add daily electricity to the national grid. If private partner fails to deliver the requested daily amount of electricity, we have to impose a penalty on them. Every month there are at least three or four penalties on the private partner. We deduct the penalties from our monthly payments to the private partner.

In contrast to what was observed in relation to the influence of institutional environment, the power differential also seemed to encourage the private partner to maintain a cooperative relationship with the public partner. The maintenance of a cooperative relationship with the public partner seemed to be vital for local private electricity companies in order to survive in the electricity industry. In the selecting phase, due to the power differential, the private partner cooperated in negotiations and facilitated the public partner's use of TBS with clan control, even though the public partner changed its initial proposal, including the change from DBT to BOOT, and maintained the same draft contractual agreement questioned by the foreign private partner in the first attempt. Similarly in the building and operating phases, while the public partner predominantly used bureaucratic control, its use of

⁵⁸ According to the agreement, the local company can cover defaults in the public partner's payments from a letter of credit previously issued by the public partner. The cost of using letter of credit to cover local company's payments is higher than the interest on delayed payments.

TBS with clan control seemed to have been facilitated by the cooperative behaviour of the private partner.

6. CONCLUSION

This study provides evidence on the use of MCS to minimise risk associated with PPPs through a case study involving a power sector PPP project in Sri Lanka. It finds that the public partner uses market, bureaucratic, and clan control archetypes, and performance evaluation and trust strategies in different combinations in the three phases of the PPP. Results of the study also show that while the clan control archetype used trust as the strategy to minimise both relational and performance risks, market and bureaucratic control archetypes used performance evaluation based on either outcome control or behaviour control or both to minimise two types of risks. Further, the study documents that, in addition to the influence of the five contingent factors explained in Appuhami *et al.*'s (2011b) framework, the institutional environment largely influenced the public partner to use the bureaucratic control archetype over other archetypes throughout the life cycle of the PPP. Moreover, the results show that owing to the power differential between partners of the PPP, the public partner who had relatively more power tended to use the bureaucratic control archetype over the private partner.

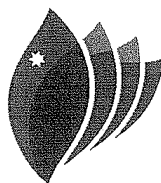
In addition to filling a gap in the literature, the study has a number of implications for practice. Managers at government departments could consider the relationships identified between control archetypes, strategies and two types of risk (relational and performance) in designing MCS in PPPs and other business arrangements with private sector. It would also be useful for managers to consider the control problems found in different phases of the PPP in managing PPP arrangements. Further, policy makers in Sri Lanka and developing countries could consider ways

in which the impact of various contextual factors explored in the study could be minimised when they are to promote public policies including PPP policy.

This study highlights a number of areas that could be further examined. Future research could examine the differences between management control patterns in PPPs in industrialised and developing countries. Such a comparative study may shed light on the differences in the public partners' perceptions about relational and performance risk due to different local contextual factors. Future studies may also examine control systems used by private partners in PPPs. A private partner is likely to introduce management controls to achieve its profit objective by undertaking a major role in different phases of a PPP such as building, operating and terminating while ensuring the achievement of social objectives of the public partner. In addition, future researchers could examine in more depth factors such as institutional environments and power differentials, which are likely to influence the use of MCS in PPPs. In examining these factors, future researchers may consider using theories such as actor network theory (Mouritsen and Thrane, 2006) and institutional theory (Burns and Scapens, 2000) to explain their findings.

APPENDIX 1

APPROVAL FROM ETHICS REVIEW COMMITTEE



15 May 2009

Mr B. A. Ranjith Appuhami
PhD Student
Department of Accounting and Finance
Faculty of Business and Economics

Reference: HE01MAY2009-D06474

Dear Mr Appuhami

FINAL APPROVAL

Title of project: Management control systems in inter-organizational relationships: With special reference to public-private partnerships in Sri Lanka

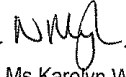
Thank you for your recent correspondence. Your response has addressed the issues raised by the Ethics Review Committee (Human Research) and you may now commence your research.

Please note the following standard requirements of approval:

1. Approval will be for a period of twelve (12) months. At the end of this period, if the project has been completed, abandoned, discontinued or not commenced for any reason, you are required to submit a Final Report on the project. If you complete the work earlier than you had planned you must submit a Final Report as soon as the work is completed. The Final Report is available at: http://www.research.mq.edu.au/researchers/ethics/human_ethics/forms
2. However, at the end of the 12 month period if the project is still current you should instead submit an application for renewal of the approval if the project has run for less than five (5) years. This form is available at http://www.research.mq.edu.au/researchers/ethics/human_ethics/forms. If the project has run for more than five (5) years you cannot renew approval for the project. You will need to complete and submit a Final Report (see Point 1 above) and submit a new application for the project. (The five year limit on renewal of approvals allows the Committee to fully re-review research in an environment where legislation, guidelines and requirements are continually changing, for example, new child protection and privacy laws).
3. Please remember the Committee must be notified of any alteration to the project.
4. You must notify the Committee immediately in the event of any adverse effects on participants or of any unforeseen events that might affect continued ethical acceptability of the project.
5. At all times you are responsible for the ethical conduct of your research in accordance with the guidelines established by the University http://www.research.mq.edu.au/researchers/ethics/human_ethics/policy

If you will be applying for or have applied for internal or external funding for the above project it is your responsibility to provide Macquarie University's Research Grants Officer with a copy of this letter as soon as possible. The Research Grants Officer will not inform external funding agencies that you have final approval for your project and funds will not be released until the Research Grants Officer has received a copy of this final approval letter.

Yours sincerely

p.s. 

Ms Karolyn White
Director of Research Ethics
Chair, Ethics Review Committee (Human Research)

Cc. Dr Sujatha Perera, Department of Accounting and Finance, Faculty of Business and Economics

ETHICS REVIEW COMMITTEE (HUMAN RESEARCH)
MACQUARIE UNIVERSITY

APPENDIX 2

INTERVIEW GUIDE

INTERVIEW GUIDE

NO	QUESTION
01	What is the overall objective of the project?
02	Was it necessary to follow a certain format in preparing the initial proposal?
03	Was this proposal evaluated by a party other than the line ministry?
04	What were the criteria used to evaluate the initial proposal (e.g., preliminary screening, clearance)?
05	<p>What was the process involved in approving the request for proposal (RFP)?</p> <p><i>Probe - Who were the personnel involved in the RFP evaluation process?</i></p> <p><i>Probe - How long did the RFP approval process take?</i></p> <p><i>Probe - How did they monitor the RFP preparation process (RFP preparation team)?</i></p> <p><i>Probe - What were the procedures to be followed by the preparation team? (e.g., time, responsibilities, activities and periodic reports)</i></p> <p><i>Probe - Was the monitoring process carried out based on the entire RFP preparation process or on the final RFP report?</i></p>
06	Who were the personnel involved in the selecting, building and operating phases of the project?
07	What was the role of each person involved in each phase of the project?
08	What were the key tasks and activities in the selection, building and operating phases?

	SELECTING PHASE Asset specificity
09	How many proposals (of the applications received) met the government's RFP requirements?
10	Was there any critical requirement that was not met by most of the proposals?
11	Was it difficult to find a private party to undertake the project?
12	What was the estimated and actual cost of the selection process?
13	Were there any provisions in the government's budget to undertake another selection process if the

	first selection process was unsuccessful?
14.	How long did the government take to complete the selection process? <i>Probe - Do you think the time taken to complete the selection process was reasonable?</i>
15	How long did it take to prepare the contract (including the negotiation period)?
16	Did the government hire consultants to undertake the selection process (including preparation of the RFP, evaluation of proposals)? <i>Probe - If yes, how much did it cost the government?</i>
	Frequency
17	Is the selection/ procurement process different from project to project?
18	Did the government have prior experience in dealing with the selected private partner?
19	Did the government have prior experience in undertaking similar projects? <i>Probe - If yes, did the government follow the same selection process for those projects?</i>
20	Did the government's Project Committee (PC)/ Cabinet Appointed Negotiation Committee (CANC) for this project have prior experience in the selection process?
	Uncertainty
21	Were there any policy or regulatory changes (relevant to the project) that affected the selecting phase?
22	Were there any political or economic changes that affected the selecting phase? <i>Probe - If yes, did they affect the selection process?</i>
23	Were there any public protests that affected the selecting phase?
24	Were there any other incidents that affected the selection process?
25	Did the government identify possible uncertain situations affecting the PPP process? <i>Probe - If yes, how?</i>
26	Were any uncertainties identified that were not included in the contract? <i>Probe - If yes, why?</i>
27	Did the government change the criteria in the REP or cost estimates during the selection process?

	<i>Probe - If yes, why?</i>
28	Did the government change the PC/CANC during the selection process? <i>Probe - If yes, why?</i>
29	Did the government change the budget or any other policy affecting the PPP during the selection process?
30	Did the private partner make changes to its initial proposal/ REF/ cost estimates during the negotiation period? <i>Probe - If yes, why?</i>
	Control archetypes
	Market
31	Did the government call for “bids” for the project both nationally and internationally?
32	How many applications did the government receive for the project?
	Market control archetype with outcome-based performance evaluation
33	Was the offer price the main consideration in the selection process among the bidders?
34	How do you rank the offer price in the critical factor test?
35	Did the government use a budget/ financial model/ public sector comparator (PSC) to evaluate the offer price?
36	Were other benchmarks used to evaluate the offer price?
37	Did the government evaluate the performance of the project team/procurement team? <i>Probe - If yes, how?</i>
	Bureaucratic
38	What criteria were used in selecting the right partner?
39	What procedures were followed in selecting the right partner?
40	Were there any situations where the required procedures were not followed? <i>Probe - If yes, why?</i>

41	How comprehensive was the contract? <i>Probe - Was it able to cover different aspects of the project?</i>
42	Was there any situation where a private partner found it difficult to follow the procedures in the contract? <i>Probe - Why?</i> <i>Probe - How was it resolved?</i>
43	Does the contract incorporate targets/structure/ incentives/penalties/ activities/ rights/responsibilities related to each key personnel?
44	What are the procedures to amend the existing contract? (e.g., informal discussions, formal meeting)
	Bureaucratic control archetype with outcome/behaviour-based performance evaluation
45	What specific procedures did the project team and cabinet-appointed negotiation team have to follow in selecting the private partner?
46	What criteria other than bid price were considered in the selection process? (e.g., financial position, feasibility, technical expertise, and time period in the field)
47	Was there a mechanism to monitor the activities of the project team? <i>Probe - If yes, how?</i> <i>Probe - Did the government evaluate the procurement team based on the overall selection process against pre-set standards/ criteria/ activities?</i>
	Clan
48	Would you feel comfortable working with a local or foreign private partner? <i>Probe - Why?</i>
49	Were any informal procedures used in selecting the private partner?
50	What was the contribution of the private partner in negotiating major aspects of the contract/ RFP/cost estimate?
51	Were there situations where the government avoided/ skipped some procedures with the objective of selecting a current (specific) private partner?

	Clan control archetype with trust-based strategy
52	Did the government consider the reputation of the private partner in making the final selection of a private partner?
53	Did the government consider previous relationships with the private partner above anything else in the selection process? (e.g., offer price, financial history)
54	Did the government consider the applicant's cultural background and localness more important than anything else? (e.g., offer price)
55	How were the following ranked in the selecting process: offer price, the relationships, trust and reputation of the private partner?
56	How was agreement reached between the parties in drawing up the contract?
57	Did the parties attempt to draw up the contract in flexible way to develop trust?
58	Were there any incidents that showed trust between the parties during the selection process?
59	Can you identify examples that showed trust between the parties during the selection period?
60	<p>Were there any disagreements/ disputes between the parties with respect to any aspect of the project during the selection period?</p> <p><i>Probe - If yes, how did the parties resolve it? (e.g., informal discussion or following the procedures outlined in the rules and regulation related to PPPs)</i></p>
61	<p>Where there any training program or workshop(s) during the selection period?</p> <p><i>Probe - What was the purpose of those workshops (e.g., develop trust, improve mutual understanding between parties about rules, regulations, norms and culture)?</i></p>
	BUILDING AND OPERATING PHASE
	Asset specificity
62	Does the contract include any provision to change the existing partner?
63	How easy is it to replace the existing partner?
64	What are the difficulties in replacing the existing partner?
65	Does the contract specify any intellectual property rights of partners?

66	Does the selected partner provide special knowledge/skills/capability that is/are rare or not available with other applicants?
67	Was the private partner allowed a learning period at the beginning of the phase? <i>Probe - Was it effective?</i> <i>Probe - How about the cost?</i>
	Frequency
68	How many similar projects, with similar activities in the building/operating phase, has the government undertaken in the past?
69	Is the building/operating phase of this PPP different from other projects undertaken by the government?
	Uncertainty
70	Were there any unexpected political events that affected the building/operating phase of the project? <i>Probe - If yes, how did that affect the project?</i>
71	Were there any changes in economic factors (e.g., inflation, interest) that affected the building/operating phase of the PPP? (e.g., budget)
72	Were there any public protests/ events that affected the building/operating phase of the project?
73	Were there any changes in government policy or regulations that affected the building/operating phase of the PPP?
74	Were there any changes in the technological environment that affected the building/operating phase of the PPP?
75	Were there any changes to the initially agreed technical specifications? <i>Probe - If yes, why?</i>
76	Did the parties make any request to change the initial contract in order to accommodate changes in the external environment during the building/operating phase? (e.g., inflation, interest rate, technical specifications)
77	Were any changes made to the initial project proposal in order to incorporate changes in the environment?

78	Did the parties encounter any difficulties in planning key tasks/activities of the building/operating phase due to changes in the external environment?
79	Were any key tasks/ activities not included in the contract due to uncertainty associated with those transactions?
80	Was it difficult for the parties to set targets/goals due to changes in the external environment (e.g., cost structure/inflation, interest rate, government policy, technological factors)

	Control Archetypes
	Market
81	Were there situations where other bids were called during the building/operating phase? <i>Probe - If yes, what was the reason?</i> <i>Probe - Did you change the contract after the bidding process?</i>
	Market control archetype with outcome-based performance evaluation
82	Did the government use benchmarks, budget or any other targets to evaluate a bid called during the building/operating phase?
83	Was there any mechanism to monitor the activities of the procurement team? <i>Probe - What was the enforcement mechanism? (e.g., incentives, appreciations and punishments)</i>
	Bureaucratic
84	Were the rules and procedures (targets/ personnel structure/ incentives/punishments/ activities/ rights/responsibilities) related to each key personnel and task strictly followed?
85	Was the contract changed during the building/operating phase? <i>Probe - If yes, why?</i>
86	Were there situations where parties disagreed about existing rules and regulations? <i>Probe - If yes, why?</i>
87	Was there any occasion where the public partner failed to follow specified procedures? <i>Probe - If yes, why? Example?</i>

	Bureaucratic control archetype with outcome/behaviour-based performance evaluation
88	What were the key tasks to be completed during the building phase?
89	Were the activities/process/specifications needed for each key task identified within the contractual agreement?
90	Were any rules and procedures specified in the contract in respect of personal behavior?
91	Were short-term performance targets (goals) set for each key task? <i>Probe - If yes, provide example?</i>
92	Was the budget for the entire PPP project prepared?
93	Were budgets prepared for each of the three phases of the project?
94	Did the partners recognize specific targets for each activity/ key task?
95	Was a budget prepared for each key task and activity?
96	Were there any tasks for which activities or targets could not be identified precisely? <i>Probe - What were they? Provide an example?</i>
97	Were specific personnel appointed to monitor activities associated with the building/operating phase?
98	Was the government directly involved in monitoring activities? <i>Probe - If yes, how?</i>
99	How often did you monitor the activities of the building/operating stage?
100	To what extent did you use progress reports to monitor the activities of the private partner? <i>Probe - What was the content of the progress reports?</i>
101	How often did the private partner provide progress reports for the project? <i>Probe - Who reviewed the progress reports?</i>
102	What methods were used to communicate between the partners? <i>Probe - How often did they communicate?</i>
103	Did the public partner's audit procedures include progress reports?

