

Privatisation of State-owned Enterprises and Development of Capital Markets in Laos

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Abstract

Laos, a small economy in Southeast Asia, has been undertaking reforms of its state-owned enterprises (SOEs) since 1989, as part of its 1986 New Economic Mechanism strategy. However, little research attention has been given to privatisation programs in Laos, partly due to the fact that data on SOEs (such as profits and previous privatisation programs) is extremely unreliable and publicly unavailable. Therefore, this study emphasised on studying and analysing views and perceptions of well-informed individuals through a mixed research methods: qualitative interviews and quantitative survey. In conducting this method, this study aimed at determining how privatisation should be implemented in a way that helps develop domestic capital (especially stock) markets and promote an equity culture and/or equity investing in a way that minimise the socialisation of risk through state ownership and intervention in the Lao economy.

This study performed a thematic analysis approach to analyse 14 qualitative interviews, and Structural Equation Modelling (SEM) techniques to assess 359 quantitative survey responses. The findings from the two sample datasets indicated that seven essential factors were believed to influence the likelihood of favourable or positive privatisation outcomes. These factors were: government commitment; legal and regulatory framework; institutional arrangements; stakeholder involvement; public education and awareness; firm-level privatisation strategy; and fairness and transparency. However, only firm-level privatisation strategy was perceived as a key contributing factor to successful privatisation. Furthermore, positive privatisation outcomes were seen as influencing the development and strength of Laos' financial system and people's investment decisions in relation to SOEs being privatised. The findings also indicate that efficiency improvement was a preferable privatisation objective, rather than a focus on state revenues, social and economic benefits, and job creation.

In summary, the firm-level privatisation strategy was thought to significantly contribute to successful positive privatisation outcomes. Specifically, efficiency enhancement objectives should be prioritised if the development of domestic capital markets and promotion of an equity culture and/or domestic equity investing is to be part of the Lao government's future privatisation policy.

Dedication

For my two-year MBA studies at the International University of Japan in Niigata Prefecture, Japan, I had to leave my beloved parents, wife and first daughter back home in Laos. For my one-year professional development program at Boston University in Massachusetts, USA, I had to leave my second daughter with my parents back in Laos. When it came to my PhD education at Victoria University, I had decided never to leave any of my immediate family members behind again. I dedicate this PhD thesis to all my family members for their great patience and endless support. I would like especially to dedicate this to my beloved parents, Khamdy and Nouvong Phommasane, my lovely wife, Kaysone Insiri, and my two wonderful and lovely daughters, Sitthiphone Phommasane and Phutthalack Phommasane.

Declaration

I, Sompasong Phommasane, declare that the PhD thesis titled "*Privatisation of State-owned Enterprises and Development of Capital Markets in Laos*" is no more than 100,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work.

Signature: ...



Date: 5 April 2017

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I am greatly indebted to my principal supervisor, Professor Peter Sheehan, and my associate supervisor, Professor Adam Fforde, for their invaluable support, assistance, guidance and encouragement during my study. My supervisors have truly given this work all the special care and attention, endless support and strong commitment it needed. I have benefited tremendously from their intellectual guidance and support through their useful suggestions, criticism and moral support, which brought this dissertation to life. I am confident that what I have learnt from Professor Peter Sheehan and Professor Adam Fforde, professionally, academically and socially, equips me well to contribute significantly to social and economic development activities when I return to my home country and, in particular, to the development of the Lao stock market in relation to privatisation of state-owned enterprises.

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List of Publications and Awards

Some sections of this thesis have been presented in conferences and/or published in academic journals:

Conference papers

Phommasane, S 2016, 'Financial and operating performance of newly-privatised banks in Laos: Evidence from Banque Pour Le Commerce Extérieur Lao', paper presented to Second International Conference on Theory and Practice, 28th-29th October 2016, Melbourne, Australia.

Phommasane, S 2016, 'Capital market development in a small economy: Can privatisation of state-owned enterprises boost the Lao stock market?', paper presented to Australia and New Zealand International Business Academy (ANZIBA) Conference on Internationalisation, International Entrepreneurship and the Emerging Markets, 15th-17th February 2017, Adelaide, Australia.

Journal article

Phommasane, S 2016, 'Financial and operating performance of newly-privatised banks in Laos: Evidence from Banque Pour Le Commerce Extérieur Lao', *Asia Pacific Journal of Advanced Business and Social Studies*, vol. 2, no. 3, pp. 1-15.

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List of Acronyms

ADB	Asian Development Bank
AMOS	Analysis of Moment Structures
ASEAN	Association of Southeast Asian Nations
BCEL	Banque Pour Le Commerce Extérieur Lao
BOL	Bank of Lao PDR
CFA	Confirmatory factor analysis
CFI	Comparative Fit Index
CPI	Committee for Planning and Investment (<i>now known as MPI</i>)
EDL	Electricité du Laos
EDL-GEN	EDL-Generation Public Company
EFA	Exploratory factor analysis
GDP	Gross Domestic Product
GFI	Goodness-of-Fit Index
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
IMF	International Monetary Fund
LNSSI	Lao National Social Science Institute
LSC	Lao Securities Commission
LSCO	Lao Securities Commission Office
LSX	Lao Securities Exchange
MLE	Maximum Likelihood Estimation
MOF	Ministry of Finance
MPI	Ministry of Planning and Investment
NCBD	National Committee for Business Development
NEM	New Economic Mechanism
NERI	National Economic Research Institute
RMSEA	Root Mean Square Error of Approximation
SEM	Structural Equation Modelling
SOCB	State-owned Commercial Bank
SOE	State-owned Enterprise
SRMR	Standardised Root Mean Residual
TLI	Tucker-Lewis Index

Map of Laos



Facts & Figures

Official country name:	Lao People's Democratic Republic (<i>Lao PDR</i>)
Capital city:	Vientiane Capital
Geographical location:	Southeast Asia
Neighbouring countries:	Cambodia, Thailand, Myanmar (Burma), China and Vietnam
Land area:	236,800 square kilometres
Population:	6.8 million
Urban population:	15%
Ethic groups:	49
Official language:	Lao
GDP per capita, (current US\$)	US\$1,812
GDP per capita, PPP (current international \$)	US\$5,675

Source: World Bank (2015)

Executive Summary

After becoming an independent country in 1975, the Lao government quickly adopted a Soviet-style, centrally-planned economy, emphasising state ownership over most economic activities in order to restore and improve the war-torn economy. As a result, the number of fully state-owned enterprises (SOEs) significantly increased to around 640 in 1988. This was due to nationalising existing private sector companies as well as creating about 500 new SOEs between 1976 and 1986. However, the overall economy did not thrive and many social and economic performance indicators were not achieved as expected. Facing severe social and economic challenges, the government then decided to implement a *Chintanakan Mai* or New Economic Mechanism (NEM) in 1986, shifting from a centrally-planned toward a market-oriented economy. Among many structural reform measures, a privatisation policy was initiated in 1989. Consequently, around 75% of SOEs were either partially or fully privatised, with only so-called strategic SOEs (such as the telecommunications industry) retained as wholly state-owned up to 1997. As of 2010, there were about 141 SOEs nationwide (Ministry of Planning and Investment - MPI 2016).

Privatisation efforts re-emerged in 2010, with the Lao government partly linking its privatisation policy to the creation and development of a domestic capital (stock) market in Laos. Out of 141 remaining SOEs, ten were privatised between 2010 and 2015. Specifically, in 2010, the government partially divested its two strategic SOEs – Banque Pour Le Commerce Extérieur Lao (BCEL) and EDL-Generation Public Company (EDL-GEN) – through share issue privatisations in order to create the first-ever stock exchange in Laos. The government also attempted to partially privatise four other SOEs in order to support the development of the Lao stock market between 2011 and 2013. However, these privatisation efforts were cancelled during the preparation process for reasons that remain unknown. According to MPI (2016), the government now planned to improve the necessary conditions for the remaining SOEs to go public and list their shares on the exchange. As such, privatisation remains the subject of ongoing national debate and a central question needs to be asked: how should privatisation be implemented effectively in Laos to ensure that the newly-created stock exchange can survive and grow in a dynamic environment (e.g. within the context of the 2015

ASEAN capital market integration initiatives (Exchange Linkages), as part of ASEAN Economic Community principles.

The wide range of literature on the theory of privatisation suggests that this is a complex and multidisciplinary concept. Consequently, there is no single method that fits all the objectives of a privatisation process. Case-by-case privatisations, which are customised and tailored to company-specific, industry-specific and/or country-specific circumstances, are thought most likely to produce favourable or positive outcomes. Numerous international perception-based studies (ADB 2000; Ernst & Young 2010; Megyeri & Sader 1997; Welch & Frémond 1998; White & Bhatia 1998), particularly focused on privatisation programs in developed and large developing economies, also suggest many crucial factors associated with success. This study focuses on seven factors, identified by key stakeholders found in the privatisation literature as the most likely to influence positive privatisation outcomes. These factors are: government commitment; legal and regulatory framework; institutional arrangements; stakeholder involvement; public education and awareness; firm-level privatisation strategy; and fairness and transparency. Many studies also suggest that privatisation can support the development of capital markets (Fine & Karlova 1998; Lieberman & Fergusson 1998; McLindon 1996) and encourage an equity culture or domestic equity investing in a way that minimises what some authors (Mann 1945; Wade 1990; Zysman 1983) have termed the socialisation of risk through state intervention. This study examines the extent to which the views and perceptions of local experts in a small economy either support or contradict the arguments of foreign experts within the privatisation literature.

There are no special laws or decrees on privatisation in Laos, neither is there a specific government agency responsible for executing privatisation processes. As a result, a systematic process of privatisation has been lacking. Since the inception of privatisation in 1989, programs have been implemented in an ad hoc manner, and processes have been viewed as opaque, lacking transparency and consistency in approach and delivery. The literature on Lao privatisation indicates that extensive stakeholder involvement and public education and awareness about SOEs and privatisation programs has rarely been seen; public trust and confidence in the process is therefore an issue. Inefficiency also remains a challenging issue. For example, out of the 131 remaining SOEs in 2015, only

six were reported to be effective and 27 effective but in need of some structural improvements; 98 were considered not effective and in need of improvements (MPI 2016, p. 44). Given this context, achieving favourable or positive privatisation outcomes has been a significant challenge, especially if privatisations are designed to support the development of domestic (capital) stock markets and promote an equity culture or domestic equity investing in Laos.

A privatisation policy has been implemented in Laos since 1989, with evidence of change over time. However, little research attention has been given to privatisation efforts in a small economy, such as Laos, partly due to unavailable, inaccessible or unreliable data on SOEs (such as profits) and privatisation programs. This study employed a mixed research method (qualitative interviews and a quantitative survey) to analyse and identify critical factors that were perceived by well-informed stakeholders as most likely to influence privatisation success, particularly in relation to capital market development and the promotion of domestic equity investing in Laos. Specifically, the objectives of this study were to:

- Identify the critical factors that key stakeholders believed would influence the likelihood of successful or positive privatisation outcomes;
- Examine how such outcomes could ultimately support the development of more competitive domestic capital markets (particularly stock markets); and
- Determine how these outcomes could promote an equity culture and/or equity investing.