104	How did the public partner measure performance for each key task/activity identified? <i>Probe - What did the public partner measure?</i>
105	Did you compare the actual results against the targets for each task and activity?
106	What procedures were included in the contract to deal with variations from performance targets?
107	To what extent did the private partner achieve the performance targets?
108	Was feedback on performance evaluation given to the other partner on time and on a regular basis? <i>Probe - If yes, how?</i>
109	Were there provisions in the contract requiring feedback on performance? <i>Probe - Were they strictly followed?</i>
110	Was there any penalty for not achieving performance targets?
111	Were there any occasions when the public partner should have imposed a penalty due to poor performance? <i>Probe - Did the public partner impose a penalty on any of those occasions?</i> <i>Probe - If yes/no, please explain those situations?</i>
112	Were there any incentives for achieving performance targets?
113	Did the public partner specify incentive procedures in the contract?
114	What determined the service fee for the private partner during the building/operating phase? (e.g., output)
115	Were there any situations where the procedures outlined in the contract for making payments to the private partner were not followed?
116	Did the parties have any conflict/issues/disagreement with respect to the activities of the PPP during the building/operating phase?
117	How did the parties resolve conflicts? <i>Probe - Did they follow the recommendations given in the contract?</i>
	Clan
118	Were any workshops/training programs/conferences organized for the parties during the building/operating phase?

	<i>Probe - For what purpose (e.g., culture, procedures and objectives)</i>
119	Was the contract changed during the building/operating phase to provide concessions to the private partner?
120	<p>Could the parties use informal procedures rather than formal procedures to carry out key tasks or activities? (e.g., highly technical tasks)</p> <p><i>Probe - If yes, why?</i></p>
	Clan control archetype with trust-based strategy
121	Were there any key tasks in the building/operating phase for which the parties were unable to identify specific activities or targets?
122	Were there discussions between the parties prior to preparing budgets?
123	How often did the parties meet to discuss targets?
124	How did the parties organise meetings? Informally or formally?
125	<p>Were there any unanticipated events during the building/operating phase?</p> <p><i>Probe - How did you resolve such events?</i></p>
126	<p>Was the risk allocation basis as outlined in the initial contract changed during the building/operating phase?</p> <p><i>Probe - If yes, why?</i></p>
127	Did any party voluntarily accept any kind of risk in the building/operating phase?
128	<p>How often did the parties meet to discuss issues related to building/operating process?</p> <p><i>Probe - Were the meetings formal or informal?</i></p>
129	How often did the parties meet to discuss the progress of the work informally?
130	<p>Were there any situations where the performance of tasks could not be evaluated due to inability to identify targets and processes precisely?</p> <p><i>Probe - How did the parties deal with such situations?</i></p>
131	Were there any instances where the public partner disregarded the rules and resolved issues without imposing a penalty on the private partner?

132	Did the parties agree on including any incentive system in the contract?
133	Were there any instances where the public partner decided incentives on an ad hoc basis? <i>Probe - If yes, why?</i>
134	Was the service fee paid according to the contract? <i>Probe - If not, why?</i>
135	Was the service fee changed during the contract? <i>Probe - If yes, why?</i>
136	Did any activities or tasks take place that were not included in the contract? <i>Probe - If yes, how they were supposed to be monitored?</i>
137	Can you identify any examples that show trust between the parties during the building/operating period?
	Concluding questions
138	What is your overall view of the control of the PPP project? <i>Probe - Are they important for achieving the objectives of the PPP?</i>
139	Do you think that the current management controls are sufficient to manage the behavior of the private partner?
140	Do you think that the government can achieve the preset objectives of the PPP?
141	Do you think the value for money objective has been achieved?
142	Do you think that the government could save money by using the PPP concept rather than using traditional projects?

APPENDIX 3

THE PROCESS OF DATA ANALYSIS

THE PROCESS OF DATA ANALYSIS

The process of data analysis involved transforming a set of data emanating from interviews and documents “into a well-founded, coherent and illuminating narrative” (O’Dwyer, 2004, p. 389). Particularly in studies based on the case study research method, the process of data analysis ensures internal validity of the findings (Yin, 2003). This study mainly followed three main sub-processes suggested by Huberman and Miles (1994) in undertaking data analysis, namely data reduction, data display and data interpretation/conclusion drawing. The study also used the NVivo analytical software to facilitate the three sub-processes.

Data reduction process

The aim of this process was to identify ‘key themes and patterns’ (O’Dwyer, 2004, p.391) in data collected from two sources, semi-structured interviews and documents. The first step of this process involved reviewing and revisiting interview transcripts, interview notes and documents, and listening to tape recordings. This gave the researcher a general idea about management controls in the PPP and various contingent factors, before proceeding to detailed analysis of the interview transcripts and documents. The next step involved coding the interview transcripts and documents for detailed data analysis.

Data coding

This step was undertaken mainly using NVivo software. First, interview transcripts and all documents were imported to NVivo under the category of ‘internals’. Second, in-depth reading of each transcript and document was undertaken to locate and select key themes/categories in the data-set to build core codes (NVivo uses the term *node* rather than *code*). Fifteen core codes were identified for themes such

as market control archetype, bureaucratic control archetype, clan control archetype, contingent factors influencing the PPP, selecting phase, building phase and operating phase of the PPP (see Table 1). The core codes were identified based on the Hierarchical Code Structure developed drawing on variables included in the analytical framework of Appuhami *et al.* (2011b) (see Table 1, Hierarchical Code Structure, in this appendix). NVivo software also automatically generated a similar code structure (Tree nodes in NVivo) once the core codes were entered manually.

Third, the interview transcripts and documents were revisited and re-read line by line to locate sub-themes to build sub-codes under core codes. Development of sub-codes was also based mainly on the Hierarchical Code Structure shown in Table 1. Accordingly 30 sub-codes were identified in the process (see Table 1). In the sub-coding process it was ensured that new sub-themes emerging from the data-set were also sub-coded (Parker and Roffey, 1997). Since the sub-codes for new themes emerging from the data-set were not included in the predesigned Hierarchical Code Structure, they were recorded separately with new sub-codes. In this process, one sub-theme was recognised in more than one sub-code. Compared with the coding of the documents data, the process of coding data collected from the interview transcripts was not difficult, since the interview guide was designed based on the analytical framework.

Table 1: Hierarchical Code Structure

No	Variable	Core code	Sub-code
1.	Selecting phase	SP	
2.	Market control archetype (MC)	SP/MC	
3.	Performance evaluation strategy (PES)		SP/MC/PES
4.	Outcome control (O)		SP/MC/PES/O
5.	Behaviour control (B)		SP/MC/PES/B
6.	Bureaucratic control archetype (BC)	SP/BC	
7.	Performance evaluation strategy		SP/BC/PES
8.	Outcome control		SP/BC/PES/O
9.	Behaviour control		SP/BC/PES/B
10.	Clan control archetype (CC)	SP/CC	
11.	Trust-based strategy (T)		SP/CC/T
12.	Contingent factors (CF)	SP/CF	
13.	Uncertainty (U)		SP/CF/U
14.	Asset specificity (AS)		SP/CF/AS
15.	Transaction frequency (TF)		SP/CF/TF
16.	Building phase	BP	
17.	Market control archetype	BP/MC	
18.	Performance evaluation strategy		BP/MC/PES
19.	Outcome control		BP/MC/PES/O
20.	Behaviour control		BP/MC/PES/B
21.	Bureaucratic control archetype	BP/BC	
22.	Performance evaluation strategy		BP/BC/PES
23.	Outcome control		BP/BC/PES/O
24.	Behaviour control		BP/BC/PES/B
25.	Clan control archetype	BP/CC	
26.	Trust-based strategy		BP/CC/T
27.	Contingent factors	BP/CF	
28.	Uncertainty		BP/CF/U
29.	Asset specificity		BP/CF/AS
30.	Transaction frequency		BP/CF/TF
31.	Operating phase	OP	
32.	Market control archetype	OP/MC	
33.	Performance evaluation strategy		OP/MC/PES
34.	Outcome control		OP/MC/PES/O
35.	Behaviour control		OP/MC/PES/B
36.	Bureaucratic control archetype	OP/BC	
37.	Performance evaluation strategy		OP/BC/PES
38.	Outcome control		OP/BC/PES/O
39.	Behaviour control		OP/BC/PES/B
40.	Clan control archetype	OP/CC	
41.	Trust-based strategy		OP/CC/T
42.	Contingent factors	OP/CF	
43.	Uncertainty		OP/CF/U
44.	Asset specificity		OP/CF/AS
45.	Transaction frequency		OP/CF/TF

NVivo has the facility to show the number of references and sources under each core code and sub-code. Thus, it was possible to see how many interviewees responded to each theme and sub-theme. For example, the number of interviewees who responded to the questions on the use of the market control archetype in the selecting phase could be identified. During the entire process of developing core codes and sub-codes, memos were maintained in relation to each code. Each memo included notes taken during data collection (e.g., interviews), reflections, and general observations emerging during data coding. In addition, quotations and phrases, which seemed appropriate in writing the thesis were cut and pasted directly to memos. Further, memos included new themes emerged during the data coding process, and contradictions arisen from interviewees. NVivo has facilities to access the memos written through its 'Node Explorer'.

Data display process

The aim of data display was to outline the reduced data from the previous process (O'Dwyer, 2004). This was mainly undertaken through the formulation of detailed matrices encompassing both core codes and sub-codes. NVivo has the facility to develop matrices in table format, which contain rows and columns with different core codes and sub-codes. Accordingly, it was possible to see, for example, how many times the bureaucratic control archetype in building phase was identified in both documents and interview transcripts. It was also possible to see various patterns and explanations regarding three control archetypes (market, bureaucratic and clan), control strategies and contingent factors in the three phases of the PPP. Thus, the data display process displayed the entire story based on the evidence collected.

Data interpretation process

This process was mainly concerned with the preparation of more focused presentations of the case study findings (O'Dwyer, 2004). The process was based primarily on matrices developed in the previous process. It involved preparing a descriptive representation and more interpretive narratives of findings with respect to key themes and patterns identified under core codes and sub-codes. Accordingly, this process was used to develop a detailed presentation of the case findings discussed in Paper 3.

REFERENCES

- Abeyratne S. (2004) 'Economic Roots of Political Conflict: The Case of Sri Lanka', *World Economy*, 27, 8, pp. 1295–314.
- Abeywickrema M.I. (2009) 'CEB's Kerawalapitiya Headache', *The Sunday Times*, 23/10/2009, Colombo.
- ADB (2007) *Sri Lanka Country Assistance Program Evaluation: Power Sector*, Operations Evaluation Department, Asian Development Bank.
- Alawattage C., Hopper T. and Wickramasinghe D. (2007) 'Introduction to Management Accounting in Less Developed Countries', *Journal of Organizational Change*, 3, 3, pp. 183–91.
- Amarawickrama H.A. and Hunt L.C. (2005) 'Sri Lankan Electricity Supply Industry: A Critique of Proposed Reforms', *Journal of Energy and Development*, Spring, 2, pp. 239–78.
- Anderson S.W. and Dekker H.C. (2005) 'Management Control for Market Transactions: The Relation Between Transaction Characteristics, Incomplete Contract Design, and Subsequent Performance', *Management Science*, 51, 12, pp. 1734–52.
- Appuhami R., Perera S. and Perera H. (2011a) 'Coercive Policy Diffusion in a Developing Country: The Case of Public Private Partnership in Sri Lanka', *Journal of Contemporary Asia*, (forthcoming).
- ____ (2011b) 'Management Controls in Public Private Partnerships: An Analytical Framework', *Australian Accounting Review*, 21, 1, pp. 64-79.
- Argyres N.S. and Porter Liebskind J. (1999) 'Contractual Commitments, Bargaining Power, and Governance Inseparability: Incorporating History into Transaction Cost Theory', *Academy of Management Review*, 24, 1, pp. 49–63.
- Asenova D. and Beck M. (2010) 'Crucial Silences: When Accountability Met PFI and Finance Capital', *Critical Perspectives on Accounting*, 21, 1, pp. 1–13.
- Atkinson A.A. and Shaffir W. (1998) 'Standards for Field Research in Management Accounting', *Journal of Management Accounting Research*, 10, pp. 41–68.

- Barnard, C. (1968) *The functions of the executive*, 30th anniversary ed. Harvard University Press, Cambridge.
- Beh L.-S. (2010) 'Development and Distortion of Malaysian Public–Private Partnerships –Patronage, Privatised Profits and Pitfalls', *Australian Journal of Public Administration*, 69, 1, pp. 74–84.
- Bhatia B. and Gupta N. (2006) 'Lifting Constraints to Public–Private Partnerships in South Asia', 6, May, pp. 1–4.
- Birnberg J.G., Shields M.D. and Young S.M. (1990) 'The Case for Multiple Methods in Empirical Management Accounting Research (with an Illustration from Budget Setting)', *Journal of Management Accounting Research*, 2, pp. 33–66.
- Bloomfield P. (2006) 'The Challenging Business of Long-Term Public–Private Partnerships: Reflections on Local Experience', *Public Administration Review*, 66, 3, pp. 400–411.
- Boland R.J. and Schultze U. (1996) 'Narrating Accountability: Cognition and the Production of the Accountable Self', in R. Munro and J. Mouritsen (eds), *Accountability: Power, Ethos and the Technologies of Managing*, International Thomson Business Press, London, pp. 62–81.
- Broadbent J., Gill J. and Laughlin R. (2003) 'The Development of Contracting in the Context of Infrastructure Investment in the UK: The Case of the Private Finance Initiative in the National Health Service', *International Public Management Journal*, 6, 2, pp. 173–99.
- ____ (2008) 'Identifying and Controlling Risk: The Problem of Uncertainty in the Private Finance Initiative in the UK's National Health Service', *Critical Perspectives on Accounting*, 19, 1, pp. 40–78.
- Broadbent J. and Laughlin R. (2003) 'Control and Legitimation in Government Accountability Processes: The Private Finance Initiative in the UK', *Critical Perspectives on Accounting*, 14, 1/2, pp. 23–48.
- Burns J. and Scapens R.W. (2000) 'Conceptualizing Management Accounting Change: An Institutional Framework', *Management Accounting Research*, 11, 1, pp. 3–25.

- Buxbaum J.N. and Ortiz I.N. (2007) *Protecting the Public Interest: The Role of Long-Term Concession Agreements for Providing Transportation Infrastructure*, University of Southern California, Keston Institute for Public Finance and Infrastructure Policy, Los Angeles.
- Campbell D. (1997) 'The Relational Constitution of Contract and the Limits of "Economics": Kenneth Arrow on the Social Background of Markets', in S. Deakin and J. Michie (eds), *Contracts, Co-operations and Competition: Studies in Economics, Management and Law*, Oxford University Press, Oxford, pp 529-596.
- Clifton C. and Duffield C.F. (2006) 'Improved PFI/PPP Service Outcomes through the Integration of Alliance Principles', *International Journal of Project Management*, 24, 7, pp. 573–86.
- Colombo Page (2011) 'Sri Lanka's Hydro Power Generation Has Increased by Two Fold, CEB Says', *Colombo Page: Sri Lanka Internet News Paper*. Available at: http://www.colombopage.com/archive_11/Feb12_1297486810JR.php, Accessed on 14 February 2011.
- Daily News (2008) 'HSBC Arranges Euro 152.2M Loan to Facilitate New Power Plant', Lackhouse, Colombo, 27/03/2008.
- ____ (2010a) 'Kerawalapitiya Combined Cycle Power Generation: Full Glow Next Week', Lackhouse, Colombo, 09/01/2010.
- ____ (2010b) 'Productive Talks between President, UN Chief: Lanka's Strong Parliament will see Political Stability', Lackhouse, Colombo, 27/09/2010.
- Das T.K. and Teng B.-S. (2001) 'Trust, Control, and Risk in Strategic Alliances: An Integrated Framework', *Organization Studies (Walter de Gruyter GmbH & Co. KG.)*, 22, 2, pp. 251–83.
- Davis L.E. and North D.C. (1971) *Institutional Change and American Economic Growth*, Cambridge University Press, London.
- Dekker H.C. (2004) 'Control of Inter-organizational Relationships: Evidence on Appropriation Concerns and Coordination Requirements', *Accounting, Organizations & Society*, 29, 1, pp. 27–49.
- Edwards P. and Shaoul J. (2003) 'Partnerships: For Better, For Worse?', *Accounting, Auditing & Accountability Journal*, 16, 3, pp. 397–421.

- Eisenhardt, K. M. (1985) 'Control: Organizational and Economic Approaches', *Management Science*, 32, 2, pp. 134-149.
- English L.M. (2006) 'Public Private Partnerships in Australia: An Independent View of their Nature, Purpose, Incidence and Oversight', *UNSW Law Journal*, 29, 3, pp. 250-62.
- English L.M. and Baxter J. (2010) 'The Changing Nature of Contracting and Trust in Public-Private Partnerships: The Case of Victorian PPP Prisons', *ABACUS*, 46, 3, pp. 289-319.
- Fernando S. (2002) 'Meeting Sri Lanka's Future Electricity Needs', *Energy for Sustainable Development*, 6, 1, pp. 14-20.
- Forrer J., Kee J.E., Newcomer K.E. and Boyer E. (2010) 'Public-Private Partnerships and the Public Accountability Question', *Public Administration Review*, 70, 3, pp. 475-84.
- Froud J. (2003) 'The Private Finance Initiative: Risk, Uncertainty and the State', *Accounting, Organizations & Society*, 28, 6, pp. 567-89.
- Gallimore P., Williams W. and Woodward D. (1997) 'Perceptions of Risk in the Private Finance Initiative', *Journal of Property Finance*, 8 2, pp. 164-76.
- Gnanadass W. (2008) 'Gigantic Leap forward in Power Generation', *The Nation: On Sunday*, 14/12/2008, Colombo.
- GPSIP (1998) *Private Sector Infrastructure Projects*. Available at: <http://www.boi.lk/ppp/ppp_Guidelines.php>. Colombo, PPP Unit. Accessed on 18 August 2009.
- Grimsey D. and Lewis M.K. (2004) 'The Governance of Contractual Relationships in Public-Private Partnerships', *Journal of Corporate Citizenship*, 15, pp. 91-109.
- Gulati R. and Singh H. (1998) 'The Architecture of Cooperation: Managing Coordination Costs and Appropriation Concerns in Strategic Alliances', *Administrative Science Quarterly*, 43, 4, pp. 781-814.
- Hall D. (2010) *PPPs: A Critique of the Green Paper*, Public Services International Research Unit (PSIRU), London.

- Hallmans B. and Stenberg C. (1999) 'Introduction to BOOT', *Desalination*, 123, 2–3, pp. 109–14.
- Hayllar M.R. (2010) 'Public–Private Partnerships in Hong Kong: Good Governance – The Essential Missing Ingredient?', *Australian Journal of Public Administration*, 69, pp. 99–119.
- Henisz W.J. (2000) 'The Institutional Environment for Multinational Investment', *The Journal of Law, Economics, & Organization*, 16, 2, pp. 334–64.
- HM Treasury (2008) *Value for Money Assessment Guidance*, HMSO, London.
- Hodge G. and Greve C. (2010) 'Public–Private Partnerships: Governance Scheme or Language Game?', *Australian Journal of Public Administration*, 69, 1, pp. 8–22.
- Hood J. and McGarvey N. (2002) 'Managing the Risks of Public–Private Partnerships in Scottish Local Government', *Policy Studies*, 23, 1, pp. 21–35.
- Hopper T., Tsamenyi M., Uddin S. and Wickramasinghe D. (2008) 'Management Accounting in Less Developed Countries: What is Known and Needs Knowing', *Accounting, Auditing & Accountability Journal*, 22, 3, pp. 469–514.
- Huberman M. and Miles M.B. (1994) 'Data Management and Analysis Methods', in N.K. Denzin and Y.S. Lincoln (eds), *Handbook of Qualitative Research*, Sage, Thousand Oaks, pp. 428–444.
- IMF (2004) *Public Investment and Fiscal Policy*, International Monetary Fund, Washington, D.C.
- Jamali D. (2004) 'Success and Failure Mechanisms of Public Private Partnerships (PPPs) in Developing Countries', *International Journal of Public Sector Management*, 17, 5, pp. 414–30.
- Jin X.-H. and Doloi H. (2008) 'Interpreting Risk Allocation Mechanism in Public–Private Partnership Projects: An Empirical Study in a Transaction Cost Economics Perspective', *Construction Management & Economics*, 26, 7, pp. 707–21.

- Johnston J. and Gudergan S.P. (2007) 'Governance of Public–Private Partnerships: Lessons Learnt from an Australian Case?', *International Review of Administrative Sciences*, 73, 4, pp. 569–82
- Kaplan R.S. (1986) 'The Role for Empirical Research in Management Accounting', *Accounting, Organizations and Society*, 11, 4–5, pp. 429–52.
- Kerr D. (1998) 'The Private Finance Initiative and the Changing Governance of the Built Environment', *Urban Studies (Routledge)*, 35, 12, pp. 2277–301.
- Kuhnle S. and Selle P. (1992) *Government and Voluntary Organizations: A Relational Perspective*, Avebury, Aldershot.
- Kumaraswamy M.M. and Zhang X.Q. (2001) 'Governmental Role in BOT-Led Infrastructure Development', *International Journal of Project Management*, 19, 4, pp. 195–205.
- Ladduwahetty R. (2009) 'Kerawalapitiya: An Outright Disaster of Epic Proportions', *Asian Tribune*, 09/03/2009, World Institute For Asian Studies, Hallstavik.
- Langfield-Smith K. (2008) 'The Relations between Transactional Characteristics, Trust and Risk in the Start-up Phase of a Collaborative Alliance', *Management Accounting Research*, 19, 4, pp. 344–64.
- Langfield-Smith K. and Smith D. (2003) 'Management Control Systems and Trust in Outsourcing Relationships', *Management Accounting Research*, 14, 3, pp. 281–307.
- Lonsdale C. (2005) 'Post-Contractual Lock-in and the UK Private Finance Initiative (PFI): The Cases of National Savings and Investments and the Lord Chancellor's Department', *Public Administration*, 83, 1, pp. 67–88.
- Lynn L.E., Jr. (2006) *Public Management: Old and New*, Routledge, New York.
- Marshall C. and Rossman G.B. (1989) *Designing Qualitative Research*, Sage Publication, California.
- McCarthy S.C. and Tiong R.L.K. (1991) 'Financial and Contractual Aspects of Build-Operate-Transfer Projects', *International Journal of Project Management*, 9, 4, pp. 222–27.

- McKinnon J. (1988) 'Reliability and Validity in Field Research: Some Strategies and Tactics', *Accounting, Auditing & Accountability Journal*, 1, 1, pp. 34–54.
- Merchant K.A. and Simons R. (1986) 'Research and Control in Complex Organizations: An Overview', *Journal of Accounting Literature*, 5, pp. 183–201.
- Merchant K.A. and Stede W.A.V.D. (2003) *Management Control Systems: Performance Measurement, Evaluation and Incentives*, Prentice-Hall, London.
- Merna A. and Smith N.J. (1996) *Guide to the Preparation and Evaluation of Build-Own-Operate-Transfer (BOOT) Project Tenders*, Asian Law and Practice, Hong Kong.
- Miraftab F. (2004) 'Public–Private Partnerships: The Trojan Horse of Neoliberal Development', *Journal of Planning Education and Research*, 24, 1, pp. 89–101.
- Morimoto R. and Munasinghe M. (2005) 'Small Hydropower Projects and Sustainable Energy Development in Sri Lanka', *International Journal of Global Energy Issues*, 24, 1/2, pp. 3–18.
- Mouritsen J. and Thrane S. (2006) 'Accounting, Network Complementarities and the Development of Inter-organisational Relations', *Accounting, Organizations & Society*, 31, 3, pp. 241–75.
- Mubin S. and Ghaffar A. (2008) 'BOT Contracts: Applicability in Pakistan for Infrastructure development', *Pak. J. Engg. & Appl. Sci*, 3, pp. 33–46.
- Narayanan V., Schoch H.P. and Harrison G. (2007) 'The Interplay between Accounting and Management Control Patterns in Public Sector Outsourcing', *International Journal of Business Studies*, 15, 2, pp. 37–65.
- Nataraj G. (2007) 'Infrastructure Challenges in South Asia: The Role of Public–Private Partnerships', ADBI Discussion Paper 80, ADB Institute, Tokyo.
- New Zealand Office of the Auditor General (2006) *Local Government: Results of the 2004'2005 Audits*. Available at: <http://www.oag.govt.nz/local-govt/2004-05/>, Accessed on 17 August 2010.

- O'Dwyer B. (2004) 'Qualitative Data Analysis: Illuminating a Process for Transforming a 'Messy' but 'Attractive' Nuisance', in C. Humphrey and B. Lee (eds), *The Real Life Guide to Accounting Research: A Behind-the-scenes View of Using Qualitative Research Methods*, Oxford, Elsevier, pp. 391-408.
- Otley D.T. and Berry A.J. (1994) 'Case Study Research in Management Accounting and Control', *Management Accounting Research*, 5, 1, pp. 45-65.
- ____ (1998) 'Case Study Research in Management Accounting and Control', *Accounting Education*, 7, pp. 105-27.
- Ouchi W.G. (1979) 'A Conceptual Framework for the Design of Organizational Control Mechanisms', *Management Science*, 25, 9, pp. 833-48.
- ____ (1980) 'Markets, Bureaucracies, and Clans', *Administrative Science Quarterly*, 25, 1, pp. 129-41.
- Ouchi W.G. and Maguire M.A. (1975) 'Organizational Control: Two Functions', *Administrative Science Quarterly*, 20, 4, pp. 559-69.
- Oxley J.E. (1999) 'Institutional Environment and the Mechanisms of Governance: The Impact of Intellectual Property Protection on the Structure of Inter-firm Alliances', *Journal of Economic Behavior & Organization*, 38, 3, pp. 283-309.
- Parker D. and Hartley K. (2003) 'Transaction Costs, Relational Contracting and Public Private Partnerships: A Case Study of UK Defence', *Journal of Purchasing & Supply Management*, 9, 3, pp. 97-108.
- Parker L.D. and Roffey B.H. (1997) 'Methodological Themes: Back to the Drawing Board: Revisiting Grounded Theory and the Everyday Accountant's and Manager's Reality', *Accounting, Auditing and Accountability Journal*, 10, 2, pp. 212-47.
- Partnerships Victoria (2001) Guidance material, Available at: www.dtf.vic.gov.au/dtf/RWP323.nsf/0/ffa08f5c9122d76b4a2569e30022155b. Accessed on 25 October 2008.
- Perera S. (2005) 'Sharing an Experience: Field Study Methods to Understand Management Accounting Practices in a Changing Environment', *Malaysian Accounting Review*, 4, 1, pp. 93-116.

- Pollock A.M. and Price D. (2008) 'Has the NAO Audited Risk Transfer in Operational Private Finance Initiative Schemes?', *Public Money & Management*, 28, 3, pp. 173–78.
- Ramanayake W. (2008) 'An Indigenous Solution to Power Crisis', *Daily News*, Lackhouse, Colombo, 09/12/2008.
- ____ (2010) 'Ceremonial Commissioning on February 25', *Daily News*, Lackhouse, Colombo, 10/02/2010.
- RIDA and OECF (1996) *Power Sector Policy in Sri Lanka*, The Research Institute of Development Assistance and The Overseas Economic Cooperation Fund.
- Sartorius K. and Kirsten J. (2005) 'The boundaries of the Firm: Why do Sugar Producers Outsource Sugarcane Production?', *Management Accounting Research*, 16, 1, pp. 81–99.
- Sirimanna B. (2010) 'Chinese and Indian Companies Dominate Sri Lanka's Mega Project Business', *The Sunday Times*, 05/09/2010.
- Smyth H. and Edkins A. (2007) 'Relationship Management in the Management of PFI/PPP Projects in the UK', *International Journal of Project Management*, 25, 3, pp. 232–40.
- Speklé R.F. (2001) 'Explaining Management Control Structure Variety: A Transaction Cost Economics Perspective', *Accounting, Organizations & Society*, 26, 4/5, pp. 419–41.
- Sri Lanka Country Review (2003) 'Investment Overview'. *Sri Lanka Country Review*, CountryWatch Incorporated, No. 62.
- The Nation (2008) 'The CEB's Nemesis', *The Nation: On Sunday*, Colombo, 13/07/2008.
- Thomas A.V., Kalidindi S.N. and Ganesh L.S. (2006) 'Modelling and Assessment of Critical Risks in BOT Road Projects', *Construction Management & Economics*, 24, 4, pp. 407–24.
- UNESCAP (2004) *Partnership for Poverty Reduction: Pro-Poor Public Private Partnerships*, United Nations Economic and Social Commission for Asia and the Pacific, Thailand.