Research instruments (i.e. interview questions and survey questionnaires) were newly designed to collect primary data on the perceptions of stakeholders (respondents) in relation to SOEs and privatisation processes in Laos. Study respondents were randomly drawn from a pre-determined sampling frame, which included government-related entities, SOEs, and private sector organisations. The qualitative interview data (14 information-rich interviewees) were analysed using a thematic analysis technique. The quantitative survey (359 responses) data were assessed using Structural Equation Modelling (SEM). The SEM analysis technique was capable of capturing certain phenomena. It could also assess structural relationships among unobserved (latent) factors that were not directly observed but were inferred from other variables that were

directly measured. Unlike path analysis, in which each regression coefficient (relationship) in a system of structural equations is estimated separately (equation by equation), SEM techniques use all of the information from all equations that make up a model to compute related statistical estimates (Hair et al. 2006). Therefore, SEM is capable of assessing and correcting for measurement errors (Hair et al. 2006), which, if ignored, could lead to bias in estimating parameters.

The research literature suggests that seven critical factors can influence the likelihood of favourable or positive privatisation outcomes. The 14 interviewees involved in this study believed that firm-level privatisation strategy was a significant contributing factor, while government commitment and stakeholder involvement were viewed as somewhat influential. Legal and regulatory framework, public education and awareness, and fairness were perceived as insignificant. The SEM results derived from the quantitative survey data (359 respondents) indicated that *only* firm-level privatisation strategy was thought to significantly influence the likelihood of privatisation success in Laos. The six other factors were considered insignificant. Specifically, the respondents believed that a firm-level privatisation strategy should emphasise: well-managed firm preparation activities (including initial assessments of an SOE's readiness for privatisation and corporate restructuring of a privatisable SOE); appropriate selection of the SOEs offered for privatisation; practical firm pricing and valuation mechanisms; and appropriate levels of post-privatisation state ownership.

The findings uncovered from the two primary qualitative and quantitative datasets also suggest that favourable privatisation outcomes were perceived to significantly influence the development and strengthening of the domestic financial system (particularly the stock market). These findings are consistent with previous international studies (Fine & Karlova 1998; Lieberman & Fergusson 1998; McLindon 1996). The research participants also believed that such privatisation outcomes could influence people's investment decisions and, consequently, promote an equity culture or equity investing according to risk-and-reward mechanisms, which could help minimise the socialisation of risk through state ownership and intervention.

This study also employed stepwise multiple regression techniques to analyse the quantitative survey data in order to examine which privatisation outcomes should be prioritised in order to ensure the two goals of capital market development and promotion of domestic equity investment in Laos. The results suggested that efficiency improvement should be prioritised, while while generation of state revenues, social and economic benefits, and job creation should be considered supplementary. These findings are consistent with previous international studies (Kikeri, Nellis & Shirley 1992; Shirley 1992; van de Walle 1989).

In order to examine the moderating effects of gender (female and male samples), educational level (tertiary education samples and postgraduate education samples) and workplaces (government-related entities and other entities) in the hypothesised privatisation model for this study, multiple group analyses were therefore employed to analyse the quantitative survey data. The findings indicated that no evidence in difference or the moderating effects in people's views and perceptions had been found. In other words, these moderators (i.e. gender: male and female samples) had no significant impacts on the measured variables and/or structural relationships among the latent constructs in the hypothesised model. Given this, it was concluded that general privatisation programs are preferable to those programs being customised and tailored to meet the needs and preferences of certain interest groups.

In addition to qualitative interview and quantitative survey datasets, this study employed a method suggested by Megginson, Nash and van Randenborgh (1994) in order to assess whether or not privatisation helped improve the financial and operating performance of newly-privatised SOEs in Laos. Due to the lack of available data on SOEs, this study focused on assessing and comparing the financial and operating performance of two partially-privatised strategic SOEs – BCEL and EDL-GEN. The main reason was that only these privatised SOEs were listed on the Lao stock exchange and their annual reports including pre- and post-privatisation data were available in the public domain. Although the findings derived from the assessment of these two SOEs could not be robust and generalised since the sample size was only two firms, these findings provided some understandings about business performance of privatised SOEs.

The results of assessing BCEL and EDL-GEN revealed that partial privatisation with sizable state ownership (70% or more) has produced mixed outcomes. Partial privatisation resulted in significant increases in sales efficiency (inflation-adjusted sales per employee) and employment outcomes (the number of employees and yearly employee incomes); moderate increases in real sales and slight declines in financial leverage; but it led to either moderate or remarkable *decreases* in profitability and net income efficiency (inflation-adjusted net income per employee). Yet, despite their low capacity for generating net incomes, these two enterprises paid relatively large amounts of cash dividends to their shareholders. Overall, it can be inferred that partial privatisation does not necessarily help improve firm performance in terms of profitability and net income efficiency in the small economy of Laos. This finding is consistent with previous international studies (Boubakri & Cosset 1998, 2002; D'Souza & Megginson 1999; Megginson, Nash & van Randenborgh 1994). These studies provided evidence that either partial or full privatisation appears to produce weak improvements in performance and efficiency for those firms in low- and lower-middle-income countries compared to those with high income per capita.

In summary, the firm-level privatisation strategy was thought to significantly influence successful or positive privatisation outcomes. Specifically, efficiency enhancement objectives should be prioritised if the development of domestic capital markets and promotion of an equity culture and/or domestic equity investing is to be part of the Lao government's future privatisation policy. The findings of this study can therefore serve as an informative evidence-base for domestic policy-makers, decision-makers, and relevant stakeholders in the field of privatisation, especially in relation to the development of more effective domestic capital markets. This study also contributes to the international literature on privatisation, particularly in relation to its links with the development of capital markets and promotion of an equity culture or domestic equity investing.

Chapter 1

Introduction

1.1 Introduction

The main purpose of this chapter is to provide an overview of this study and the reasons why the research is critically important to the researcher. It begins with a discussion of the general background to the research, focused on the national social and economic development performance of Laos, the emergence of the Lao formal financial system and privatisation policy activities. The chapter not only outlines the research, but also introduces the main conceptual frameworks used in the study of privatisation. Objectives, contribution to knowledge and the significance of this study are also discussed, followed by the research procedures undertaken to achieve the research objectives and answer the research questions. The penultimate section presents the organisation of this thesis, followed by a conclusion.

1.2 Background to the research in the Lao context

After a long historic fight for freedom and liberalisation from domination by Siam, today called Thailand (1779-1893), French colonialism (1893-1945) and re-colonialism (1946-1964), and American air bombardment (1964-1973), Laos ultimately became an independent nation on 2nd December 1975.¹ Since then, Laos has made increased efforts to integrate with the international and regional community and collaborate with international organisations. Laos signed the first agreement with the World Bank and the International Monetary Fund (IMF) in 1989. Laos then joined the Association of Southeast Asian Nations (ASEAN) in 1997, World Trade Organisation in 2013, and ASEAN Economic Community (AEC) in 2015. As part of its long-term development visions, Laos seeks to graduate from least-developed country status by 2020 and to consolidate as a middle-income country by 2030 (Ministry of Planning and Investment - MPI 2016).

¹ The long history of Laos started in 1353 when King Chao Fa Ngum (1316-1373) successfully founded a unified kingdom, the Kingdom of Lane Xang. For further details of Lao history, see National Assembly (2009), Stuart-Fox (1998, 2007), Ivarsson (2008), and Viravong (1964).

1.2.1 Social and economic development in Laos from 1975 to 2015

The social and economic development efforts made by the Lao government can be divided into two phases: a centrally-planned economy (1975-1986) and a market-oriented economy (1986 onward):

Socio-economic development under the centrally-planned economy from 1975 to 1986

In order to restore and improve the country's war-torn economy and secure development goals, Laos adopted a Soviet-style centrally-planned model to assume the tasks of social and economic development after the national revolution of 1975 (Bird & Hill 2010; Bourdet 1996; Otani & Pham 1996; Saignasith 1997; Shimomura et al. 1994). Its principal characteristics were a high degree of central economic decision-making in all important economic activities through a system of price control and restrictions on internal and external trade, foreign trade under state monopoly, and production facilities and distribution of goods. The main objectives of such an economic development model were quick industrialisation, collectivisation of agriculture and central control 'management' of the economic system to impose economic activities in a desired direction (Bird & Hill 2010; Bourdet 1996; Otani & Pham 1996; Saignasith 1997; Shimomura et al. 1994).

In order to achieve these long-term objectives, the Lao government argued that state ownership over economic activities should play a leading role in the economy. Consequently, a number of state-owned enterprises (SOEs) were rapidly established, partly due to nationalising existing private sector companies, as well as creating about 500 new SOEs between 1976 and 1986 (Lao National Social Science Institute - LNSSI 2011). Thus, SOEs constituted the foundation of the Lao economy. They were heavily subsidised by the state through its subsidisation and provision of raw materials and other inputs of production, machinery and equipment imported with aid funds and credit loans. At that time, the SOEs were the main source of tax revenue (LNSSI 2011).

By 1982, the use of market forces (to a limited degree) was being promoted at the third Congress of the Lao People's Revolutionary Party in order to support the social and economic development of Laos. Specifically, the Lao government granted financial and operating autonomy to small- and medium-sized SOEs. Enterprises under other forms of

ownership, such as public-private joint-venture enterprises and economic activities by individual persons and private enterprises, were also permitted in the Lao economy in that year.

During the period (1976-1986) of seeking to implement a centrally-planned economy, the overall economy proved unsuccessful and many key economic indicators were not be achieved as had been expected. Contrary to plans, the economy stagnated with a relatively small growth, low income per capita and high inflation. Real gross domestic product (GDP) growth rates averaged 2.8% per annum during 1975 to 1985 (Committee for Planning and Investment - CPI 2005). By 1985, the economy was comprised of agriculture – the dominant sector – accounting for about 65%, followed by services at 23% and industry at 12% of total outputs (LNSSI 2011). Income per capita stood at only US\$245 and an annual inflation rate surged to around 60% in that year. Furthermore, many social indicators appeared to indicate poverty to be a serious problem. For example, average life expectancy at birth was 51 years, rates of mortality (birth per woman) and infant mortality (per 1,000 live births) were high (i.e. 6.36 and 123, respectively) in 1985, and the percentage of children completing primary schooling (e.g. 42% in 1988) was very low (World Bank 2015).