- van der Meer-Kooistra J. and Scapens R.W. (2008) 'The Governance of Lateral Relations between and within Organisations', *Management Accounting Research*, 19, 4, pp. 365–84.
- van der Meer-kooistra J. and Vosselman E.G.J. (2000) 'Management Control of Interfirm Transactional Relationships: The Case of Industrial Renovation and Maintenance', *Accounting, Organizations & Society*, 25, 1, pp. 51–77.
- van Ham H. and Koppenjan J. (2001) 'Building Public–Private Partnerships: Assessing and Managing Risks in Port Development', *Public Management Review*, 3, 4, pp. 593–616.
- Watawala L.R. (2006) 'Foreword', in R. Madawela (eds), *Public Private Partnerships: The Best Way to Forward Sri Lanka*, Research Intelligence Unit, Colombo, pp. 3–4.
- Westgren R. and Zering K. (1998) 'Case Study Research Methods for Firm and Market Research', *Agribusiness*, 5, pp. 415–23.
- Wijayatunga P.D.C. and Jayalath M.S. (2004) 'Assessment of Economic Impact of Electricity Supply Interruptions in the Sri Lanka Industrial Sector', *Energy Conversion and Management*, 45, 2, pp. 235–47.
- Williamson O.E. (1985) *The economic Institutions of Capitalism*, Free Press, New York.
- ____ (1991) 'Comparative Economic Organization: The Analysis of Discrete Structural Alternatives', *Administrative Science Quarterly*, 36, 2, pp. 269–96.
- ____ (1996) *The Mechanisms of Governance*, Oxford University Press, New York.
- ____ (2005) 'Transaction Cost Economics and Business Administration', *Scandinavian Journal of Management*, 21, 1, pp. 19–40.
- World Bank (1996) *Private Sector Infrastructure Development Project: Staff Appraisal Report Sri Lanka: Report No. 15391-CE*.
- World Bank (2009) Estimation of Infrastructure Investment Needs in the South Asia Region, Available at: <http://go.worldbank.org/H8HUEBT7D0>. The World Bank. Accessed on 19 October 2009.

- World Bank and PPIAF (2007) *Public Private Partnership Units*, Washington.
- Yin R.K. (1989) *Case Study Research: Design and Methods*, Sage Publications, California.
- Yiu D. and Makino S. (2002) 'The Choice between Joint Venture and Wholly Owned Subsidiary: An Institutional Perspective', *Organization Science*, 13, 6, pp. 667-683.
- Yin R.K. (2003) *Case Study Research: Design and Methods*, Sage Publications, Thousand Oaks, CA.
- Ysa T. (2007) 'Governance Forms in Urban Public–Private Partnerships', *International Public Management Journal*, 10, 1, pp. 35–57.
- Zhang X. (2005) 'Paving the Way for Public–Private Partnerships in Infrastructure Development', *Journal of Construction Engineering & Management*, 131, 1, pp. 71–80.
- Zheng J., Roehrich J.K. and Lewis M.A. (2008) 'The Dynamics of Contractual and Relational Governance: Evidence from Long-term Public–Private Procurement Arrangements', *Journal of Purchasing and Supply Management*, 14, 1, pp. 43–54.

CHAPTER FIVE

SUMMARY AND CONCLUSION

1. INTRODUCTION

The focus of this study is the use of management controls to minimise risk in PPPs in a developing country. More specifically, it has examined how the public partner has used various types of management controls to minimise behaviour risk (relational risk and performance risk) associated with an energy PPP project in Sri Lanka. The study has used multiple data sources including comprehensive surveys of the relevant literature and documents, and semi-structured interviews. As outlined in Chapter 1, this study has three objectives, and the three papers contained within the thesis focus on each of these objectives.

Paper 1 examines the diffusion of PPP policy into Sri Lanka and identifies the challenges to successful adoption of the policy in Sri Lanka. Paper 2 develops a framework to analyse systematically the use of MCS in PPPs by drawing on the ideology of transaction cost economics (TCE), organisational theory and the notion of trust. These two papers are based on the data collected through a comprehensive survey of literature and documents. Based on a case study of an energy project in Sri Lanka, paper 3 provides empirical evidence that suggests how public partners use MCS in order to minimise the risk associated with PPPs in Sri Lanka.

This chapter is organised as follows. Section 2 presents the findings of the thesis. Contributions of this thesis to the literature and practice are discussed in Section 3. The implications of the thesis are discussed in Section 4. Section 5 identifies the limitations of the thesis and Section 6 provides suggestions for future research.

2. FINDINGS

The findings of the study are summarised under three areas: PPP policy diffusion into Sri Lanka; management controls used by a public partner of a PPP in Sri Lanka; and the factors influencing the public partner's choice of control archetypes in a PPP in Sri Lanka.

2. 1. PPP policy diffusion into Sri Lanka

The study reveals that PPP policy, which was first developed in industrialised countries, was diffused into Sri Lanka with coercion from international aid organisations (e.g., the World Bank and the IMF). The evidence provided in the study also suggests that international aid organisations used conditionality attached to financial assistance to coerce the government of Sri Lanka to introduce the PPP policy. Further, the study finds that the progress in the adoption of PPP policy in Sri Lanka has been slow due to local contextual factors, such as political instability, weak regulatory framework, underdeveloped capital market, government's focus on macroeconomic objectives, lack of social support and lack of state credibility. Moreover, the study reveals that privatisation and economic liberalisation were predecessors to PPP policy in Sri Lanka, and these were new public management trends in the country.

2. 2. Management controls used by a public partner of a PPP in Sri Lanka

It is argued in the study that transferring risk associated with PPPs to private partners is problematic in the context of a developing country. It has become difficult for public partners to draft complete contracts and transfer risks associated with PPPs to private partners due to the high level of uncertainty resulting from several factors. Among them are political instability, poor legal and

regulatory framework, lack of credibility of the government, and the complexity of PPP arrangements. Moreover transferring risk to private partners is found to be more difficult in the context of developing countries Sri Lanka due to government guarantees on various aspects of PPPs such as financing, building and operating. Thus, this study shows the importance of using management controls to minimise the risk associated with PPPs in developing countries.

The study finds that the public partner uses control archetypes and strategies in different combinations in different phases of a PPP such as selecting, building and operating. This finding of the study is consistent with Cristofoli *et al.*'s (2010, p. 368) suggestion 'that "pure" control patterns are not likely to be found in reality; rather combinations of various models [archetypes] tend to emerge as a result of a mixture of their determinants'. The study also reveals that the public partner of the PPP uses PES as the strategy of both the market and bureaucratic control archetypes, and TBS as the strategy of the clan control archetype to minimise the risk associated with the PPP. Further, the evidence provided in the case study suggests that TBS minimises both the relational risk and the performance risk associated the PPP. However, PES seems to minimise relational risk if it is based on behavioural control and performance risk if it is based on outcome control.

Moreover, consistent with studies on other types of inter-organisational relationships (alliances and joint ventures formed between private sector organisations) (see, for example, Dekker, 2008), the study finds that the public partner in the PPP used management controls more extensively in the selecting phase than in other phases in order to select an appropriate private partner, thereby limiting the need for management controls in the rest of the PPP phases (building and operating).

Additionally, the study provides insights into the processes associated with PPPs in Sri Lanka, including the phases involved, activities in the different phases, the nature of each party's involvement, issues arising during the PPP life cycle, the private partner selection process and factors considered in evaluating the private party.

2. 3. Factors influencing public partner's choice of control archetypes in a PPP in Sri Lanka

The study finds that contingent factors suggested by TCE theory influence the nature of relational risk and performance risk in different phases of the PPP and the public partner's choice of control archetypes (market, bureaucratic and clan). It is also revealed that while contingent factors suggested by TCE theory were of substantial importance in the context of PPPs, the institutional environment in the country also plays a major role in the public partner's selection of management control systems in PPPs. Further, the study finds that due to the influence of the institutional environment, the public partner tended to choose the bureaucratic control archetype over other control archetypes in all phases of PPPs. Moreover, the findings of the study suggest that the power differential between the public and private partners also influences the public partner's choice between the three control archetypes in PPPs. Finally, the findings show that the public partner, which had relatively high power, tended to use more bureaucratic control archetype than other control archetypes. These findings are also consistent with those of Kamminga and Van de Meer-Kooistra (2007) on management control patterns in joint venture relationships. They find that power differential influenced certain control patterns used by parent companies in joint ventures. They further note that parent companies which used consultation-based control patterns (which has characteristics similar to the bureaucratic control archetype) tended to exercise bargaining power deliberately.

3. CONTRIBUTIONS

3.1. Contribution to literature

This thesis contributes to several streams of literature such as PPPs, management control, public policy and NPM.

In view of the lack of clarity as to how PPP policy has been diffused into developing countries and the limited studies investigating contextual factors affecting the application of PPP policy in developing countries, a main contribution of the study to the literature is that it explains how the PPP policy was diffused from industrialised countries into a developing country namely Sri Lanka, and identifies contextual factors affecting the application of PPP policy in Sri Lanka.

The second contribution of this study is that it shows that economic liberalisation and privatisation in Sri Lanka were macro-level trends of NPM resulting from stability agreements signed between the Sri Lankan government and international aid organisations. Although it has been suggested that the development of NPM is different between industrialised and developing countries (see, for example, Hood, 1991; Minogue, 2004), this study has moved a step forward by exploring the development of NPM, in particular the PPP policy, within the context of a developing country. For example, Newberry (2004) notes that the PPPs in New Zealand were announced as public policy and that the adoption of PPP policy was largely influenced by the New Zealand government's leading role in adopting accrual accounting in the public sector to facilitate the neo-liberal reform movement (NPM) in the country. It was also highlighted that the manner in which negotiations were conducted and the language used to implement neo-liberal

reforms were different between developed and developing countries (Kelsey, 2003; Newberry, 2004).

The third contribution of the study to the literature is that it develops two analytical frameworks. The analytical framework of policy diffusion from industrialised countries to developing countries was developed based on diffusion theory and policy diffusion theory in particular (presented in paper 1). It identified linkages among industrialised countries, developing countries and transfer agents in the policy diffusion process. It also highlighted various contextual factors, which influence policy adoption in the local context of a developing country.

The framework of MCS in PPPs (presented in paper 2) was developed by drawing on TCE, organisational theory and the notion of trust. The framework identifies linkages among control archetypes, control modes and control strategies and explores the relationship between management controls and two types of risk, namely relational risk and performance risk in the context of PPPs. Although, the importance of an analytical framework of management controls in inter-organisational relationships such as PPPs has been acknowledged by studies (for example, van der Meer-kooistra and Vosselman, 2000; Langfield-Smith and Smith, 2003), this study makes a significant contribution by developing a framework to systematically analyse MCS in PPPs. Both frameworks proposed in this thesis could be used by researchers to investigate similar research questions.

The fourth contribution of this study to the literature is that it empirically investigates the management controls adopted by a public partner in the selecting, building and operating phases of a PPP. It also highlights how the public partner chooses among different control archetypes within the context of various contingent factors.

The final contribution of this study to the literature is that, by paying special attention to PPPs in Sri Lanka through a case study of an energy sector PPP project, it highlights the economic importance of the PPP policy to developing countries in delivering public infrastructure facilities. It also identifies the importance of addressing challenges arising from local context in order to succeed in PPP arrangements in Sri Lanka. Further, it highlights the importance of using management controls by public partners in PPPs in Sri Lanka to minimise the risks associated with the PPP in order to achieve VFM objective. Most management accounting studies in developing countries have concentrated particularly on examining the application of accounting controls at macro level. Uddin and Hopper (2001) and Rahaman *et al.* (2007), for instance, examine the accounting control and accounting in the context of evolution of neo-liberal economic reforms (e.g., privatisation) in Bangladesh and several countries in Africa respectively. Additionally, those studies were based on large companies in private or public sectors, and limited attention was given to small government projects and public-private partnerships in particular.

3.2. Contributions to practice

For polic- makers in developing countries

The findings of this thesis confirm that policies developed in industrialised countries may not be easily transferable to developing countries, and that there is no guarantee that they would work equally well in developing countries such as Sri Lanka. The thesis also establishes that contextual factors such as political instability, underdeveloped capital market, lack of state credibility and lack of social support have largely contributed to the slow progress of PPP policy adoption in Sri Lanka. This suggests that governments in developing countries

such as Sri Lanka should be aware of such factors, and should make an effort to minimise the negative impacts of those factors when adopting the PPP policy, if the policy is to be adopted successfully. Further, governments in developing countries should make an assessment of the policies developed in industrialised countries in the light of contextual factors before introducing them in their countries.

For international aid organisations

International aid organisations (IAOs) are often recognised in the international policy diffusion literature as policy transfer agents (Holden, 2009). IAOs expect developing countries to achieve economic stability and development via the adoption of policies (e.g., PPP policy) supported by their financial assistance (Dobbin *et al.*, 2007). This thesis suggests that before transferring a policy to a developing country, IAOs should carefully examine the nature and state of its contextual factors and assess the applicability of the policy. Such an assessment should minimise the need for using coercion by IAOs over governments in developing countries to adopt foreign policies. It could also assist IAOs to ensure that the policies to be transferred would achieve their expected economic objectives.

For managers of government organisations

The study explores various control archetypes and strategies, which can be used by public sector managers in PPPs. In particular, the framework presented in the study highlights the need to select different control archetypes depending on the nature of relevant contingent factors. Such insights should help public sector managers in designing MCS in business arrangements with private parties (e.g., outsourcing), and PPPs in particular. The study also establishes the relationship

between risk minimisation and management controls, which could assist managers of government organisations in developing their risk management plans in the delivery of public services.

4. IMPLICATIONS

The study highlights certain important practices/procedures (e.g., public sector comparator) adopted in undertaking PPPs by countries such as the UK and Australia, which can guide policy makers in developing countries in deciding similar measures to be used when delivering public infrastructure facilities. The use of similar practices could help governments in developing countries to attract foreign private investors to undertake PPPs.

The study also provides some insights into the progress of PPP policy application, macro economic problems, challenges to applying public policies, and infrastructure deficiencies in Sri Lanka, which could help IAOs to make a country-level assessment of developing countries such as Sri Lanka, and direct their financial assistance accordingly.

Further, the study sheds light on different control problems (e.g., problems in negotiations and measuring outcomes) in the life cycle of a PPP. Moreover, it reveals challenges to the successful adoption of PPP policy in a local context. Such problems and challenges seem to differ from phase to phase in a PPP. It would be appropriate for managers in the public sector to take into account such problems when they design management controls for each phase of a PPP.

Finally, although each inter-organisational relationship is likely to have its own control problems, the basic elements of a MCS seem to be common for most business organisations. Therefore, the findings of the thesis can assist managers in

private sector organisations to identify the proper mix of control archetypes, control strategies and control modes needed to minimise the risk associated with their business transactions regardless of the type of the inter-organisational relationship.

5. LIMITATIONS OF THE STUDY

There are some limitations of this study, which need to be acknowledged. First, the study focuses on one PPP project in one particular country. Since the way PPPs operate seems to be different among countries and projects (see, for example, Broadbent and Laughlin, 1999), the findings presented in this study may not be representative of PPP arrangements in other countries and with other projects. This limitation seems to be common for case study-based research studies.

Second, although the theoretical framework of management controls in PPPs developed in the thesis includes four phases of a PPP lifecycle, namely selecting, building, operating and terminating, the empirical analysis of MCS in the PPP did not include the terminating phase. This was due to lack of access to a PPP project which had gone through all four phases of the PPP cycle.