Facing severe social and economic challenges, the government started to reconsider the merits of the model that it had been seeking to implement. The fourth National Party Congress of November 1986 marked a remarkable shift in the economic strategy. Specifically, the centrally-planned economic mechanism was officially replaced by a market-oriented economy, often referred to as *Chintanakan Mai* or the New Economic Mechanism (NEM) (Bird & Hill 2010; Bourdet 1992; CPI 2005; LNSSI 2011; Otani & Pham 1996; Rigg 2005; Sevic et al. 2016; UN 2006; World Bank 2007). Consequently, policy measures inherited from the centrally-planned economic mechanisms were ultimately abolished and numerous reform measures were implemented to promote and support multi-sectoral economic actors and economic growth. Over time, the comprehensive policy shift included development of legal and regulatory systems; tax reform; decontrol and liberalisation of prices (excluding utilities); trade liberalisation; dismantling of agricultural cooperatives; introduction and promotion of foreign investment; agricultural liberalisation and abolishment of the state monopoly on rice

distribution; unification of the foreign exchange rate; creation of a two-tier banking system (separation between the central bank and commercial banks); reform and privatisation of SOEs; and the introduction and promotion of private sector ownership in the economy) (Bird & Hill 2010; Bourdet 1992; CPI 2005; LNSSI 2011; Otani & Pham 1996; Rigg 2005; Sevic et al. 2016; UN 2006; World Bank 2007).

Social and economic development under the market-driven economy from 1986 to 2015

Since implementing the NEM of 1986, Laos has made many impressive social and economic achievements, particularly between 1990 and 2015, as presented in Table 1.1. The real GDP growth rate averaged about 6.9% annually between 1990 and 2015. The economic landscape of Laos also became more diverse. In 1986, agriculture was the dominant sector accounting for about 64% of GDP whilst industry and services respectively accounted for only 13% and 23%. However, in 2015, services became the largest sector in the Lao economy, representing around 42% of GDP, followed by industry and agriculture, which respectively accounted for 31% and 27%. GDP per capita at the US dollar current price and at purchasing power parity (PPP) at the current international dollar price, respectively rose from US\$204 and US\$1,048 in 1990 to about US\$1,810 and US\$5,675 in 2015, making Laos a lower middle-income economy.

During the 1990s and in 2000, Laos experienced high and hyperinflation. In particular, inflation jumped from nearly 28% in 1997 to over 90% in 1998 and 130% in 1999. However, since 2001, inflation has remained relatively low and stable at a single digit number, with the exception of 2002, 2003 and 2004, when inflation was 10.6%, 15.5% and 10.5% respectively. The annual inflation rate averaged 6.7% from 2001 to 2015.

The Lao *Kip*, the national currency, appeared to follow a similar path to inflation. The exchange rate (*Kip* per US\$) gradually depreciated from 708 *Kip* in 1990 to around 1,200 *Kip* in 1997, and then jumped to nearly 8,000 *Kip* in 2000 and just over 10,000 *Kip* in 2002. The depreciation of the *Kip* resulted from policy difficulties associated with the 1997 financial crisis. However, since 2000 the Lao *Kip* has been relatively stable against the US dollar. In 2015, a US dollar was around 8,150 *Kip*.

Table 1.1 Selected economic and social indicators 1990 to 2015

Indicators	1990	2000	2010	2015
<u>Economic</u>				
GDP growth (annual %)	6.7	5.8	8.5	7.0
Inflation (annual %)	36	25	6	1.3
GDP (current US\$ - million US\$)	866	1,731	7,181	12,327
GDP per capita (current US\$)	204	324	1147	1812
GDP per capita, PPP (current international \$)	1,048	1,860	3,904	5,675
Official exchange rate (Kip per US\$)	708	7,888	8,259	8,148
<u>Education</u>				
Net enrolment rate, primary (%)	65	76	94	95 ⁽¹⁴⁾
Net enrolment rate, secondary (%)	14 ⁽⁹²⁾	28	39	51 ⁽¹⁴⁾
Youth literacy rate (ages 15-24) (%)	71 ⁽⁹⁵⁾	81	84 ⁽⁰⁵⁾	
Adult literacy rate (ages 15+) (%)	60 ⁽⁹⁵⁾	70	73 ⁽⁰⁵⁾	
<u>Health</u>				
Life expectancy (years)	54	59	64	66 ⁽¹⁴⁾
Fertility rate, total (births per woman)	6.2	4.3	3.3	3.0 ⁽¹⁴⁾
Mortality rate, infant (per 1,000 live births)	111	83	59	51
Mortality rate, under-5 (per 1,000 live births)	162	118	80	67
<u>Poverty and malnutrition</u>				
Children underweight (ages under 5) (%)	40 ⁽⁹³⁾	36	26 ⁽¹¹⁾	
Population access to safe water (%)	40 ⁽⁹⁵⁾	46	68	78
Population access to sanitation facilities (%)	20 ⁽⁹⁵⁾	28	59	71
People below PPP \$1.90 a day (%)	44 ⁽⁹²⁾	43 ⁽⁰²⁾	36 ⁽⁰⁷⁾	30 ⁽¹²⁾
Population below national poverty line (%)	39 ⁽⁹⁷⁾	34 ⁽⁰²⁾	28 ⁽⁰⁷⁾	23 ⁽¹²⁾

Source: World Bank (2015)

Note: Due to the unavailability of data in certain years in an observation window, data available in the nearest year are used for comparison purposes.

In addition to significant economic successes (usually with some minor fluctuations), the social development of Laos has significantly progressed. Human development indicators have gradually improved from 0.397 in 1990 to 0.575 in 2014, ranking Laos 141th globally out of 188 countries (UNDP 2015). As presented in Table 1.1, all health

indicators have shared positive trends. Between 1990 and 2014, life expectancy increased from 54 years to 66 years and fertility rates (births per woman) dropped from 6.2 to 3.0. ‘Infant’ and ‘under 5’ mortality rates (per 1,000 live births) also declined respectively from 111 to 51 and from 162 to 67 between 1990 and 2015.

Education indicators, including literacy rates, have also improved. The primary and secondary school enrolment rates have increased significantly and were respectively 95% and 51% in 2014. Regarding poverty and malnutrition indicators, the percentage of the population with access to clean water improved from 40% to 78% from 1990 to 2015. Access to sanitation facilities increased from 20% to 71% during the same period. Children underweight (under 5 years old) also dropped from 40% to 26% between 1993 and 2011. While about 43% of the Lao people lived on less than US\$1.90 a day in 2002, this figure had reduced to 30% in 2012. The percentage of the population living below the national poverty line also reduced from 34% to 23% during that period.

In summary, Laos has experienced significant and positive social and economic successes over the past three decades, partly resulting from the successful implementation of the NEM announced in 1986. In order to achieve the successful economic transition from the centrally-planned to market-oriented economy, many reform measures (including privatisation of SOEs) have been undertaken to promote economic growth and development.

1.2.2 Lao banking and securities-related sectors

During the period 1975-1988, the State Bank of Laos performed both central and commercial banking roles and functions, known as a mono-banking system according to a centrally-planned administrative mechanism across central and local levels (ADB & World Bank 2002; Bourdet 1997; Keomanisy 2003; Otani & Pham 1996). However, in late-1988, the Lao government initiated several measures to reform the financial system in line with other economic reform measures under the NEM strategy. Consequently, the mono-banking system was transferred into a two-tier banking system comprising the central ‘Bank of the Lao PDR’ and commercial banks (ADB & World Bank 2002; Bourdet 1997; Keomanisy 2003; Otani & Pham 1996). The Lao government opened the banking sector to both domestic and foreign investors in 1989 by allowing private sector

participation in the banking sector and foreign banks to open their branches in Vientiane Capital.

As of 2015, there were 41 commercial banks nationwide: four state-owned commercial banks (SOCBs), including the Banque Pour Le Commerce Extérieur Lao (BCEL); three joint-venture banks; seven private banks; and 27 foreign bank branches (BOL 2015a). BCEL was the largest commercial bank in Laos in terms of assets, deposits and loans. Its total assets accounted for about 27% of approximately US\$12 billion in total assets in the banking system. BCEL also shared about 37% of total deposits (US\$7.11 billion) and 23% of total loans (US\$5.93 billion). Following BCEL, the three SOCBs and seven privately-owned commercial banks were together considered the second and third largest groups in this sector. Since 41 banks operate and compete in such a small market, it can be said that the Lao banking industry is highly competitive.

In addition to the banking sector, the LSX was jointly established by the Bank of the Lao PDR (holding 51%) (BOL) and Korea Exchange (holding 49%) in 2010, resulting from partially privatising two strategic SOEs – EDL-Generation Public Company (EDL-GEN) and BCEL (LSCO 2014). Since its inception in 2010, the exchange has operated on a very limited, inactive scale in terms of listed companies, investor bases, trading volume and liquidity. As of 2015, there were four public-private securities companies (including one financial advisory company). The exchange accommodated five listed companies (two privatised SOEs and three private companies) with a total market capitalisation of free floating shares of US\$354 million or roughly 3% of GDP in that year (LSX 2015). EDL-GEN and BCEL accounted for around 85% and 5% of total market capitalisation respectively.

Besides the limited number of listed stocks, the exchange also has a relatively small investor base. According to the Lao Securities Commission Office (LSCO (2015) and the Lao Securities Exchange (LSX (2015), the number of stock trading accounts gradually increased from 8,187 (6,910 accounts for domestic investors and 1,277 accounts for foreign investors) to 12,076 (9,650 accounts for domestic investors and 2,426 accounts for foreign investors) between 2011 and 2015. On average, retail and institutional investors accounted for over 99% and less than 1% of stock total trading

accounts during that period. Specifically, trading values executed by domestic investors have been much weaker than those executed by their foreign counterparts. Out of about \$US25 million in 2015, around 85% of stock trading values were made by foreign investors with only 15% executed by domestic investors. According to the LSCO (2014), “stock trading accounts of foreign investors represent only 20% of the entire trading accounts but they can significantly influence stock prices on the exchange” (p. 17). It can be concluded that foreign investors play a dominant role in trading shares listed on the LSX (LSCO 2015).

To conclude, the LSX has been rather inactive and is still in its infancy. Central questions are raised as to how a newly-created stock exchange can survive and grow in a dynamic changing environment (e.g. ASEAN Exchange Linkage under the AEC principles of 2015) and how a privatisation policy can practically support the development of capital (stock) markets and promotion of an equity culture or domestic equity investing in the small Laos economy.

1.2.3 Brief discussion of privatisation policy in Laos

Under the NEM strategy of 1986, the Lao government implemented a radical program for SOE reforms in 1989 using a privatisation initiative as the major policy instrument (ADB 1997; Bourdet 1992; IMF 1998; Livingstone 1997; LNSSI 2011; Pham 2004b; Suzuki 2002). The main objective was to assist in improving the poor economic performance resulting from the low productivity and inefficiency of obsolete, centrally-planned mechanisms. The initiative began with a process of privatising small-scale enterprises and then, in 1991, shifting emphasis toward larger and strategic enterprises, such as the food processing and telecommunication industries. By 1997, about 75% of around 640 SOEs had become privatised through methods of liquidation, lease arrangements, workforce buyouts, and/or direct sales (ADB 1997; Bourdet 1992; IMF 1998; Livingstone 1997; LNSSI 2011; Pham 2004b; Suzuki 2002). Although the IMF (1998, p. 12) had referred to these measures as “one of the most successful parts of Laos’ structural reforms thus far” (1998, p. 12), privatisation in Laos since 1998 has been carried out at a relatively slow pace, with a significant number of SOEs still in need of reform and remaining the focus of an ongoing national debate.