Third, some inherent limitations of field study research (e.g., limitations of the human mind and data access) need to be recognised (see McKinnon, 1988). Although the study took several measures (e.g., use of an analytical framework and collection of data from multiple sources) to minimise such limitations, the study might still be influenced by these limitations.

6. SUGGESTIONS FOR FUTURE RESEARCH

The thesis highlights a number of areas for future research. First, the theoretical framework of policy diffusion developed in the thesis could be used by future researchers to examine the diffusion of PPP policy from one industrialised country to another industrialised country. It is not clear whether the diffusion of PPP policy between industrialised countries has resulted from coercion or other mechanisms such as mimicry, competition and learning. Such a study might also provide some insights into contextual factors influencing the adoption of PPP policy in industrialised countries, which could differ from those in developing countries.

Further, it would be beneficial to undertake future research to examine more closely other factors such as the institutional environment and power differentials, and their influence on the use of MCS in PPPs. While the five contingent factors of TCE theory (opportunism, bounded rationality, uncertainty, transaction frequency and asset specificity) identified in the theoretical framework developed in paper 2 are found to be useful in explaining MCS, the findings of paper 3 reveal that factors such as institutional environment and power differentials are also likely to influence the public partner's choice between three control archetypes in PPPs. In examining such factors, certain other theories such as actor network theory (Mouritsen and Thrane, 2006) and institutional theory (Burns and Scapens, 2000) could be used.

Future research may also undertake comparative studies of management control patterns in PPPs in industrialised and developing countries. Since the nature of contextual factors leading to risk is different between developing and industrialised countries, management control patterns used by the parties to minimise such risks associated with PPPs might also differ accordingly. Such comparative studies might also shed light on differences of public partners'

perceptions of relational risk and performance risk under different local contextual factors.

Moreover, a future study could examine MCS in PPPs from the private partner's point of view. The private partner in a PPP is also likely to introduce management controls to ensure the achievement of a profit goal in undertaking agreed tasks in different phases of the PPP while facilitating the VFM objective of the public partner.

Finally, more longitudinal studies of this nature would demonstrate whether the management control patterns identified in this thesis are idiosyncratic or representative of management control patterns in typical PPPs. Such a longitudinal study incorporating all phases (selecting, building, operating and terminating) of a PPP life cycle may help to further extend the analysis of the use of MCS under different contingent factors over the duration of the PPP life cycle.

REFERENCES

- Abdel Aziz A.M. (2007) 'Successful Delivery of Public-Private Partnerships for Infrastructure Development', *Journal of Construction Engineering & Management*, 133, 12, pp. 918-931.
- Abeyratne S. (2004) 'Economic Roots of Political Conflict: The Case of Sri Lanka', *World Economy*, 27, 8, pp. 1295-314.
- Abeywickrema M.I. (2009) 'CEB's Kerawalapitiya Headache', *The Sunday Times*, Colombo, 23/10/2009.
- ADB (2004) *Country Strategy and Program Update: 2005- 2006 Sri Lanka*, Asian Development Bank, Mandaluyong.
- ADB (2004) *Review of Governance and Public Management for Sri Lanka*, Asian Development Bank, Mandaluyong.
- ADB (2005) *Country Strategy and Program Update: 2006- 2008*, Asian Development Bank, Mandaluyong.
- ADB (2005) *Equity Investment and Loan to the Colombo Port Development Project in the Democratic Socialist Republic of Sri Lanka*, Asian Development Bank, Mandaluyong.
- ADB (2007) *Sri Lanka Country Assistance Program Evaluation: Power Sector*. Operations Evaluation Department, Asian Development Bank, Mandaluyong.
- ADB (2009) *Country Assistance Plans - Sri Lanka*, Asian Development Bank, Mandaluyong.
- Adler P. S. (2001) 'Market, Hierarchy, and Trust: The Knowledge Economy and the Future of Capitalism', *Organization Science*, 12, 2, pp. 215-234.
- Alawattage C., Hopper T. and Wickramasinghe D. (2007) 'Introduction to Management Accounting in Less Developed Countries', *Journal of Organizational Change*, 3, 3, pp. 183-91.
- Alles L. (2008) 'Project Financing in the Sri Lankan Context', *The Chartered Accountant*, 43, 2, pp. 7-11.

- Amarawickrama H.A. and Hunt L.C. (2005) 'Sri Lankan Electricity Supply Industry: A Critique of Proposed Reforms', *Journal of Energy and Development*, Spring, 2, pp. 239–78.
- Anderson S.W. and Dekker H.C. (2005) 'Management Control for Market Transactions: The Relation Between Transaction Characteristics, Incomplete Contract Design, and Subsequent Performance', *Management Science*, 51, 12, pp. 1734–52.
- Appuhami R., Perera S. and Perera H. (2011) 'Coercive Policy Diffusion in a Developing Country: The Case of Public Private Partnership in Sri Lanka', *Journal of Contemporary Asia*, (forthcoming).
- Appuhami R., Perera S. and Perera H. (2011) 'Management Controls in Public Private Partnerships: An Analytical Framework', *Australian Accounting Review*, 21, 1, pp. 64–79.
- Argyres N.S. and Porter Liebskind J. (1999) 'Contractual Commitments, Bargaining Power, and Governance Inseparability: Incorporating History into Transaction Cost Theory', *Academy of Management Review*, 24, 1, pp. 49–63.
- Arunatilake N., Jayasuriya S. and Kelegama S. (2001) 'The Economic Cost of the War in Sri Lanka', *World Development*, 29, 9, pp. 1483–1500.
- Asenova D. and Beck M. (2010) 'Crucial Silences: When Accountability Met PFI and Finance Capital', *Critical Perspectives on Accounting*, 21, 1, pp. 1–13.
- Athukorala P. (2007) 'The Role of the International Donor Agencies in the Politics of Sri Lanka', *Japanese Journal of Political Science*, 8, 2, pp. 263–282.
- Atkinson A.A. and Shaffir W. (1998) 'Standards for Field Research in Management Accounting', *Journal of Management Accounting Research*, 10, pp. 41–68.
- Auditor-General of New South Wales (2006) *The News Schools Privately Financed Project*, Auditor-General's Report Performance Audit, March, Sydney.

- Balasooriya A., Alam Q. and Coghill K. (2006) 'The effectiveness of the Telecommunications Regulatory Regime: The Case of Sri Lanka Telecom', *Public Administration and Development*, 26, pp. 383-393.
- Balasooriya A.F., Alam Q. and Coghill K. (2008) 'Market -based Reforms and Privatization in Sri Lanka', *International Journal of Public Sector Management*, 21, 1, pp. 58-73.
- Barnard C. (1968) *The functions of the executive*, 30th anniversary ed, Harvard University Press, Cambridge.
- Barton D., Coombes P. and Wong S.C.Y. (2004) 'Asia's Governance Challenge', *McKinsey Quarterly*, 2, pp. 54-61.
- Battaglio J.R.P. and Khankarli G.A. (2008) 'Toll Roads, Politics, and Public-Public Partnerships: The Case of Texas State Highway 121', *Public Works Management & Policy*, 13, 2, pp. 138-148.
- Beh L.-S. (2010) 'Development and Distortion of Malaysian Public-Private Partnerships –Patronage, Privatised Profits and Pitfalls', *Australian Journal of Public Administration*, 69, 1, pp. 74–84.
- Bello D.C. and Gilliland, D.I. (1997) 'The Effect of Output Controls, Process Controls, and Flexibility on Export Channel Performance', *Journal of Marketing*, 61, 1, pp. 22–38.
- Berry F.S. and Berry W.D. (1990) 'State Lottery Adoption as Policy Innovations: An Event History Analysis', *American Political Science Review*, 84, 2, pp. 395-415.
- Bhatia B. and Gupta N. (2006) 'Lifting Constraints to Public-Private Partnerships in South Asia', 6, May, pp. 1-4.
- Biersteker T.J. (1995) 'The Triumph of Liberal Economic Ideas in the Developing World', in B. Stallings (eds), *Global Change, Regional Response: The New International Context of Development*, Cambridge University Press, Cambridge, pp. 174-198.
- BII (1997) *Private Sector Participation in Infrastructure Development in Sri Lanka*, Bureau of Infrastructure Investment, Colombo.

- Bing L., Akintoye A., Edwards P.J. and Hardcastle C. (2005) 'Critical Success Factors for PPP/PFI Projects in the UK Construction Industry,' *Construction Management & Economics*, 23, 5, pp. 459-471.
- Bing L., Akintoye A. (2003) 'An Overview of Public-Private Partnerships', in A. Akintoye, B. Matthias, C. Hardcastle (eds), *Public-Private Partnerships: Managing Risks and Opportunities*, Blackwell Publishing, Oxford, pp. 3-30.
- Birnberg J.G., Shields M.D. and Young S.M. (1990) 'The Case for Multiple Methods in Empirical Management Accounting Research (with an Illustration from Budget Setting)', *Journal of Management Accounting Research*, 2, pp. 33-66.
- Blanken A., Dewulf, G. (2010) 'PPPs in Health: Static or Dynamic?', *Australian Journal of Public Administration*, 69, 1, pp. 35-47.
- Blau P.M. (1964) *Exchange and Power in Social Life*, Wiley, New York.
- Bloomfield P. (2006) 'The Challenging Business of Long-Term Public-Private Partnerships: Reflections on Local Experience', *Public Administration Review*, 66, 3, pp. 400-411.
- Boland R.J. and Schultze U. (1996) 'Narrating Accountability: Cognition and the Production of the Accountable Self', in R. Munro and J. Mouritsen (eds), *Accountability: Power, Ethos and the Technologies of Managing*, International Thomson Business Press, London, pp. 62-81.
- Broadbent J. and Laughlin R. (1999) 'The Private Finance Initiative: Clarification of a Future Research Agenda', *Financial Accountability & Management*, 15, 2, pp. 15 - 14.
- Broadbent J. and Laughlin R. (2003) 'Control and Legitimation in Government Accountability Processes: The Private Finance Initiative in the UK', *Critical Perspectives on Accounting*, 14, 1/2, pp. 23-48.
- Broadbent J. and Laughlin R. (2005) 'The Role of PFI in the UK Government's Modernisation Agenda,' *Financial Accountability & Management*, 21, 1, pp. 75-97.
- Broadbent J., Gill J. and Laughlin R. (2003) 'The Development of Contracting in the Context of Infrastructure Investment in the UK: The Case of the Private

- Finance Initiative in the National Health Service', *International Public Management Journal*, 6, 2, pp. 173–99.
- Broadbent J., Gill J. and Laughlin R. (2008) 'Identifying and Controlling Risk: The Problem of Uncertainty in the Private Finance Initiative in the UK's National Health Service', *Critical Perspectives on Accounting*, 19, 1, pp. 40–78.
- Broadbent J., Gill, J. and Laughlin R., (2004) 'The Development of Contracting in the Context of Infrastructure Investment in the UK: The Case of the Private Finance Initiative in the National Health Service', in L.R. Jones (eds), *Strategies for Public Management Reform (Research in Public Policy Analysis and Management)*, Emerald Group Publishing, Oxford, pp. 55–83.
- Burns J. and Scapens R.W. (2000) 'Conceptualizing Management Accounting Change: An Institutional Framework', *Management Accounting Research*, 11, 1, pp. 3–25.
- Buskens V., Batenburg R. and Weesie J. (2003) 'Embedded Partner Selection in Relations between Firms', in P.M. Lounsbury (eds), *The Governance of Relations in Markets and Organizations. Research in the Sociology of Organizations*, Emerald Group Publishing Limited, Oxford, pp. 107–33.
- Buxbaum J.N. and Ortiz I.N. (2007) *Protecting the Public Interest: The Role of Long-Term Concession Agreements for Providing Transportation Infrastructure*, University of Southern California, Keston Institute for Public Finance and Infrastructure Policy, Los Angeles.
- Caglio A. and Ditillo A. (2008) 'A Review and Discussion of Management Control in Inter-Firm Relationships: Achievements and Future Directions', *Accounting, Organizations and Society*, 33, 7-8, pp. 865-898.
- Campbell D. (1997) 'The Relational Constitution of Contract and the Limits of 'Economics': Kenneth Arrow on the Social Background of Markets', in S. Deakin and J. Michie (eds), *Contracts, Co-operations and Competition: Studies in Economics, Management and Law*. Oxford University Press, Oxford, pp 529-596.
- Caron C. and Costa D.D. (2007) 'There's a Devil on Wayamba Beach: Social Drama of Development and Citizenship in Northwest Sri Lanka', *Journal of Asian and African Studies*, 42, 5, pp. 415-445.

- Cassimon D. and Engelen P.-J. (2005) 'Impact of the Legal and Institutional Framework on the Financial Architecture of New Economy Firms in Developing Countries', *Information Economics and Policy*, 17, 2, pp. 247-269.
- CEB (2009) Private Power Projects, Available at:
<http://www.ceb.lk/PVT/Completed/>. Accessed on 16 October 2009.
- Celly K.S. and Frazier G.L. (1996) 'Outcome-based and Behaviour-based Coordination Efforts in Channel Relationships', *Journal of Marketing Research*, 33, 2, pp. 200–210.
- Central Bank of Ceylon (1968) *Annual Report for 1968*, Colombo.
- Central Bank of Sri Lanka (2004) *Public Debt Management and Debt Profile of Sri Lanka*, Public Debt Department at Central Bank of Sri Lanka, Colombo.
- Challagalla G. N. and Shervani T. A. (1997) 'A Measurement Model of the Dimensions and Types of Output and Behavior Control: An Empirical Test in a Sales Force Context', *Journal of Business Research*, 39, 3, pp. 159-172.
- Chiles T.H. and McMackin J. F. (1996) 'Integrating Variable Risk Preferences Trust and Transaction Cost Economic', *Academy of Management Review*, 21, 1, pp. 73-99.
- Clifton C. and Duffield C.F. (2006) 'Improved PFI/PPP Service Outcomes through the Integration of Alliance Principles', *International Journal of Project Management*, 24, 7, pp. 573–86.
- Coase R.H., (1937) *The Nature of the Firm*, Irwin, Homewood, IL.
- Colombo Page (2011) 'Sri Lanka's Hydro Power Generation Has Increased by Two Fold, CEB Says', *Colombo Page: Sri Lanka Internet News Paper*. Available at:
http://www.colombopage.com/archive_11/Feb12_1297486810JR.php, Accessed on 14 February 2011.
- Common R. (1998) 'The New Public Management and Policy Transfer: The Role of International Organizations', in M. Minogue, C. Polidano, D. Hulme (eds), *Beyond the New Public Management*, Edward Elgar, Cheltenham, pp. 59-75.