In the long process of privatisation in Laos, the year 2010 marked the beginning of a new chapter, with ten out of 141 remaining SOEs being privatised between 2010 and 2015 (MPI 2016). Of ten privatisation cases in 2010, two (including BCEL and EDL-GEN) significantly differed from the other eight cases, in that they supported the establishment of the first-ever Lao stock market. In these two cases, it was the first time that a privatisation process had been conducted through an open, transparent and competitive bidding process using a share issue privatisation method. It was also the first attempt by the government to implement a privatisation policy, not only to mobilise a large-scale domestic private sector capital, but also to promote an *equity* culture as the best way of minimising the socialisation of risk through state intervention. In this way, certain risks were to be shifted away from the government to private investors who were voluntary and willing to take those risks through alternative risk and reward mechanisms.

Considering the absence of special laws and decrees on privatisation and specific government agency to execute privatisation processes, a systematic process of privatisation appeared unlikely. In other words, previous privatisation programs were implemented in an ad hoc manner and, consequently, privatisation processes were believed to be opaque in terms of consistency and stability in approach and delivery of privatisation. Researchers of Lao privatisation have also argued that a wide range of stakeholder involvement and public education and awareness on SOEs and privatisation programs were unlikely to be seen. Consequently, public trust and confidence could be lacking in this regard. Inefficiency issues, it is also argued, continued to be a challenge for the remaining SOEs. Of the 131 remaining SOEs, six were reported to be “effective” and 27 “effective but need some structural improvements”, whereas 98 were “not effective and need improvements” (MPI 2016, p. 44). From these arguments, it can be concluded that privatisation outcomes were limited in supporting the development of the first-ever stock market and promotion of an equity culture in Laos.

Since 1986, the Lao government has been shifting and adjusting its development policies, moving from the general to the specific, to support and enhance the development of a more robust and balanced financial structure. In this way, the

domestic financial system (including both the informal and formal sub-systems) has been able to contribute to economic growth over time and during a period of dynamic change. In particular, recent history has shown that the Lao government has been tailoring its privatisation programs to fit its social and economic circumstances and to ensure success in the development of capital (especially stock) market and other forms of savings-investment intermediation. But this process is not yet finished.

1.3 Problem statement and rationale

Overall, privatisation has not been simple. Of the six share issue partial privatisations during the period 2010 to 2013, two were finalised in late 2010 and listed on the LSX in early 2011, and four were either postponed or cancelled during the preparation processes. Reasons for these mixed outcomes are not clear, perhaps due to inefficient SOEs and/or the lack of public confidence in the privatisation process and/or the absence of the necessary pre-conditions for privatisation success. From these perspectives, the researcher investigated what actions need be taken to assist the successful implementation of privatisation in Laos. This will allow policy-makers and practitioners not only to finalise privatisation transactions, but also ensure a privatisation quality that can support the development of capital (especially stock and corporate bond) markets and promote an equity culture in Laos. Ultimately, such issues are central to ensuring success in economic development in Laos.

In addressing these challenging issues, an understanding of both domestic and foreign privatisation experiences of noted practitioners and theorists in the field brings insights into an assessment and criticism of the privatisation process in Laos. However, this is not to say that the best practices from one country are necessarily applicable to another, but rather that privatisation programs need to be tailored and customised relative to country-specific conditions and reality. Many authors (Edwards 1987; Guislain 1997; Pfeffermann 1988; Pirie 1988; Vuylsteke 1988; Welch & Frémond 1998) suggest that privatisation is a complex issue. There is no formula, but a pragmatic, innovative and creative approach would enhance the probability of privatisation success. In attempting such an approach, a systematic learning process is of critical importance.

1.4 Conceptual frameworks used in privatisation

Privatisation took a major step forward in the 1980s, when Great Britain and France initiated their large-scale privatisation programs. Such privatisation initiatives were then promoted by international lending institutions such as the World Bank and the IMF, and consequently became part of a world economic agenda. This phenomenon of privatisation led to an academic discourse on the subject, including the effects of privatisation on social and economic benefits and capital market development, and the necessary pre-conditions for successful privatisations. Many international empirical studies (Boubakri & Cosset 1998; D'Souza & Megginson 1999; Megginson, Nash & van Randenborgh 1994) have presented evidence that privatisation results in strong improvements in firm performance relative to profitability, operating efficiency, leverage, employment, welfare and growth. Only a handful of studies present the opposite view (Boubakri & Cosset 2002). Notably, for reflection on Laos as a small economy and the focus of this study, other empirical studies conclude that privatisation has produced weaker improvements in firm performance in lower middle-income countries than those in high-income countries (Boubakri & Cosset 1998).

To some extent, there is a clear linkage between privatisation and the creation and development of capital (especially stock and corporate bond) markets. Many transition countries, such as China, Mongolia, and Vietnam, created or re-established their stock exchanges as part of their privatisation strategies. Many authors (Bortolotti, Fantini & Siniscalco 2001; Boutchkova & Megginson 2000; Megginson et al. 2004) have found that privatisation has helped to improve capital markets, particularly stock markets, which appear to thrive under market capitalisation. It is evident that privatisation has stimulated the development of these domestic stock markets by supplying shares to the public (markets) and increasing market liquidity (Lieberman, Kessides & Gobbo 2008; Vuylsteke 1988; World Bank 1989). Waters (1985, p. 43) stated:

There is no point in complaining that organised local financial markets do not exist in many of the less developed nations. The process of raising funds for privatisation can be the vehicle for organising the existence of unofficial financial markets, and an incentive to permit the emergence of official ones. This provides an opportunity to create the missing organised financial structures.

As suggested by Vuylsteke (1988), there may be more investable savings in liquid forms outside the banking system than governments may anticipate. These savings may be invested in liquid forms such as cash, hard currencies and gold. Privatisation, especially share issue privatisation, could thus be possible in some countries lacking formal financial markets. This may, in turn, help enhance formal underdeveloped financial markets and minimise the roles and scope of informal financial markets in an economy. *Underdeveloped* financial markets are those that operate in an economy with various imperfections, including government overregulation, inefficient legal systems, poorly enforced financial contracts, direct government lending that competes with private companies, low levels of access to financial services, and immature capital markets (Valderrama 2008). Consequently, the healthy formal financial system can effectively mobilise and allocate domestic savings to the most productive sector (World Bank 1989). Therefore, a crucial policy question is just how this competition between formal and informal financial markets is viewed and managed in the reform strategy of Laos.

Privatisation programs in the last three decades have significantly reduced the role and scope of SOEs in the economic life of many countries. Numerous studies (ADBI 2000; Bortolotti, Fantini & Siniscalco 2001, 2003; Donaldson & Wagle 1995; McLindon 1996; Megyery & Sader 1997; Pfeffermann 1988; White & Bhatia 1998) have presented various critical features that are argued to underlie successful privatisations. These include strong government commitment, consistent legal and regulatory frameworks, institutional arrangements, stakeholder involvement, public education and awareness, firm-level privatisation strategies, and fairness and transparency. In light of the absence of these pre-conditions, malpractices and inappropriate behaviours cannot be avoided in the implementation of privatisation programs. Stiglitz (2008, p. ix) echoed this concern:

Perhaps no subject in development arouses more passions – on both sides [successes and failure] – than privatisation. The privatisation process has been marked by enormous abuses: in many countries a few individuals managed to grab hold of previously state-owned resources for a pittance and become millionaires – or billionaires.

However, although these efforts have been well-documented in advanced and/or large developing economies, there have been few studies focusing on small economies. Therefore, the varying conditions required for success or failure of privatisation in small economies, such as Laos, are still unclear and we have little empirical basis for discussing how privatisation may be adjusted over time to ensure economic development goals, including the development of domestic capital markets. This study endeavours to address this gap in the literature, using Laos as a case study.

There is almost no research into privatisation in relation to capital market development in the Lao context, yet this is a very important issue for the economic development of the country, being part of the overall question of savings-investment relationships. This study therefore investigates the evolution of two aspects of the economic reform policy in Laos: privatisation and development of the financial ‘ecosystem’². By analysing the evolving attitudes and beliefs of local experts, participants and policy advisers, this study empirically examines the collective ‘perceptions and attitudes’³ of relevant stakeholders about the links between privatisation and the development of Laos’ financial ecosystem. It also examines the critical factors that are perceived by these stakeholders to positively contribute to the likelihood of favourable privatisation outcomes (successful privatisations). In this way, research limitations caused by the lack of reliable and publicly accessible data on the *real* effects of privatisation in Laos can be addressed.

1.5 Objectives of the study

The literature points to a wide range of essential factors that can influence the likelihood of privatisation success. The question here is how the lessons and experience of local

² The term *financial ecosystem* can be defined as a system or network where market relevant actors, regulatory and policy frameworks, and infrastructure function, interconnect and interact altogether in a way that enables a safe and efficient financial system (European Union 2016).

³ ‘*Perception*’ refers to the process of “receiving, selecting, acquiring, transforming, and organising [and interpreting] the information supplied by our senses” (Barber & Legge 1976, p. 7), whereas ‘*attitude*’ refers to “a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour” (Eagly & Chaiken 2005, p. 745).

Lao well-informed and knowledgeable stakeholders can inform and improve the implementation of privatisation programs. Such knowledge might help develop a domestic stock market, and promote an *equity* culture in a way that helps minimise socialisation of risk through state intervention. The main objectives of this study were to assess and identify critical factors that are perceived by these stakeholders as most likely to influence the likelihood of favourable privatisation outcomes, and to examine how such outcomes can ultimately support the development of more competitive domestic capital markets (particularly stock markets) and promote an equity culture and/or equity investing according to risk-and-reward mechanisms.

In order to achieve the research objectives, the following broad research questions were formulated to direct the course of the study:

1. What are the critical factors driving the likelihood of favourable privatisation outcomes (privatisation success) in Laos as perceived by key stakeholders in light of theoretical and practical perspectives?
2. In what ways would such perceived critical factors influence these perceived privatisation outcomes?
3. In what ways would such perceived privatisation outcomes impact on the development of capital (stock) markets in Laos?
4. In what ways would such perceived privatisation outcomes stimulate and promote an *equity* culture that simultaneously minimises *socialisation of risk* through state intervention in Laos?
5. In what ways would moderator(s) of gender, educational level and workplaces affect a privatisation process in Laos?
6. What specific privatisation outcomes are likely to influence the development of capital (stock) markets and people's intentions and willingness to invest in shares of SOEs being privatised?
7. In what way would privatisation affect the financial and operating performance of the newly-privatised firms in Laos?
8. How might a learning curve in the adoption process shift the Lao government's development policies over time, given the importance of capital market development through privatisation programs?