- Corea G. (2008) *Gamani Corea: My Memoirs*, Gamini Corea Foundation, Colombo.
- Cristofoli D., Ditillo A., Liguori M., Sicilia M. and Steccolini I. (2010) 'Do Environmental and Task Characteristics Matter in the Control of Externalized Local Public Services? Unveiling the Relevance of Party Characteristics and Citizens' Offstage Voice', *Accounting, Auditing & Accountability Journal*, 23, 3, pp. 350–72.
- Daily News (2003) 'Mihaly International Canada to Sue GOSL', *Daily News*, Lackhouse: Colombo, 23/01/2003.
- Daily News (2008) 'HSBC Arranges Euro 152.2M Loan to Facilitate New Power Plant', *Daily News*, Lackhouse, Colombo, 27/03/2008.
- Daily News (2010) 'Kerawalapitiya Combined Cycle Power Generation: Full Glow Next Week', *Daily News*, Lackhouse, Colombo, 09/01/2010.
- Daily News (2010) 'Productive Talks between President, UN Chief: Lanka's Strong Parliament will See Political Stability', *Daily News*, Lackhouse, Colombo, 27/09/2010.
- Das T.K. and Teng B.-S. (1996) 'Risk Types and the Inter-Firm Alliance Structures', *Journal of Management Studies*, 33, 6, pp. 827–43.
- Das T.K. and Teng B.-S. (1998) 'Between Trust and Control: Developing Confidence in Partner Cooperation in Alliances', *Academy of Management Review*, 23, 3, pp. 491–512.
- Das T.K. and Teng B.-S. (1999) 'Managing Risks in Strategic Alliances', *Academy of Management Executive*, 13, 4, pp. 50–62.
- Das T.K. and Teng B.-S. (2001) 'Trust, Control, and Risk in Strategic Alliances: An Integrated Framework', *Organization Studies (Walter de Gruyter GmbH & Co. KG.)*, 22, 2, pp. 251–83.
- Das, T. K and Teng, B.S. (2000) 'Instabilities of Strategic Alliances: An Internal Tensions Perspective', *Organization Science*, 11, 1, pp. 77-101.
- Das, T. K. (2006) 'Strategic Alliance Temporalities and Partner Opportunism', *British Journal of Management*, 17, 1, pp. 1-21.

- Davis L.E. and North D.C. (1971) *Institutional Change and American Economic Growth*, Cambridge University Press, London.
- de Bettignies J.-E. and Ross T.W. (2004) 'The Economics of Public-Private Partnerships,' *Canadian Public Policy*, 30, 2, pp. 135-154.
- Deakin S., Lane C. and Wilkinson F. (1997) 'Contract Law, Trust Relations and Incentives for Co-operation: A Comparative Study', in S. Deakin and J. Michie (eds), *Contracts, Co-operation and Competition: Studies in Economics, Management Law*, Oxford University Press, Oxford, pp.105–39.
- Dekker H.C. (2004) 'Control of Inter-organizational Relationships: Evidence on Appropriation Concerns and Coordination Requirements', *Accounting, Organizations & Society*, 29, 1, pp. 27–49.
- Dekker H.C. (2008) 'Partner Selection and Governance Design in Interfirm Relationships', *Accounting, Organizations and Society*, 33, 7–8, pp. 915–41.
- Devapriya K.A.K. (2006) 'Governance Issues in Financing of Public-Private Partnership Organizations in Network Infrastructure Industries', *International Journal of Project Management*, 24, 7, pp. 557-65.
- Dobbin F., Simmons B. and Garrett G. (2007) 'The Global Diffusion of Public Policies: Social Construction, Coercion, Competition, or Learning?', *Annual Review of Sociology*, 33, 1, pp. 449-72.
- Dolowitz D. and Marsh D. (1996) 'Who Learns What from Whom: A Review of the Policy Transfer Literature', *Political Studies*, 44, 2, pp. 243-257.
- EC (2006) *The EC and Sri Lanka: Co-operation Strategy*, The European Commission.
- Edelenbos J. and Klijn E.H. (2007) 'Trust in Complex Decision-making Networks: Theoretical and Empirical Exploration', *Administration and Society*, 39, 1, pp. 25-50.
- Edwards P. and Shaoul J. (2003) 'Partnerships: For Better, For Worse?', *Accounting, Auditing & Accountability Journal*, 16, 3, pp. 397–421.

- EF (2001) *Killing at Colombo - Katunayake Expressway Worksite: Who is responsible for these deaths?*, Environmental Foundation. Colombo.
- Eisenhardt K. M. (1985) 'Control: Organizational and Economic Approaches', *Management Science*, 32, 2, pp. 134-49.
- Eisenstadt S. N. (1968) *Max Weber on Charisma and Institution Building*, University Press, Chicago.
- Embuldeniya D.K. (2000) 'Economic Reforms and the Corporate Sector in Sri Lanka', *Contemporary South Asia*, 9, 2, pp. 165-179.
- English L.M. (2006) 'Public Private Partnerships in Australia: An Independent View of their Nature, Purpose, Incidence and Oversight', *UNSW Law Journal*, 29, 3, pp. 250-62.
- English L.M. and Baxter J. (2010) 'The Changing Nature of Contracting and Trust in Public-Private Partnerships: The Case of Victorian PPP Prisons', *ABACUS*, 46, 3, pp. 289-319.
- English L.M. and Guthrie J. (2003) 'Driving Privately Financed Projects in Australia: What Makes Them Tick?', *Accounting, Auditing & Accountability Journal*, 16, 3, pp. 493-511.
- English L. M. (2005) 'Using Public-Private Partnerships to Achieve Value for Money in the Delivery of Healthcare in Australia', *International Journal of Public Policy*, 1, 1/2, pp. 91-121.
- English L.M. and Skellern M. (2005) 'Public Private Partnerships and Public Sector Management Reform: A Comparative Perspective', *Special Issue: International Journal of Public Policy*, 1, 1/2, pp. 1-21.
- Evans M. (2009) 'Policy Transfer in Critical Perspective', *Policy Studies*, 30, 3, pp. 243-268.
- Evans M. and Davies J. (1999) 'Understanding Policy Transfer: A Multi-Level, Multi-Disciplinary Perspective', *Public Administration*, 77, 2, pp. 361-385.
- Fernando S. (2002) 'Meeting Sri Lanka's Future Electricity Needs', *Energy for Sustainable Development*, 6, 1, pp. 14-20.

- Forrer J., Kee J.E., Newcomer K.E. and Boyer E. (2010) 'Public-Private Partnerships and the Public Accountability Question', *Public Administration Review*, 70, 3, pp. 475-84.
- Froud J. (2003) 'The Private Finance Initiative: Risk, Uncertainty and the State', *Accounting, Organizations & Society*, 28, 6, pp. 567-89.
- FSAP (2008) *Sri Lanka: Financial Sector Assessment*, World Bank and IMF.
- Gallimore P., Williams W. and Woodward D. (1997) 'Perceptions of Risk in the Private Finance Initiative', *Journal of Property Finance*, 8, 2, pp. 164-76.
- Gambetta D. (1988) 'Can We Trust?', in D. Gambetta (eds), *Trust: Making and Breaking Cooperative Relations*, Blackwell, New York, pp. 213-237.
- Gavieta R.C. (2006) 'How Contract Rights and Public Sector Governance Affect Infrastructure Investment: The Philippine Experience', *Journal of Structured Finance*, 12, 1, pp. 90-94.
- Gendron Y., Cooper D.J. and Townley B. (2001) 'In the Mame of Accountability - State Auditing, Independence and New Public Management', *Accounting, Auditing & Accountability Journal*, 14, 3, pp. 278 - 310.
- Gnanadass W. (2008) 'Gigantic Leap forward in Power Generation', *The Nation: On Sunday*, Colombo, 14/12/2008.
- GPSIP (1998) *Private Sector Infrastructure Projects*. Available at: http://www.boi.lk/ppp/ppp_Guidelines.php. Colombo: PPP Unit. Accessed on 18 August 2009.
- Greve C. (2003) 'When Public-Private Partnerships Fail: The Extreme Case of the NPM-inspired Local Government of Farum in Denmark', paper for the EGPA-conference, 3-6 September, Oerias, Portugal.
- Grimsey D. and Lewis M.K. (2004) 'The Governance of Contractual Relationships in Public-Private Partnerships', *Journal of Corporate Citizenship*, 15, pp. 91-109.
- Grimsey D. and Lewis M.K. (2002) 'Evaluating the Risks of Public Private Partnerships for Infrastructure Projects', *International Journal of Project Management*, 20, 2, pp.107-118.

- Gulati R. and Singh H. (1998) 'The Architecture of Cooperation: Managing Coordination Costs and Appropriation Concerns in Strategic Alliances', *Administrative Science Quarterly*, 43, 4, pp. 781–814.
- Hall D. (2010) *PPPs: A Critique of the Green Paper*, Public Services International Research Unit (PSIRU), London.
- Hall J. (1998) 'Private Opportunity, Public Benefit?', *Fiscal Studies*, 19, 2, pp. 121–40.
- Hallmans B. and Stenberg C. (1999) 'Introduction to BOOT', *Desalination*, 123, 2–3, pp. 109–14.
- Haque M.S. (1996) 'The Contextless Nature of Public Administration in Third World Countries', *International Review of Administrative Sciences*, 62, 3, pp. 315–329.
- Haque M.S. (1996) 'Public Service under Challenge in the Age of Privatization', *Governance*, 9, 2, pp. 186–216.
- Hayllar M.R. (2010) 'Public–Private Partnerships in Hong Kong: Good Governance – The Essential Missing Ingredient?', *Australian Journal of Public Administration*, 69, pp. 99–119.
- Heald D. (1992) 'The Relevance of Privatisation to Developing Economies', in B. Smith (eds), *Progress in Development Administration*. John Wiley & Sons, Chichester, pp. 59–74.
- Heald D. (2003) 'Value for Money Tests and Accounting Treatment in PFI Schemes,' *Accounting, Auditing & Accountability Journal*, 16, 3, pp. 342–371.
- Henisz W.J. (2000) 'The Institutional Environment for Multinational Investment', *The Journal of Law, Economics, & Organization*, 16, 2, pp. 334–64.
- Henisz W.J., Zelner B.A. and Guillén M.F. (2005) 'The Worldwide Diffusion of Market-Oriented Infrastructure Reform, 1977–1999', *American Sociological Review*, 70, 6, pp. 871–897.
- Hernandez-Espallard M. and Arcas-Lario N. (2008) 'Outcome and Behaviour Control in Distribution Partnerships: The Role of Trust and Dependence

- and Their Effects on Performance', *The International Review of Retail, Distribution and Consumer Research*, 18, 1, pp. 63-86.
- HM Treasury (2008) *Value for Money Assessment Guidance*, HMSO, London.
- Hodge G. and Greve C. (2010) 'Public-Private Partnerships: Governance Scheme or Language Game?', *Australian Journal of Public Administration*, 69, 1, pp. 8-22.
- Hodge G.A. (2004) 'The Risky Business of Public-Private Partnerships', *Australian Journal of Public Administration*, 63, 4, pp. 37-49.
- Holden C. (2009) 'Exporting Public-Private Partnerships in Healthcare: Export Strategy and Policy Transfer', *Policy Studies*, 30, 3, pp. 313-32.
- Hood C. (1991) 'A Public Management for All Seasons?', *Public Administration*, 69, 1, pp. 3-19.
- Hood C. (1995) 'The New Public Management in the 1980s: Variation on a Theme', *Accounting, Organizations and Society*, 20, 2/3, pp. 93-109.
- Hood J. and McGarvey N. (2002) 'Managing the Risks of Public-Private Partnerships in Scottish Local Government', *Policy Studies*, 23, 1, pp. 21-35.
- Hopper T., Tsamenyi M., Uddin S. and Wickramasinghe D. (2008) 'Management Accounting in Less Developed Countries: What is Known and Needs Knowing', *Accounting, Auditing & Accountability Journal*, 22, 3, pp. 469-514.
- Huberman M. and Miles M.B. (1994) 'Data Management and Analysis Methods', in N.K. Denzin and Y.S. Lincoln (eds), *Handbook of Qualitative Research*, Sage Publication, Thousand Oaks, pp. 428-444.
- IMF (2004) *Public Investment and Fiscal Policy*. International Monetary Fund: Washington, D.C.
- IPS (2010) Developing the Capital Market: Issues and Constraints, Available at: <http://www.ips.lk/macro/reagenda.html> Colombo: Institute of Policy Studies, Accessed on 26 January 2010.

- Ivanova V. and Evans M. (2004) 'Policy Transfer in a Transition State: The Case of Local Government Reform in the Ukraine', in M. Evans (eds), *Policy Transfer in Global Perspective*, Ashgate, England, pp. 95-113.
- Jacobson C. and Choi S.O. (2008) 'Success Factors: Public Works and Public-Private Partnerships', *International Journal of Public Sector Management*, 21, 6, pp. 637-657.
- Jain R. (1993) 'Review the Policy Changes in the Indian Telecom Sector: Implication for Decision Makers', *Journal of Global Information Management*, 1, 3, pp. 33-43.
- Jamali D. (2004) 'Success and Failure Mechanisms of Public Private Partnerships (PPPs) in Developing Countries', *International Journal of Public Sector Management*, 17, 5, pp. 414-30.
- James O. and Lodge M. (2003) 'The Limitations of Policy Transfer and Lesson Drawing for Public Policy Research', *Political Studies Review*, 1, 2, pp. 179-93.
- Jayasundara P.B. (2007) 'Key Policy Issues', in R. Madawela (eds), *Public Private Partnerships, Best Way Forward for Sri Lanka*, Research Intelligence Unit, Colombo, pp. 7-15.
- Jayawardena L. (1997) 'Sri Lanka: Reforming Public Administration', *The Report on Governance: Promoting Sound Development Management*, ADB, Fukupka, pp. 80-99.
- Jefferies M., Gameson R. and Rowlinson S. (2002) *Critical Success Factors of the BOOT Procurement System: Reflections from the Stadium Australia Case Study*. Blackwell Publishing Limited, Oxford.
- Jin X.-H. and Doloi H. (2008) 'Interpreting Risk Allocation Mechanism in Public-Private Partnership Projects: An Empirical Study in a Transaction Cost Economics Perspective', *Construction Management & Economics*, 26, 7, pp. 707-21.
- Johansson, T. and Siverbo, S. (2011) 'Governing Cooperation Hazards of Outsourced Municipal Low Contractibility Transactions: An Exploratory Configuration Approach', *Management Accounting Research*, forthcoming.