1.6 Contribution to knowledge

This perception-based study is the first in-depth analysis of privatisation policy in Laos. It will, in my belief, contribute to the knowledge of privatisation relative to the development of capital (especially stock) markets and promotion of domestic equity investing, both in Laos and beyond. Although the literature recognises the importance of privatisation and capital market development for economic growth in both developed and large developing countries, Laos, a less developed and still largely rural economy still in transition from a centrally-planned to market-oriented economy, has received relatively little attention. This is largely due to the difficulties in accessing reliable information on SOEs, especially regarding the evolution of privatisation policies. Therefore, this study not only makes a significant contribution to knowledge of privatisation in the small economy of Laos, but also provides an evolving conceptual framework for successful privatisation and a healthy local stock market in small developing economies.

Using Laos as a case study, this work also contributes to knowledge by examining perceptions and attitudes about the impacts of privatisation (from the collective perspectives of key stakeholders) on the development of capital markets and other forms of savings-investment intermediations in a small economy. Furthermore, as few studies have specifically focused on people's perceptions and attitudes toward privatisation in the development of capital (especially stock) markets and promotion of an equity culture or equity investing, this unique study contributes to a new body of knowledge focused on small economies in this regard, using Laos as a case study.

1.7 Significance of the study

By conducting a detailed investigation into the changing collective perceptions and attitudes of key stakeholders regarding privatisation relative to the development of the financial 'ecosystem' of Laos, this study presents a framework for assessing the associated policy issues. This framework will not only help formulate policies that address the controllable impediments to privatisation, but also serve as a first step toward formulating realistic, implementable and tailored privatisation policies. Such policies would assist in the development of the stock market and other forms of

savings-investment intermediations, as well as promote an equity culture and domestic equity investing in the specific and unique context of Laos. A successful policy must be realistic, both in terms of meeting local expectations and in what can be achieved through privatisation.

This study will also be beneficial to the Lao government's economic development goals and poverty reduction strategies and, in particular, to the privatisation policies related to capital market development. By establishing and developing a domestic capital (stock) market alongside the banking sector and existing informal institutions, domestic financial resources would be mobilised to improve the collective efficiency and effective allocation of funds. This will ultimately enhance economic growth in Laos. This perception-based study will further provide a conceptual framework for assessing and evaluating previous privatisation programs in a small developing economy. This framework will help identify practical hindrances to such programs and find feasible solutions to the improvement of ongoing programs and the implementation of upcoming programs. In this way, the study will help contribute to well-planned privatisation programs that bring potential benefits to all stakeholders, while at the same time taking into consideration the development of domestic capital markets. By drawing on these lessons from the small economy of Laos, this study provides important guidelines for countries in similar situations where the many necessary pre-conditions for privatisation success might be lacking.

1.8 Research procedures

This study proceeded in five stages, as follows: an extensive review of relevant literature; preliminary fieldwork activities in Laos; data collection; data analysis; and interpretation of the research findings. To meet the research objectives and answer the research questions, this study adopted various methods of collecting and analysing data to suit the purposes of each research question. In order to address the issue of unreliable and publicly inaccessible data on the business performance of SOEs and privatisation processes, this study analysed stakeholder experiences to date using three datasets: two sets of primary data collected from qualitative interviews and a quantitative survey; and one secondary dataset of financial reports from two partially-privatised SOEs.

1.8.1 Primary qualitative and quantitative data

Primary data were critically important in answering research questions 1 to 6. This study adopted a mixed research method of qualitative interviews and quantitative self-administrated survey questionnaires to collect the primary data. Due to the lack of studies on privatisation in small economies, literature focusing on this process in advanced and large economies was reviewed to help establish a conceptual foundation for this study. Preliminary fieldwork activities, including interviews and collection of relevant information, were then conducted in two of the largest provinces in Laos (Vientiane Capital and Savannakhet Province). This helped secure an initial understanding of the relevant environments and perceptions of relevant stakeholders, through formal and informal discussions with multiple key stakeholders.

Qualitative interview questions and quantitative self-administrated survey questionnaires were then developed and used to collect primary data about key stakeholders' perceptions and attitudes toward privatisation in relation to the development and strengthening of the domestic financial 'ecosystem' in Laos. Interview and survey questions were initially written in English and then translated into Lao by a local accredited translator. The Lao version was used to reduce the possibility of misunderstandings. After receiving ethical approval from the Victoria University Human Research Ethics Committee, the researcher carried out the second fieldwork activities and collected primary data through interviews and surveys in Vientiane Capital, where almost all remaining and privatised SOEs were located. At this stage, the researcher had planned to interview 20 information-rich stakeholders and recruit 500 potential respondents for questionnaire surveys. These samples would be drawn from a pre-specified sampling frame including government-related and private sector entities. Specifically, laypersons (i.e. members of the public) were excluded from this sampling frame since this study was more technically-specific and required potential interviewees and survey respondents with certain knowledge and understanding of SOEs and privatisation processes.

In order to analyse the primary data focused on the experiences and perceptions of key stakeholders, two new datasets were established. Using thematic analysis techniques, the first dataset, based on detailed interviews with 14 out of 20 well-informed

interviewees, was analysed for lessons learnt and perceived opportunities and constraints. The aim of undertaking this analysis was to better understand the meanings of identified themes and the relationships between concepts. The second dataset, based on the quantitative data collected from 359 out of 400 returned and answered survey forms, allowed the researcher to analyse and assess whether their respondent views supported or contradicted those of foreign experts within the existing literature. This survey data was processed using the Statistical Package for Social Sciences (SPSS) and SPSS AMOS version 22 for Structural Equation Modelling (SEM) analysis techniques. This approach was used to estimate observed variables used to measure unobserved variables (factors) and examine the structural path relationships among these factors in a given perception-based model. The findings uncovered from the SEM analysis technique resulted in answering many research questions.

Research findings derived from the analyses of the two primary datasets were then discussed and combined in order to generalise the findings and draw possible conclusions. A generalisation of these conclusions has revealed the need for privatisation processes and policies in Laos in order to develop more effective implementation in its privatisation programs. Consequently, favourable outcomes from such privatisation programs are believed to support the development of more competitive domestic capital (stock) markets and promote an equity culture and/or equity investing that helps minimise socialisation of risk through state intervention (e.g. state ownership) in Laos.

1.8.2 Secondary data

In order to assess and compare the financial and operating performance of privatised SOEs in Laos (as stipulated in research question 7), this study adopted an assessment methodology proposed by Megginson, Nash and van Randenborgh (1994; henceforth MNR methodology). However, due to a lack of publicly available data and information about financial and operating performance of pre- and post-privatisation SOEs, this study only used the MNR methodology to focus on two previously-privatised SOEs, namely BCEL and EDL-GEN. As indicated earlier, these are the only privatised SOEs that are now listed on the LSX, with applicable company data and information in the public domain.

The findings derived from both primary (qualitative and quantitative) and secondary data could result in generalising potential conclusions. As a result, such findings also assisted in assessing how a learning process would affect the Lao government's privatisation policy over time (as stipulated in research question 8).

1.9 Definition of state-owned enterprises and privatisation in the Lao context

State-invested enterprises are divided into two categories according to Enterprise Law (Amendment) No. 46/NA dated 26 December 2013. SOEs refer to those in which the government holds more than 50% ownership (Article 196), whereas public-private joint companies refer to those in which the government makes a certain amount of capital contributions (i.e. 50% and less) (Article 202). Theoretically and practically, many authors define SOEs as enterprises or economic entities where the government has significant control through full, majority, or significant minority ownership (Guislain 1992, 1997; OECD 2011; Ramamurti 1991; Vuylsteke 1988; World Bank 1995). Therefore, it can be said that Laos' definition of SOEs is comparable to those used in the literature and those defined by many international agencies such as World Bank.

The term privatisation is defined as “the conversion of state-owned enterprises to other forms of ownership” according to Decree No. 17/PCM issued by the minister council in March 1990. This term means the transfer of either partial or full ownership from the public to private ownership through direct sales, joint-venture arrangements, and/or lease or concession arrangements. This definition of privatisation has been the most commonly used in the Lao context. Such a definition is literally comparable to a narrow definition of privatisation ‘denationalisation’ used in the literature, which is the partial or entire transfer of state assets or enterprises to private ownership (Bös 1991; Lieberman 2008; McLindon 1996; Saunders & Harris 1990; Shirley 1992). A detailed definition of privatisation will be discussed in Section 2.3.

1.10 Organisation of the thesis

This is organised into nine chapters, followed by a list of references and appendices presenting research instruments, statistical estimates and graphical charts from the analyses of primary quantitative data. Following this introductory Chapter 1, Chapter 2 provides a literature review on the theoretical and empirical underpinnings of

privatisation used to guide the research. Chapter 3 discusses a mixed research method of qualitative interviews and quantitative self-administered survey questionnaires. These were used to determine the collective perceptions and attitudes of key stakeholders toward privatisation efforts in relation to the development of capital markets, as well as the promotion of an equity culture and/or domestic equity investing in Laos. Chapter 4 presents a further discussion of privatisation policy in Laos and compares the business performance of newly-privatised firms on the LSX using two listed strategic SOEs – BCEL and EDL-GEN as case studies.

Chapter 5 conducts analysis of qualitative views in historical perspectives on past privatisation programs that are drawn from interviews with 14 information-rich key stakeholders residing in Vientiane Capital. Chapter 6 presents the data analysis procedures of the primary data collected from the quantitative survey questionnaires in order to prepare model analysis variables prior to performing exploratory factor analysis (EFA) and SEM techniques. Chapter 7 presents the preliminary data analysis of model variables using the EFA technique and SEM congeneric measurement models. Chapter 8 provides the empirical analyses of structural relationships among hypothesised constructs using SEM structural models in order to assess testable hypotheses and moderating effects concerning a hypothesised model of privatisation in Laos. It also presents the results of stepwise multiple regression analyses.

Chapter 9 continues the discussions and provides concluding remarks and the implications of this study. Some recommendations are presented with the aim of improving privatisation programs linked to the development of domestic capital markets in Laos. Finally, possible and actual limitations of the study are articulated together with suggestions for further research into privatisation in developing country contexts.

1.11 Chapter conclusion

This introductory chapter has presented some background on Laos through a brief synopsis of its social and economic development policy since its independence in 1975, as well as a discussion on privatisation. The chapter has also outlined the research, research problems, objectives and research questions, contributions and significance of this study, as well research procedures.

The NEM policy initiated in 1986 has transformed Laos' centrally-planned economy into a market-oriented economy, with considerable achievements in social and economic development. Although the first privatisation effort took place in 1989, privatisation policy remains a subject of ongoing national debate. It is evident that the recent privatisation programs of two strategic SOEs resulted in the establishment and development of the first-ever Lao stock market.

The principle objectives of this study were to examine and identify factors perceived by key stakeholders as most likely to influence privatisation success, particularly in connection to the strengthening and development of Laos' domestic capital markets and promotion of an equity culture and/or domestic equity investing in Laos.

The following chapter (Chapter 2) provides a literature review of international studies on the theory of privatisation, providing an analysis of the theoretical and conceptual frameworks that underpin this thesis.

Chapter 2

Literature Theories of Privatisation

2.1 Introduction

The main purpose of this chapter is to review and introduce the theoretical and practical aspects of privatisation. The origin of privatisation and global lessons learned from privatisation experiences are also discussed. Specifically, this chapter presents a review of the historical background, followed by the definitions, motivations and objectives, and techniques of privatisation. It then presents the theory of learning curve effects and innovation diffusion related to the privatisation process. Furthermore, this chapter focuses on numerous international studies of critical factors that help influence the likelihood of successful privatisations, to serve as a conceptual framework and research model for this study. The following two sections outline how privatisation outcomes can influence the development of capital (especially stock) markets and people's behavioural intentions in buying shares in privatisable SOEs. Selected empirical studies on pre- and post-privatisation firm performance are then discussed. A summary of the hypotheses underpinning the research questions and a hypothetical privatisation model is then presented.

2.2 Privatisation: History and trends

The main purpose of this section is to provide a basis for understanding the interconnected roles of public and private ownership in relation to economic development throughout history.

2.2.1 Brief history of privatisation

Throughout history, there have been ongoing debates on whether the state or the private sector should own the means of production and commerce. According to Sobel (2000), in the ancient Near East (3500-2500 B.C.), the government (often including religious institutions) owned and controlled the means of production (such as land, mills, metal workshops and trading companies), while trading and money lending could be conducted by individuals and private companies. By 1500 B.C., the government of the Ch'in dynasty in China had developed sophisticated markets in which private parties

were allowed to transact in luxury goods such as silk, turquoise and tortoise shells (Means 2001). In the ancient Roman Empire (27 BC-393 AD), the government usually had large public holdings in lands, forests, and mines, but contracted out the work to independent individuals and firms. At this time, many economic activities (e.g. tax collection, supplying the army, providing for religious sacrifices and other ceremonies, building construction and repair, and mining) were contracted out to both private individuals and firms (Sobel 2000). In the late 18th century, public versus private ownership was well documented in literature. Smith (1776, p. 324) first stated:

Great nations are never impoverished by private, though they sometimes are by public prodigality and misconduct. The whole, or almost the whole public revenue, is in most countries employed in maintaining unproductive hands.

According to Smith, people seemed to be imprudent with other people's assets and to behave in a prodigal way using public money carelessly and unwisely. He suggested that state ownership was more likely to destroy, rather than create, the wealth of nations. By contrast, he argued, private ownership helped improve productivity and efficiency since private owners concentrated on the costs and benefits of using their own capital and had incentives to use and allocate their resources efficiently. Smith (1776, p. 309) also commented:

[T]he sale of the crown lands would produce a very large sum of money, which, if applied to the payment of the public debts, would deliver from mortgage a much greater revenue than any which those lands have ever afforded to the crown. [...] When the crown lands had become private property, they would, in the course of a few years, become well improved and well cultivated.

Skousen (2007) pointed out that this classical economic model became one of the key principles of laissez-faire non-interventionism in economic affairs (e.g. free trade, low taxes, and minimal bureaucracy). By the time of the Industrial Revolution (late 1700s-1800s) in the richest western economies, the private sector was the dominant

producer of commercial goods, and was also important in providing public goods and services (Sobel 2000). Moreover, European governments gradually permitted private companies to engage in international trade, resulting in significant expansion of private business in their economies.

Marxism and socialist ideologies however began to spread in Europe in the late 19th and early 20th centuries, with a noticeable decline in trade liberalisation in European countries (Brus & Laski 1989; Friedman 2002; Skousen 2007). SOEs slowly increased in number and state control expanded during that time. This phenomenon initially resulted in state intervention and protectionism in economic activities to sustain full employment and promote equitable distribution of wealth (Brus & Laski 1989; Friedman 2002; Skousen 2007). These movements of state central planning, intervention, ownership, and nationalisation of private assets, were more significant and even more intensified in socialist-driven economies after World Wars I and II (Brus & Laski 1989; Drucker 1992; Lee & Nellis 1990; Parker 2009; Shonfield 1965; Skousen 2007; Sobel 2000). Together with the existence of a wide sector of publicly managed enterprise, according to Shonfield (1965), socialist governments also imposed economic activities in a desired direction through different mechanisms, such as the control of the banking system and tax policies. Despite intensified state ownership in those economies, mixed enterprises – partnerships of public and private capital or state joint ownership of productive assets – were still implemented for large-scale investment projects. Shonfield (1965) argued that a mixed economy assists in achieving optimal social welfare and full employment prosperity, but the supervisory role and guiding force of public power over the private sector is of critical importance. Shonfield (1980, p. 1) further explained:

A mixed economy is one in which prices and supplies of goods and services are largely determined by market processes. At the same time the state and its agencies have a large capacity for economic intervention, which is used in an endeavour to secure objectives that the market would, it is believed, not achieve automatically or would not do so fast enough to meet some requirement of public policy. [...] The component of public power was so small and the consequent mixture so thin that it could not function as a

mixed economy – like cement mix which has had so much water put into it that it could not be used to hold a building together.

Following debates on the extensive role of the public sector in European economies, an increase in private sector roles in economic activities began to emerge in the 1960s. For example, the Federal Republic of Germany launched its the first large-scale denationalisation program by selling a majority stake in Volkswagen to public investors in 1961 (Megginson & Netter 2001, 2003; Young 1987). In 1969, Drucker (1992, p. 233) echoed the sentiments of this new direction, providing a sceptical view on the ineffectiveness of government ownership as the result of the co-existing government functions of *governing* and *doing*:

This [governing] is incompatible with "doing." Any attempt to combine governing with "doing" on a large scale, paralyses the decision-making capacity. Any attempt to have decision-making organs actually "do," also means very poor "doing." They are not focused on "doing." They are not equipped for it. They are not fundamentally concerned with it.

In order to improve efficiency and effectiveness, Drucker (1992) explained that governments may have to learn to decentralise through re-privatising the “doing” tasks (e.g. performing, operating and executing) to non-governmental institutions. However, it was almost twenty years before this concept of privatisation re-emerged and took a major step forward in the 1980s, when Great Britain and France pioneered their own large-scale privatisation programs. After the 1989-1991 collapse of socialist regimes, including the former Soviet Union, the privatisation phenomenon further flourished to become the key element in their transition from centrally-planned to market economies (Megginson & Netter 2001; Sachs 1992; UNCTAD 1993; Vuylsteke 1988).

The reasons behind this global privatisation phenomenon were driven by both ideological reasoning and market forces in response to the poor performance and inefficiency of SOEs. Under state ownership, it was claimed, neither managers nor employees had to bear the costs of their decisions nor would they capture the gains of efficient behaviour (Hanke 1985). As government ownership and management of firms

did not prosper as expected, the introduction and use of market forces was expected to improve the efficiency of resource allocation and enhance greater efficiency (Bös 1991; Megginson, Nash & van Randenborgh 1994; Megginson & Netter 2003; Robinson 2003; UNCTAD 1993). In 1962, Friedman (2002, p. 168) stated:

The achievement of [efficient] allocation of resources without compulsion is the major instrumental role in the market place of distribution [of income and wealth]. [This] enables distribution to occur impersonally without the need for ‘authority’ - a special facet of the general role of the market in effecting co-operation and co-ordination without coercion.

Throughout history, the two schools of thought (private versus state ownership) have co-existed, with the organisation of economic activities and ownership of means of production and commerce shifting from public to private sectors, and vice versa. Therefore, the answer to a question on whether SOEs are a problem can vary depending on where the respondent sits on the ideological spectrum (World Bank 1995).

2.2.2 Factors causing inefficiency of state-owned enterprises

SOEs, the wide range of literature argues, are unproductive, inefficient and ineffective. Inefficiency and effectiveness of SOEs arises largely from weak bureaucratic mechanisms (Feigenbaum, Henig & Hamnett 1999; Glade 1983; Jones & Papanek 1983; Megginson & Netter 2001; Saunders & Harris 1994). Stretton (2000) explained that bureaucracy is the governmental mechanism for organising, coordinating and, when necessary, commanding and intervening in SOEs. In doing so, the government as sole owner is capable of controlling SOEs’ investments and spending, and most importantly, directing or guiding the SOEs to do what the government wants in pursuit of either collective or individual interests (Stretton 2000). Feigenbaum, Henig and Hamnett (1999) claimed that politicians are like business people who have something to sell, and as a result they try to deliver material favours and interests from the government to the groups that support them (e.g. through state ownership). Through state ownership politicians can easily intervene in SOE operations and/or business activities (Megginson & Netter 2001). Consequently, state intervention in the economy typically involves the assignments of various social and political objectives to SOEs, while meddling in the organisation’s daily management in pursuit of diverse objectives (van de Walle 1989).

In favour of the above propositions, Stretton (2000, p. 473) further stated:

Most business enterprises, public or private, need coherent management capable of quick decisions and quick and flexible response to changing conditions. They must not be subject to detailed directions or interventions by outsiders [state authorities] likely to be over-cautious, slow to respond, and inexperienced in the business. And they must not have their management broken up and distributed to a number of different authorities.

In line with these preceding perspectives, Saunders and Harris (1994, p. 24) stated:

Battered all sides by competing demands, ministers used the nationalised industries to achieve their own short-term political objectives. Governments never gave their managers clear signals about what they wanted and were never able to leave them alone to get on with the job. Rather than operating at arm's length, they found themselves operating from within the minister's pocket, and, increasingly, they did not like it. [...] A key reason for privatising the nationalised industries was, therefore, that it would depoliticise them and free their managements to manage. [...] Once in the private sector, ministers would be unable to pressure companies into policies which were not in their commercial interests, and this in turn would reduce the intensity of interest-group demands upon politicians since it would no longer be in the power of government to accede to them.

In addition to state interventions in the day-to-day operations and decision-making processes of SOEs, the literature points to several other factors causing inefficient SOE performance. These factors include: conflicting business objectives of commercial and non-commercial orientations; non-competitive business; ineffective governance and poor management; inaccurate or incomplete accounting records; obsolescent equipment and plants; and overstaffing (Johnson, G 1999; Megyery & Sader 1997; Poole 1987; Vuylsteke 1988). As indicated earlier, lack of accountability is also another cause, since SOE managers and employees are viewed as unaffected by their decisions (Hanke 1985). Domberger and Piggott (1986, pp. 36-7) elaborated:

First, there is the absence of a clear-cut profit objective which is the overriding goal of private enterprise. [...] The second problem arises from the fact that public enterprises are often assigned a number of (sometimes conflicting) objectives amongst which cost minimisation typically has low priority. More importantly, governments are generally willing and able to direct the management of [SOEs] to pursue non-commercial objectives for political reasons. [...] Finally, the incentives confronting management are not compatible with the pursuit of efficiency in production since typically neither their earnings nor tenure are directly related to any measure of performance such as profitability. [...] Thus, attempts by management to improve efficiency can involve confrontations with [the governments' political objectives]. Such attempts are therefore incompatible with that ubiquitous management objective – the desire for a quiet life.