- Johnson H. T. (1983) 'The Search for Gains in Markets and Firms: A Review of the Historical Emergence of Management Accounting Systems', *Accounting, Organizations and Society*, 8, 2-3, pp. 139-146.
- Johanson J. and Mattsson L.-G. (1991) 'Interorganizational Relations in Industrial systems: A Network Approach Compared with the Transactions-Cost Approach', in Thompson, G., Frances, J., Levacic, R. and Mitchell, J. (eds), *Markets, Hierarchies and Networks: The Coordination of Social Life*, Sege Publications, London, pp. 256-264.
- Johnston J. and Gudergan S.P. (2007) 'Governance of Public-Private Partnerships: Lessons Learnt from an Australian Case?', *International Review of Administrative Sciences*, 73, 4, pp. 569-82.
- Jones O. (2005) 'Managing Public-Private Partners: The Enactment of a New Business Venture', *Technovation*, 25, pp. 587-597.
- Kale P., Singh H. and Perlmutter H. (2000) 'Learning and Protection of Proprietary Assets in Strategic Alliances: Building Relational Capital', *Strategic Management Journal*, 21, 3, pp. 217-37.
- Kamminga, P.E. and Van der Meer-Kooistra, J. (2007) 'Management Control Patterns in Joint Venture Relationships: A Model and an Exploratory Study', *Accounting, Organizations & Society*, 32, ½, pp. 135-58.
- Kanes (2005) 'Public-Private Partnership for Growth and Development', *The Island*, Colombo, Sri Lanka, 3/07/2005.
- Kaplan R.S. (1986) 'The Role for Empirical Research in Management Accounting', *Accounting, Organizations and Society*, 11, 4-5, pp. 429-52.
- Kappagoda H. (2004) 'Public Debt: Institutional Issues', in S. Kelegama (eds), *Economic Policy in Sri Lanka: Issues and Debates*, Sage Publication, New Delhi, pp. 153-176.
- Kelegama S. (1989) 'The Speed and Stages of a Trade Liberalization Strategy: the Case of Sri Lanka', *Marga Quarterly Journal*, 10, 1, pp. 59-93.
- Kelegama S. (1997) 'Privatization and the Public Exchequer: Some Observations from the Sri Lanka Experience', *Asia Pacific Development Journal*, 4, 1, pp. 14-25.

- Kelegama S. (2006) *Development Under Stress: Sri Lankan Economy in Transition*, Sage Publications, New Delhi.
- Kelsey, J. (2003) '*Free Trade at Any Price? The World Trade Organisation, Doha Round*', Arena, New Zealand.
- Keong C.H., Tiong R.L.K. and Alum j. (1997) 'Conditions for Successful Privately Initiated Infrastructure Projects', in *Proceedings of the Institute of Civil Engineers, Civil Engineering*, 120, May, pp. 59-65.
- Kerr D. (1998) 'The Private Finance Initiative and the Changing Governance of the Built Environment', *Urban Studies (Routledge)*, 35, 12, pp. 2277-301.
- Khadaroo I. (2008) 'The Actual Evaluation of School PFI Bids for Value for Money in the UK Public Sector', *Critical Perspectives on Accounting*, 19, 8, pp. 1321-1345.
- Knight-John M. (2004) 'Privatization and Regulation', in S. Kelegama (eds), *Economic Policy in Sri Lanka: Issues and Debates*, Sage Publication, New Delhi, pp. 363 - 378.
- Knight-John M. and Athukorala P. P. A. W. (2005) 'Assessing Privatization In Sri Lanka: Distribution and Governance', in J. Nellis and N. Birdsall (eds), *Reality Check: The Distributional Impact Of Privatization In Developing Countries*, Center For Global Development, Washington DC., pp. 389-426.
- Koppenjan J.F.M. (2005) 'The Formation of Public-Private Partnerships: Lessons from Nine Transport Infrastructure Projects in the Netherlands', *Public Administration*, 83, 1, pp. 135-157.
- Körner P., Maass G., Siebold T. and Tetzlaff R. (1986) *The IMF and the Debt Crisis: A Guide to the Third World's Dilemma (Translated from the German by Paul Knight, London)*, Zed Books, London.
- Kovach H. and Lansman Y. (2006) *World Bank and IMF Conditionality: A Development Injustice*, Eurodad, Brussels.
- Kuhnle S. and Selle P. (1992) *Government and Voluntary Organizations: A Relational Perspective*, Aldershot, Avebury.

- Kulshreshtha P. (2008) 'Public Sector Governance Reform: The World Bank's Framework,' *International Journal of Public Sector Management*, 21, 5, pp. 556-567.
- Kumaraswamy M.M. and Morris D.A. (2002) 'Build-Operate-Transfer-Type Procurement in Asian Megaprojects', *Journal of Construction Engineering & Management*, 128, 2, pp. 93-102.
- Kumaraswamy M.M. and Zhang X.Q. (2001) 'Governmental Role in BOT-Led Infrastructure Development', *International Journal of Project Management*, 19, 4, pp. 195–205.
- Kunreuther H. (2001) 'Incentives for Mitigation Investment and More Effective Risk Management: The Need for Public-Private Partnerships', *Journal of Hazardous Materials*, 86, 1-3, pp. 171-185.
- Ladduwahetty R. (2009) 'Kerawalapitiya: An Outright Disaster of Epic Proportions', *Asian Tribune*, World Institute For Asian Studies, Hallstavik, 09/03/2009.
- Lakshman W.D. (1985) 'The IMF-World Bank Intervention in Sri Lankan Economy: Historical Trends and Patterns', *Social Scientist*, 13, 2, pp. 3-29.
- Lane J-E. (2000) *New public management*, Routledge, London.
- Langfield-Smith K. (2008) 'The Relations between Transactional Characteristics, Trust and Risk in the Start-up Phase of a Collaborative Alliance', *Management Accounting Research*, 19, 4, pp. 344–64.
- Langfield-Smith K. and Smith D. (2003) 'Management Control Systems and Trust in Outsourcing Relationships', *Management Accounting Research*, 14, 3, pp. 281–307.
- Larson A. (1992) 'Network Dyads in Entrepreneurial Settings: A Study of the Governance of Exchange Relationships', *Administrative Science Quarterly*, 37, 1, pp. 76-104.
- Linder S.H. (1999) 'Coming to the Terms with the Public Private Partnership: A Grammar of Multiple Meanings', *the American Behavior Scientist*, 43, 1, pp. 35-51.

- Liyanarachchi W. (2009) 'If CKE Construction Completed Before Schedule: Govt to Offer Incentives to Contractor', *Daily News*, 02/05/2009. Colombo: Lakehouse.
- Lobao L. and Kraybill D.S. (2005) 'The Emerging Roles of County Governments in Metropolitan and Nonmetropolitan Areas: Findings From a National Survey', *Economic Development Quarterly*, 19, 3, pp. 245-259.
- Lonsdale C. (2005) 'Post-Contractual Lock-in and the UK Private Finance Initiative (PFI): The Cases of National Savings and Investments and the Lord Chancellor's Department', *Public Administration*, 83, 1, pp. 67-88.
- Lonsdale C. and Watson G. (2007) 'Managing Contracts under the UK's Private Finance Initiatives: Evidence from the National Health Service', *Policy & Politics*, 35, 4, pp. 683-700.
- Lowrey T.M. (1991) 'The Use of Diffusion Theory in Marketing: A Qualitative Approach to Innovative Consumer Behavior', *Advances in Consumer Research*, 18, 1, pp. 644-650.
- Lynn L.E., Jr. (2006) *Public Management: Old and New*, Routledge, New York.
- Maguire G. and Malinovitch A. (2004) 'Development of PPPs in Victoria', *Australian Accounting Review*, 14, 2, pp. 27-33.
- Marsh D. and Sharman J.C. (2009) 'Policy Diffusion and Policy Transfer', *Policy Studies*, 30, 3, pp. 269-88.
- Marshall C. and Rossman G.B. (1989) *Designing Qualitative Research*, Sage Publication, California.
- Matthias P. (2007) 'PPP Arrangements and Its Advantages for Sri Lanka', in R. Madawela (eds), *Public Private Partnerships: Best Way Forward for Sri Lanka*, Research Intelligent Unit, Colombo, pp. 39-41.
- Matthias P. (2009) Adopting PPPs in the Sri Lankan Context. *Public Private Partnership (PPP) Awareness Workshop-2009*, Colombo.
- McCarthy S.C. and Tiong R.L.K. (1991) 'Financial and Contractual Aspects of Build-Operate-Transfer Projects', *International Journal of Project Management*, 9, 4, pp. 222-27.

- McKinnon J. (1988) 'Reliability and Validity in Field Research: Some Strategies and Tactics', *Accounting, Auditing & Accountability Journal*, 1, 1, pp. 34–54.
- McQuaid R. W. and Scherrer W. (2010) 'Changing Reasons for Public-Private Partnerships (PPPs)', *Public Money & Management*, 30, 1, pp. 27-34.
- Meier P. and Munasinghe M. (2005) *Sustainable Energy in Developing Countries: Policy Analysis and Case Studies*. Edward Elgar: Cheltenham.
- Merchant K.A. and Simons R. (1986) 'Research and Control in Complex Organizations: An Overview', *Journal of Accounting Literature*, 5, pp. 183–201.
- Merchant K. A and van der Stede W. (2003) *Management Control Systems: Performance Measurement, Evaluation and Incentives*, Prentice Hall, London.
- Merna A. and Smith N.J. (1996) *Guide to the Preparation and Evaluation of Build-Own-Operate-Transfer (BOOT) Project Tenders*, Asian Law and Practice, Hong Kong.
- Meyerson D., Weick K. E. and Kramer H. M. (1996) 'Swift Trust and Temporary Groups', in R. M. Kramer and T. R. Tyler (eds), *Trust in organizations: Frontiers of theory and research*, Sage Publication, Thousand Oaks, pp. 166-195.
- Milbourne R. (1997) 'Growth, Capital Accumulation and Foreign Debt', *Economica*, 64, 253, pp. 1-13.
- Minogue M. (2004) 'Public Management and Regulatory Governance: Problems of Policy Transfer to Developing Countries' in P. Cook (eds), *Leading Issues in Competition, Regulation, and Development*, Edward Elgar, Northampton, pp. 165–81.
- Miraftab F. (2004) 'Public–Private Partnerships: The Trojan Horse of Neoliberal Development', *Journal of Planning Education and Research*, 24, 1, pp. 89–101.
- Moll J. and Humphrey C. (2007) 'Management Accounting and Accounts in the Public Sector: the Challenges presented by Public-Private Partnerships', in T. Hopper, D. Northcott and R. Scapens (eds), *Issues in Management Accounting*, Prentice Hall, London, pp. 297-316.

- Morallos D. and Amekudz A. (2008) 'The State of the Practice of Value for Money Analysis in Comparing Public Private Partnerships to Traditional Procurements', *Public Works Management & Policy*, 13, 2, pp. 114-125.
- Morimoto R. and Munasinghe M. (2005) 'Small Hydropower Projects and Sustainable Energy Development in Sri Lanka', *International Journal of Global Energy Issues*, 24, 1/2, pp. 3-18.
- Mosley P., Harrigan J. and Toye J. (1991) *Aid Power: The World Bank and Policy Based Lending*, Routledge, London.
- Mouritsen J. and Thrane S. (2006) 'Accounting, Network Complementarities and the Development of Inter-organisational Relations', *Accounting, Organizations & Society*, 31, 3, pp. 241-75.
- Mubin S. and Ghaffar A. (2008) 'BOT Contracts: Applicability in Pakistan for Infrastructure Development', *Pak. J. Engg. & Appl. Sci*, 3, pp. 33-46.
- Narayanan V., Schoch H.P. and Harrison G. (2007) 'The Interplay between Accounting and Management Control Patterns in Public Sector Outsourcing', *International Journal of Business Studies*, 15, 2, pp. 37-65.
- Nataraj G. (2007) 'Infrastructure Challenges in South Asia: The Role of Public-Private Partnerships', ADB Discussion Paper 80, ADB Institute, Tokyo.
- Nellis J. (2003) 'Effects of Privatisation on Income and Wealth Distribution', *World Bank Energy Week 2003*, Washington DC.
- New Zealand Office of the Auditor General (2006) *Local Government: Results of the 2004-2005 Audits*, Available at: <http://www.oag.govt.nz/local-govt/2004-05/>, Accessed on 17 August 2010.
- Newberry S. and Pallot J. (2003) 'Fiscal (ir) Responsibility: Privileging PPPs in New Zealand', *Accounting, Auditing & Accountability Journal*, 16, 3, pp. 467-492.
- Newberry, S. (2004) 'Trade in Services: Wider Implications for Accounting Standard Setters and Accountants', *Australian Accounting Review*, 14, 2, pp. 11-21.
- O' Dwyer B. (2004) 'Qualitative Data Analysis: Illuminating a Process for Transforming a 'Messy' but 'Attractive' Nuisance', in C. Humphrey and B.

- Lee (eds), *The Real Life Guide to Accounting Research: A Behind-the-scenes View of Using Qualitative Research Methods*, Elsevier, Oxford, pp. 391-408.
- Oliver C. (1992) 'The Antecedents of Deinstitutionalization', *Organization Studies*, 13, 4, pp. 563-588.
- Onimode B. (1989) *The IMF and World Bank and the African Debt*, Zed Books, London.
- Otley D.T. and Berry A.J. (1994) 'Case Study Research in Management Accounting and Control', *Management Accounting Research*, 5, 1, pp. 45-65.
- Otley D.T. and Berry A.J. (1998) 'Case Study Research in Management Accounting and Control', *Accounting Education*, 7, pp. 105-27.
- Ouchi W.G. (1979) 'A Conceptual Framework for the Design of Organizational Control Mechanisms', *Management Science*, 25, 9, pp. 833-48.
- Ouchi W.G. (1980) 'Markets, Bureaucracies, and Clans', *Administrative Science Quarterly*, 25, 1, pp. 129-41.
- Ouchi W.G. and Maguire M.A. (1975) 'Organizational Control: Two Functions', *Administrative Science Quarterly*, 20, 4, pp. 559-69.
- Owen J.M. (2002) 'The Foreign Imposition of Domestic Institutions', *International Organization*, 56, 2, pp. 375-409.
- Oxley J.E. (1999) 'Institutional Environment and the Mechanisms of Governance: The Impact of Intellectual Property Protection on the Structure of Inter-firm Alliances', *Journal of Economic Behavior & Organization*, 38, 3, pp. 283-309.
- Parker D. and Hartley K. (2003) 'Transaction Costs, Relational Contracting and Public Private Partnerships: A Case Study of UK Defence', *Journal of Purchasing & Supply Management*, 9, 3, pp. 97-108.
- Parker L.D. and Roffey B.H. (1997) 'Methodological Themes: Back to the Drawing Board: Revisiting Grounded Theory and the Everyday Accountant's and Manager's Reality', *Accounting, Auditing and Accountability Journal*, 10, 2, pp. 212-47.

- Parker D and Hartley K. (2003) 'Transaction Costs, Relational Contracting and Public Private Partnerships: A Case Study of UK Defence', *Journal of Purchasing and Supply Management*, 9, 3, pp. 97-108.
- Parker L.D. and Roffey B.H. (1997) 'Methodological Themes: Back to the Drawing Board: Revisiting Grounded Theory and the Everyday Accountant's and Manager's Reality', *Accounting, Auditing & Accountability Journal*, 10, 2, pp. 212-47.
- Partnerships Victoria (2001) Overview: Guidance Material, Available at: www.dtf.vic.gov.au/dtf/RWP323.nsf/0/ffa08f5c9122d76b4a2569e30022155b. Accessed on 25 October 2008.
- Payer C. (1974) *The Debt Trap*, Monthly Review Press, New York.
- Perera S. (2005) 'Sharing an Experience: Field Study Methods to Understand Management Accounting Practices in a Changing Environment', *Malaysian Accounting Review*, 4, 1, pp. 93-116.
- Perera S., McKinnon J.L. and Harrison G.L. (2003) 'Diffusion of Transfer Pricing Innovation in the Context of Commercialization: A Longitudinal Case Study of a Government Trading Enterprise', *Management Accounting Research*, 14, 2, pp. 140-164.
- Pollitt C. (2001) 'Clarifying Convergence. Striking Similarities and Durable Differences in Public Management Reform', *Public Management Review*, 3, 4, pp. 471-492.
- Pollitt M. G. (2002) 'The Declining Role of the State in Infrastructure Investment in the UK', in S. V. Berg, M. G. Pollitt and M. Tsuji (eds), *Private Initiatives in Infrastructure: Priorities, Incentives and Performance*, Edward Elgar, Northampton, pp. 67-100.
- Pollitt M.G. (2005) 'Learning from the UK Private Finance Initiatives Experience', in G. Hodge and C. Greve (eds), *The Challenge of Public-Private Partnerships: Learning from International Experience*, Edward Elgar, Cheltenham, pp. 207-230.
- Pollock A.M. and Price D. (2008) 'Has the NAO Audited Risk Transfer in Operational Private Finance Initiative Schemes?', *Public Money & Management*, 28, 3, pp. 173-78.