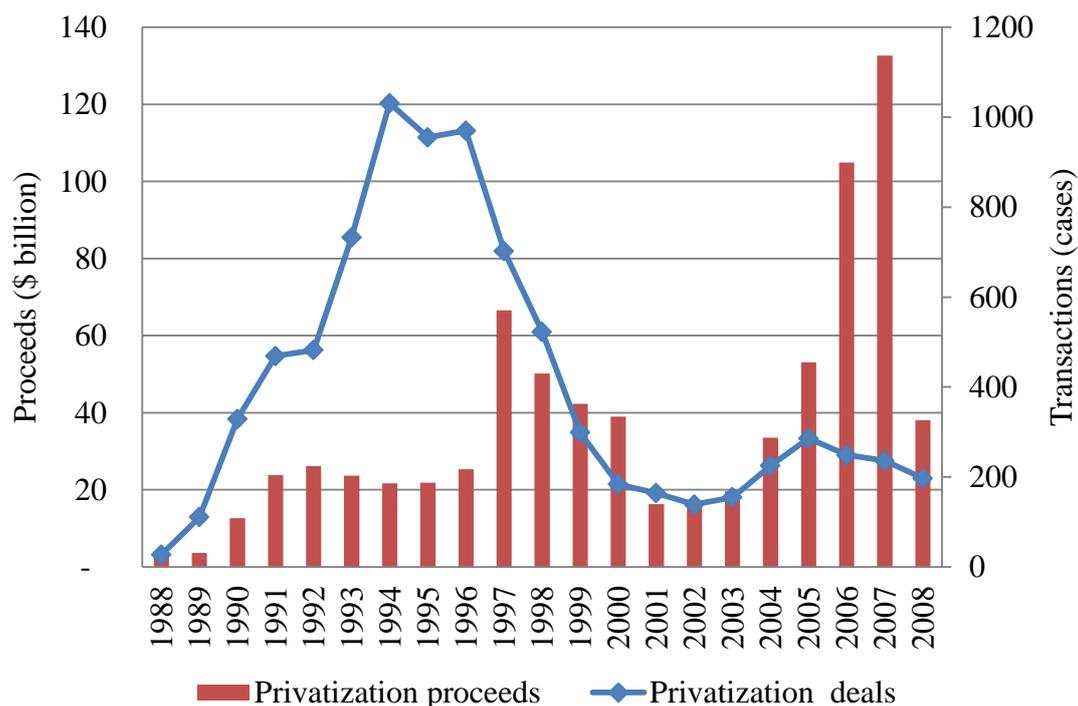
In summary, researchers argue, SOEs perform poorly as a result of several factors but bureaucracy (state intervention) is considered a central underlying factor to poor SOE performance.

2.2.3 Privatisation trends in developing countries from 1988 to 2008

Based on the presumption that private sector enterprises outperformed their state-owned counterparts, in the 1980s many governments initiated privatisation programs, starting from selling small retail outlets and industries to selling larger mining and infrastructure enterprises (Shirley 1992). Specifically, privatisation movements began to be promoted by international lending agencies like the World Bank and the IMF in order to support the structural economic adjustment and stabilisation reforms of many developing countries (Baker 1999; Feigenbaum, Henig & Hamnett 1999; Miller 2000; Parker 2006; Parker & Kirkpatrick 2005; Parker & Saal 2003; Vuylsteke 1988; Williamson 2008). In 1989, loans, investments and aid were offered on conditions centred on the implementation of a set of relatively specific policy reforms. This was termed the *Washington Consensus* by John Williamson.⁴ Privatisation became a part of

⁴ Williamson's (pp. 16-7) *Washington Consensus* centred on ten reforms: 1) fiscal policy discipline to eliminate public deficits; 2) re-ordering public expenditure priorities; 3) tax reform; 4) liberalising interest

conditionality requirements attached to institutional lending (Williamson 2008). For example, 70% of structural adjustment loans and 40% of sectoral adjustment loans granted by the World Bank during the 1980s contained a privatisation component (Baker 1999). As a consequence, privatisation movements spread like an unavoidable bushfire, requiring acceptance throughout the world. Nonetheless, privatisation policies have remained a subject of ongoing debate in many countries.



Source: Adapted from World Bank (2008)

Figure 2.1 Privatisation proceeds and cases in developing countries, 1988-2008

According to the World Bank (2008), about 8,500 SOEs had transferred to private ownership in over 120 developing economies between 1988 and 2008. Figure 2.1 illustrates the increasing monetary value levels that the three waves of privatisation transactions brought to these countries, beginning with smaller SOEs and moving to include larger SOEs. The first wave was from 1988 to 1991, the second from 1992 to 1997, and the third from 1998 to 2008. In these three waves, the aggregate values of proceeds from privatisations rose from about US\$43 billion (936 transactions), to

rates; 5) competitive exchange rates; 6) trade liberalisation; 7) liberalisation of inward foreign direct investment; 8) privatisation of SOEs; 9) deregulation; and 10) legal security for property rights.

US\$185 billion (4,873 transactions), to roughly \$545 billion (2,657 transactions), respectively. Such an increasing trend reflects a learning curve effect, which Rogers (1983) termed a ‘diffusion of innovations’ resulting from the accumulation of experiences and lessons drawn from previous privatisation efforts.

2.3 Definition of privatisation

Even though privatisation might be a relatively new term, the concepts surrounding it have been operating throughout history. The wide range of studies into privatisation reveals that it is a complex and multidisciplinary concept, which cannot fit into a single definition (Beesley & Littlechild 1997; Bös 1991; Guislain 1997; Pirie 1988; Ramamurti 1991; Saunders & Harris 1990). Therefore, in order to define privatisation in both broad and narrow senses, Saunders and Harris (1990) presented a four-fold typology, as shown in Table 2.1.

Table 2.1 A typology of privatisation

Change in government’s role	New locus of responsibility	
	Producers	Consumers
Change of ownership	<i>Denationalisation</i>	<i>Commodification</i>
Change of control	<i>Liberalisation</i>	<i>Marketisation</i>

Source: Saunders and Harris (1990, p. 59)

In the broad sense, many authors refer to the term privatisation as either ‘liberalisation’ or ‘deregulation’ (Pirie 1988; Saunders & Harris 1990; von Weizsäcker, Young & Finger 2005; Vuylsteke 1988). As shown in Table 2.1, liberalisation can be seen as any measure that increases the scope and role of the private sector within the economy while diminishing the overall scope of public sector involvement through ownership of assets (Pirie 1988; Saunders & Harris 1990; von Weizsäcker, Young & Finger 2005; Vuylsteke 1988). Such measures include the removal of restrictions in market entry and the opening-up of services to increase competition within the statutory monopolies. This allows the private sector to provide a service that was earlier monopolised by the SOE sector. In a narrow sense, ‘commodification’ refers to cases in which state-owned resources are sold directly to those who previously consumed them, such as council house tenants. ‘Marketisation’ refers to cases where direct state provision(s) in kind are

replaced by cash transfers and allowances made to individual consumers. This allows them to purchase what they need in the market; for example, individuals receiving financial support to purchase housing (Saunders & Harris 1990). Another narrow definition of privatisation is ‘denationalisation’, which is the partial or entire transfer of state assets or enterprises to private ownership (Lieberman 2008; McLindon 1996; Saunders & Harris 1990; Shirley 1992; Vuylsteke 1988). A partially privatised SOE is owned partly by private shareholders and partly by the government (Lieberman 2008; McLindon 1996; Saunders & Harris 1990; Shirley 1992; Vuylsteke 1988).

Drawing from the above discussion, this study adopts the narrow definition – denationalisation – since it is relatively close to the term *conversion of SOEs to other forms of ownership*, as used in Laos (See Section 1.9).

2.4 Privatisation objectives in practice

Numerous studies document different reasons for the actual privatisation of SOEs, including poor performance and inefficiency, overstaffing, dependence on subsidies and unilateral budget transfers, highly centralised and politicised organisations, and the limited private sector participation in economic activities (Bös 1991; Lieberman 2008; Lieberman & Fergusson 1998; Miller 2000; Pirie 1988). Although a broad survey of the literature has identified a multiplicity of privatisation objectives that many governments expect to achieve from their privatisation efforts, this study draws from the extensive list of possible objectives suggested by Guislain (1997). He classified the possible objectives of privatisations into four groups: efficiency, financial, distributional, and political, as presented in Table 2.2.

Table 2.2 Selected objectives of privatisation

Efficiency / Economic Development

- Create a market economy, suited to key objectives in transition economies;
- Encourage private enterprises and expansion of private activities in an economy;
- Promote macroeconomic or sectoral efficiency and competitiveness;
- Promote efficiency of SOEs;
- Promote competition, particularly by abolishing monopolies;
- Promote domestic and/or foreign investment;

- Establish and/or develop efficient capital markets to allow better capture and mobilisation of domestic savings; and
- Maintain and/or create employment.

Financial objectives

- Maximise net proceeds of divestiture to generate the public revenue needed to fund government expenditures, reduce public deficits and repay public debts;
- Mobilise private funds to finance investments that are not publicly financed;
- Improve the allocation of public resources;
- Reduce the financial drain of SOEs on the state from subsidies; and
- Generate new sources of tax revenue.

Distributional objectives

- Foster broader capital 'business' ownership and promote an 'equity' culture;
- Promote distributional equity and equal income distribution in a society;
- Encourage employee ownership (also important for efficiency reasons); and
- Restore full property rights of former owners (expropriated under nationalisation).

Political objectives

- Reduce size and scope of the public sector and its share in economic activity;
- Create an environment favourable to private economic activities;
- Redefine the field of activity of the public sector by abandoning production tasks and focusing on core government functions; and
- Reduce chances for misuse of public property by state officials and SOE managers.