- Rafael L.P., Lopez-De-Silanes F., Shleifer A. and Vishny R.W. (1997) 'Legal Determinants of External Finance', *Journal of Finance*, 52, 3, pp. 1131-1150.
- Rahama A. S., Everett J. and Neu D. (2007) 'Accounting and the Move to Privatize Water Services in Africa', *Accounting, Auditing and Accountability Journal*, 20, 5, pp. 637-670.
- Ramanayake W. (2008) 'An Indigenous Solution to Power Crisis', *Daily News*, 09/12/2008, Lackhouse: Colombo.
- Ramanayake W. (2010) 'Ceremonial Commissioning on February 25', *Daily News*, 10/02/2010, Lackhouse: Colombo.
- Reeves E. and Ryan J. (2007) 'Piloting Public-Private Partnerships: Expensive Lessons from Ireland's Schools' Sector', *Public Money and Management*, 27, 5, pp. 331-338.
- RIDA and OECF (1996) *Power Sector Policy in Sri Lanka*. The Research Institute of Development Assistance and The Overseas Economic Cooperation Fund, Tokyo.
- Ring P. S. and van de Van A. H. (1992) 'Structuring Cooperative Relationships between Organizations', *Strategic Management Journal*, 13, 7, pp. 483-98.
- Ring P. S. and van de Ven A. H. (1994) 'Developmental Processes of Cooperative Inter-Organizational Relationships', *Academy of Management Review*, 19, 1, pp. 90-118.
- Rogers E.M. (1983) *Diffusion of Innovations*, The Free Press, New York.
- Rogers E.M. (1995) *Diffusion of Innovations*, The Free Press, New York.
- Rousseau D. M., Sitkin S. B., Burt R. S. and Camerer C. (1998) 'Not So Different After All: A Cross-Discipline View of Trust', *Academy of Management Review*, 23, 3, pp. 393-404.
- Sako M. (1992) *Price, Quality and Trust: Inter-firm Relationships in Britain and Japan*, Cambridge University Press, Cambridge.
- Samaratunge R., Alam Q. and Teicher J. (2008) 'The New Public Management Reforms in Asia: A Comparison of South and Southeast Asian Countries', *International Review of Administrative Sciences*, 74, 1, pp. 25-46.

- Samaratunge R., Alam Q. and Teicher J. (2008) 'Public Sector Reforms and Accountability: The Case of South and Southeast Asia,' *Public Management Review*, 10, 1, pp. 101-126.
- Sarker A.E. (2006) 'New Public Management in Developing Countries: An Analysis of Success and Failure with Particular Reference to Singapore and Bangladesh,' *International Journal of Public Sector Management*, 19, 2, pp. 180-203.
- Sartorius K., and Kirsten J. (2005) 'The Boundaries of the Firm: Why do Sugar Producers Outsource Sugarcane Production?', *Management Accounting Research*, 16, 1, pp. 81-99.
- Seal W. B. (1993) *Accounting, Management Control and Business Organization*, Aldershot, Avebury.
- Shaoul J. (2005) 'The Private Finance Initiative or the Public Funding of Private Profit', in G. Hodge and C. Greve (eds), *The Challenge of Public-Private Partnerships: Learning from International Experience*, Cheltenham, Edward Elgar, pp. 190-206.
- Shaoul J., Stafford A., Stapleton P. and McDonald P. (2008) *Financial Black Holes: Accounting for Privately Financed Roads in the UK*, Institute of Chartered Accountants in Scotland (ICAS), Edinburgh.
- Shastri A. (1997) 'Transitions to a Free Market: Economic Liberalisation in Sri Lanka', *The Round Table (London)*, 344, pp. 485-511.
- Shaw J. (1999) 'A World Bank Intervention in the Sri Lankan Welfare Sector: The National Development Trust Fund', *World Development*, 27, 5, pp. 825-838.
- Shen LY., Andrew P. and Deng X.P. (2006) 'Role of Public Private Partnerships to Manage Risks in Public Sector Projects in Hong Kong', *International Journal of Project management*, 24, 7, pp. 587-594.
- Shipan C.R. and Volden C. (2008) 'The Mechanisms of Policy Diffusion', *American Journal of Political Science*, 52, 4, pp. 840-857.
- Silva N.D. (1999) 'Three Transformers Blasted in City', *The Sunday Times*, Colombo, 24/01/1999.

- Simon H. A. (1993) 'Altruism and Economics', *American Economic Review*, 83, 2, pp. 156-161.
- Sirimanna B. (2010) 'Chinese and Indian Companies Dominate Sri Lanka's Mega Project Business', *The Sunday Times*, 05/09/2010. Colombo.
- Smith B. (1992) 'Introduction', in B. Smith (eds), *Progress in Development Administration*, John Wiley & Sons, Chichester, pp. 1-21.
- Smith K.G., Carroll S.J. and Ashford S. J. (1995) 'Intra- and Interorganizational Cooperation: Toward a Research Agenda', *Academy of Management Journal*, 38, 1, pp. 7-23.
- Smyth H. and Edkins A. (2007) 'Relationship Management in the Management of PFI/PPP Projects in the UK', *International Journal of Project Management*, 25, 3, pp. 232-40.
- Şngün A.E. and Wasti S.N. (2007) 'Trust, Control, and Risk: A Test of Das and Teng's Conceptual Framework for Pharmaceutical Buyer-Supplier Relationships', *Group & Organization Management*, 32, 4, pp. 430-64.
- Speklé R.F. (2001) 'Explaining Management Control Structure Variety: A Transaction Cost Economics Perspective', *Accounting, Organizations & Society*, 26, 4-5, pp. 419-41.
- Sri Lanka Country Review (2003) 'Investment Overview', *Sri Lanka Country Review*, Country Watch Incorporated, 62.
- Sri Lanka: Tax Guide (2002) International Business Publications, Washington DC.
- Sunday Times (1996) 'In the Dark: CEB Power Plans', *Sunday Times*, Colombo 26/05/1996.
- Sunday Times (1997) 'Promoting Investment is Everybody's Business', *Sunday Times*, Colombo, 12/01/1997.
- Suratgar D. (2002) 'Individual Concurring Opinion by Mr. David Suratgar,' *Foreign Investment Law Journal: ICSID Review*, pp. 161-165.
- The Nation (2008) 'The CEB's Nemesis', *The Nation: On Sunday*, Colombo, 13/07/2008..

- Thomas A.V., Kalidindi S.N. and Ganesh L.S. (2006) 'Modelling and Assessment of Critical Risks in BOT Road Projects', *Construction Management & Economics*, 24, 4, pp. 407–24.
- Thompson, J. D. (1967) *Organizations in Action*, McGraw-Hill, New York.
- Timothy D., Gaye P. and Alan J. (2005) 'Lessons from the Private Finance Initiative in the UK: Benefits, Problems and Critical Success Factors', *Journal of Property Investment & Finance*, 23, 5, pp. 412-423.
- Torres L. and Pina V. (2001) 'Public-Private Partnership and Private Finance Initiatives in the EU and Spanish Local Governments,' *European Accounting Review*, 10, 3, pp. 601-619.
- Tyran J.-R. and Sausgruber R. (2005) 'The Diffusion of Policy Innovations -An Experimental Investigation', *Journal of Evolutionary Economics*, 15, 4, pp. 423-442.
- Uddin S. and Hopper T. (2001) 'A Bangladesh Soap Opera: Privatisation, Accounting, and Regimes of Control in a Less Developed Country', *Accounting, Organizations and Society*, 26, 7-8, pp. 643-672.
- UNDP (2009) *Colombo, Sri Lanka Case Study (Port Expansion), Public Private Partnerships: Case Studies for Sustainable Development*, United Nations Development Programme, Arlington.
- UNESCAP (2004) *Partnership for Poverty Reduction: Pro-Poor Public Private Partnerships*, United Nations Economic and Social Commission for Asia and the Pacific, Thailand.
- USDOT (2004) *Report to Congress on Public-Private Partnerships*, US Department of Transport, Washington.
- van der Meer-Kooistra J. and Scapens R.W. (2008) 'The Governance of Lateral Relations between and within Organisations', *Management Accounting Research*, 19, 4, pp. 365–84.
- van der Meer-Kooistra J. and Vosselman E.J.G. (2000) 'Management Control of Inter-Firm Transactional Relationships: The Case of Industrial Renovation and Maintenance', *Accounting, Organizations and Society*, 25, 1, pp. 51–77.

- van Ham H. and Koppenjan J. (2001) 'Building Public-Private Partnerships: Assessing and Managing Risks in Port Development', *Public Management Review*, 3, 4, pp. 593-616.
- van Marrewijk A., Clegg S.R., Pitsis T.S. and Veenswijk M. (2008) 'Managing Public-Private Megaprojects: Paradoxes, Complexity, and Project Design', *International Journal of Project Management*, 26, 6, pp. 591-600.
- Vélez M.L., Sánchez J.M. and Álvarez-Dardet C. (2008) 'Management Control Systems as Inter-Organizational Trust Builders in Evolving Relationships: Evidence from a Longitudinal Case Study', *Accounting, Organizations and Society*, 33, 7-8, pp. 968-994.
- Vreeland J.R. (2003) *The IMF and Economic Development*, Cambridge University, New York.
- Walker J.L. (1969) 'The Diffusion of Innovations among the American States', *The American Political Science Review*, 63, 3, pp. 880-899.
- Watawala L.R. (2006) 'Foreword', in R. Madawela (eds), *Public Private Partnerships: The Best Way to Forward Sri Lanka*, Research Intelligen Unit, Colombo, pp. 3-4.
- Weerakkody V., Dwivedi Y.K. and Kurunananda A. (2009) 'Implementing E-Government in Sri Lanka: Lessons from the UK', *Information Technology for Development*, 15, 3, pp. 171-192.
- Weiler T. (2005) *International investment law and arbitration: leading cases from the ICSID*, Cameron, May, London.
- Wejnert B. (2002) 'Integrating Models of Diffusion of Innovations: A Conceptual Framework', *Annual Review of Sociology*, 28, 1, pp. 297-326.
- Westgren R. and Zering K. (1998) 'Case Study Research Methods for Firm and Market Research', *Agribusiness*, 5, pp. 415-23.
- WFB (2008) World Fact Book, <https://www.cia.gov/library/publications/the-world-factbook/index.htm>, Accessed on 22 July 2008.
- Wickramaratne R.D. (2009) 'The First Ever Expressway Project in Sri Lanka Resumes Construction Programme: People's Republic of China Extends Her Hand of Friendship To Help Sri Lanka', *Sinhale Hot News*, Colombo, 06/04/2009.

- Wijayatunga P.D.C. and Jayalath M.S. (2004) 'Assessment of Economic Impact of Electricity Supply Interruptions in the Sri Lanka Industrial Sector', *Energy Conversion and Management*, 45, 2, pp. 235–47.
- Williamson O.E. (1985) *The economic Institutions of Capitalism*, Free Press, New York.
- Williamson O.E. (1991) 'Comparative Economic Organization: The Analysis of Discrete Structural Alternatives', *Administrative Science Quarterly*, 36, 2, pp. 269–96.
- Williamson O.E. (1996) *The Mechanisms of Governance*, Oxford University Press, New York.
- Williamson O.E. (2005) 'Transaction Cost Economics and Business Administration', *Scandinavian Journal of Management*, 21, 1, pp. 19–40.
- Williamson O. E. (1981) 'The Economics of Organization: The Transaction Cost Approach', *American Journal of Sociology*, 87, 3, pp. 548-577.
- Williamson O.E. (1979) 'Transaction-Cost Economics: The Governance of Contractual Relations', *Journal of Law & Economics*, 22, 2, pp 233–61.
- Williamson O.E. (1975) *Markets and Hierarchies: Analysis and Antitrust Implications*, Free Press, New York.
- World Bank (1994) *World Development Report: Infrastructure for Development*. Oxford University Press, New York.
- World Bank (1995) *Promoting Growth in Sri Lanka: Lessons from East Asia*, Paper No. 1478, World Bank, Washington DC.
- World Bank (1996) *Private Sector Infrastructure Development Project: Staff Appraisal Report Sri Lanka: Report No. 15391-CE*, World Bank, Washington DC.
- World Bank (1998) *World Development Report 1998*, Oxford University Press, New York.
- World Bank (2009) Data and Statistics, Available at:
<http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS>,
 Accessed on 18 December 2009.

- World Bank (2009) *Doing Business: Country Profile for Sri Lanka*, The World Bank, Washington DC.
- World Bank and PPIAF (2007) *Public Private Partnership Units*, The World Bank Washington DC.
- World Bank (2009) Estimation of Infrastructure Investment Needs in the South Asia Region, Available at: <http://go.worldbank.org/H8HUEBT7D0>, Accessed on 19 October 2009.
- Yatanwala Y.W.S.R. and Jayasena H.S. (2008) Failure of Applying PFI in Colombo Katunayake Expressway Project, in *International Conference on Building Education and Research: Building Resilience*, Colombo, Sri Lanka.
- Yin R.K. (1989) *Case Study Research: Design and Methods*, Sage Publication, California.
- Yin R.K. (2003) *Case Study Research: Design and Methods*, Sage Publications: Thousand Oaks CA.
- Yiu D. and Makino S. (2002) 'The Choice between Joint Venture and Wholly Owned Subsidiary: An Institutional Perspective', *Organization Science*, 13, 6, pp. 667-683.
- Ysa T. (2007) 'Governance Forms in Urban Public-Private Partnerships', *International Public Management Journal*, 10, 1, pp. 35-57.
- Zhang X. (2005) 'Paving the Way for Public-Private Partnerships in Infrastructure Development', *Journal of Construction Engineering & Management*, 131, 1, pp. 71-80.
- Zheng J., Roehrich J.K. and Lewis M.A. (2008) 'The Dynamics of Contractual and Relational Governance: Evidence from Long-term Public-Private Procurement Arrangements', *Journal of Purchasing and Supply Management*, 14, 1, pp. 43-54.
- Zohlnhöfer R., Obinger H. and Wolf F. (2008) 'Partisan Politics, Globalization, and the Determinants of Privatization Proceeds in Advanced Democracies (1990-2000)', *Governance*, 21, 1, pp. 95-121.