Source: Guislain (1997, pp. 18-9)

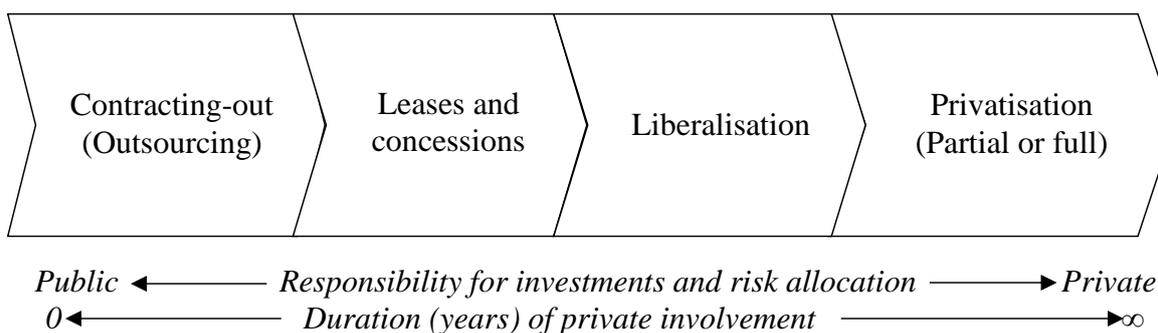
Given these varying reasons, there is no doubt that privatisation has often been used as a policy tool to serve multiple objectives. Numerous scholars argue that many privatisation programs have not been successful, perhaps due to the lack of a clear set of objectives or conflicting objectives in a privatisation program (Douglas 1994; Edwards 1987; Megyery & Sader 1997; Miller 2000; Robinson 2003). In seeking privatisation success, it is very important to have clear and implementable privatisation objectives and clearly defined expectations about what it should achieve (Douglas 1994; Edwards 1987; Megyery & Sader 1997; Miller 2000; Robinson 2003).

However, Domberger and Piggott (1986), van de Walle (1989) and Shirley (1992) warned that a short-term revenue-generating gain should not be the primary privatisation objective since such a gain would be temporary and illusory. They argued that privatisation practices should be focused on static productive efficiency, the so-called 'X-efficiency'. This would be accomplished by encouraging firms to reduce costs, operate cost-effectively on their production frontier and seek dynamic allocative efficiency by bringing consumer demands in line with the marginal costs of supply. This would result from an increase in new investment and innovation. Kikeri, Nellis and Shirley (1992) also emphasised that the primary consideration of privatisation should be the goal of efficiency, not short-term revenue generation, development of capital markets, or dispersion of ownership.

2.5 Methods of privatisation

Although a wide variety of privatisation objectives has been presented in the literature (Graham 2003; Guislain 1997; McLindon 1996; Megyery & Sader 1997; Miller 2000; Robinson 2003; Vuylsteke 1988), no single method has been found to fit all the objectives of certain aspects in a privatisation process. These authors therefore suggested that the choice of a particular privatisation method or technique depends on the government's privatisation objectives being sought (see Section 2.4), as well as specific conditions of a particular company being sold. For example, Guislain (1997) classified the techniques of privatisation according to the level of investment responsibility and degree of risks transferred to the private sector in the context of the relative irreversibility involved in privatisation transactions.

Figure 2.2 below illustrates Guislain's range of techniques for participation in privatisation, ranging from contracts that require very small investment and involve low risk of investment, through to privatisations where public sector activities and assets are either partially or fully transferred into private ownership. In each of these privatisation techniques, risk allocation and duration of private involvement are of major concern (Guislain 1997). Specifically, these privatisation methods can be divided into two dimensions: non-ownership (indirect approach) versus ownership transfer (direct approach), as shown in Table 2.3 below. Each technique of privatisation will be further discussed in the following two sub-sections 2.5.1 and 2.5.2.



Source: Adapted from Guislain (1997, p. 12)

Figure 2.2 Range of privatisation techniques

Table 2.3 Non-ownership versus ownership transfer techniques of privatisation

Privatisation techniques	State ownership	Ownership transfer (State to private ownership)				
		Adult citizens	Former owners	Insiders [†]	Strategic partners	Public investors
I. Non-ownership transfer						
Contracting-out	●					
Lease/concession contracts	●					
Liberalisation	●					
II. Ownership transfer						
Restitution			●			
Spontaneous privatisation				●		
Mass (voucher) privatisation		●				
Workforce buyouts				●		
Joint-venture arrangements	●				●	
Direct sales	●				●	
IPOs - Public share offering	●			●	●	●
Liquidation				●		●

Source: Adapted from Guislain (1997) and Megyery and Sader (1997)

Note: [†]Insiders refer to SOEs' management and/or employees.

2.5.1 Non-ownership transfer techniques of privatisation

This sub-section examines the non-ownership transfer techniques of privatisation, including the techniques presented in Figure 2.2 and/or Table 2.3, which are: contracting-out, lease and concession contracts, and liberalisation.

Contracting-out arrangements

Contracting-out or outsourcing arrangements refer to cases in which the production and provision of goods and services (e.g. office cleaning, car parking, and garbage collection) formerly conducted by government are contracted out to private sector businesses, with the government owning and financing the public sector activities and assets (Berg & Berg 1997; Guislain 1997; McLindon 1996; Megyery & Sader 1997; Pirie 1988; Vuylsteke 1988). Other forms of contracting-out include performance-based management contracts in which private management teams are contracted to manage state assets without the transfer of ownership and control, or rights to service delivery. In general, researchers argue that such aspects of contracting-out should be conducted through open and competitive bidding processes, in which the government bears actual investment costs on a risk basis and the private business performs the operating task. Dudley and Bogaevskaya (2006) warned that mechanisms for ensuring transparency in the selection process, as well as strong performance monitoring, need to be in place in order to avoid corruption. Importantly, serving the public interest is given top priority (Dudley & Bogaevskaya 2006). However, Pirie (1988) suggested that these arrangements might incur high costs to the government in terms of monitoring and enforcing the outsourcing arrangement contracts.

Lease and concession-based contracts

When the government is not willing to transfer any ownership over state assets and/or enterprises to private businesses, lease or concession-based contracts are adopted. In such arrangements, the private partners only provide expertise, management, technology and/or financing (Berg & Berg 1997; Calabrese 2008; Finger 2005; Guislain 1997; McLindon 1996; Megyery & Sader 1997; Vuylsteke 1988). In general, these contract aspects are conducted through various competitive bidding techniques. Under the lease contracts, the government leases state assets or enterprises to the private sector for a period of five to ten years, in order to turn physical assets into financial capital. The

lessee then takes over the control and management of the leased assets in return for lease payments and must bear financial and operational risks. Unlike lease contracts, concession arrangements are often known as public-private partnership schemes, such as build-own-operate-transfer and build-operate-transfer arrangements. Owing to state budgetary constraints, concession arrangements are considered well-suited to large-scale infrastructure projects such as power and roads. These arrangements involve greater contractor responsibilities and normally last longer than lease contracts, usually between 15 and 30 years. Both lease and concession contracts can help relieve the burden of loss-making assets on public budgets and even generate government revenues in the form of fees and charges. However, contract enforcement and regulatory burdens can be substantial and sometimes greater than expected (Berg & Berg 1997; Calabrese 2008; Finger 2005; Guislain 1997; McLindon 1996; Vuylsteke 1988).

Liberalisation

Liberalisation, or deregulation, refers to cases in which a government removes obstacles and restrictions that formerly prevented the private sector from entering a certain market and competing with a state-owned monopoly, such as in telecommunication, utilities, and airlines (Domberger & Piggott 1986; Finger 2005; Guislain 1997; Pirie 1988; Robinson 2003; UNCTAD 1993; Vuylsteke 1988). The main objective of liberalisation is conventionally to minimise state monopolies, open industry to the private sector, and introduce competition into industry. Such competition can encourage the public sector to search for innovations and efficiency improvements to keep prices competitive and improve state services and the benefits to consumers. However, a new and effective regulatory framework needs to be in place in order to ensure such benefits and prevent private companies from monopolising a market in such an environment.

2.5.2 Ownership transfer techniques of privatisation

This sub-section presents the main techniques used in privatisation in Figure 2.2 and/or Table 2.3, with governments either partially or entirely transferring and/or selling ownership of state assets to private businesses. These techniques include restitution, spontaneous privatisation, mass privatisation, workforce buyouts, joint-venture arrangements, direct sales, public share offerings, and liquidation.

Restitution

The technique of restitution refers to governments returning state-held real assets to former owners in situations where the property was expropriated by the government under its nationalisation policy. Many authors (Bornstein 1997; Guislain 1997; Havrylyshyn & McGettigan 1999; Lieberman, Kessides & Gobbo 2008) have argued that initial government compulsory acquisitions of properties could, in many cases, be deemed unjust, involving illegal confiscation and uncompensated seizure. Restitution can thus signify the crucial redressing of the worst examples of such past injustices. For psychological reasons, restitution could re-establish public confidence in a country's legal enforcement of property rights. However, certain property claims could become complicated and drawn out, thereby unnecessarily delaying the privatisation efforts. Such barriers could not only impede the overall privatisation process by causing uncertainty about ownership rights, but also discourage private sector investment. Conversely, some state-held assets have been freely sold at a good price.

Spontaneous privatisation

The technique of spontaneous privatisation involves the free or low-cost transfer of SOEs to their insiders (managers and/or workers), sometimes combined with the writing-off of any capital debts (Lieberman, Kessides & Gobbo 2008; Nellis 2008; Pirie 1988). This technique takes advantage of the view that insiders will improve their work attitudes and outputs because they will be working to benefit themselves rather than others. Ideally, this in turn will not only result in efficiency improvements but also release the government from the burden of providing financial subsidies to inefficient SOEs. However, this method of privatisation is somewhat questionable since immediate financial returns benefit insiders rather than the government and wider society. Nellis (2008) echoed this concern, believing that if such arrangements are conducted in a non-transparent manner (i.e. through non-transparent transfer and unfair asset stripping in SOEs), this could result in increased malpractice and corruption.

Mass privatisation

Mass (voucher or coupon) privatisation was first initiated in several Central and Eastern European countries in the 1990s. According to Boycko, Shleifer and Vishny (1994, p. 249), "the decision to pursue mass privatisation and even the specific design of the

program are largely dictated by politics”. Under this technique, vouchers or certificates were distributed either free or for a small fee to the majority of adult citizens who were 18 years of age or older. This allowed them to participate in share ownership of SOEs, either directly through auction or indirectly through specially created financial intermediaries (i.e. investment privatisation funds) that collected voucher points from the public and invested them in shares of privatised SOEs (Alexandrowicz 1994; Berg & Berg 1997; Bornstein 1997; Graham 2003; Lieberman 1997; Lieberman et al. 1995; Lieberman, Kessides & Gobbo 2008; McLindon 1996). This technique has been considered an effective method for transferring a large number of SOEs from the public to private ownership in a short timeframe using standard and transparent procedures (Alexandrowicz 1994; Berg & Berg 1997; Bornstein 1997; Graham 2003; Lieberman 1997; Lieberman et al. 1995; Lieberman, Kessides & Gobbo 2008; McLindon 1996). Moreover, this kind of privatisation can serve as a mechanism for widespread public ownership that promotes the development of capital markets, as well as help overcome problems of low domestic purchasing power resulting from low private savings and reluctant foreign investors (Alexandrowicz 1994; Berg & Berg 1997; Bornstein 1997; Graham 2003; Lieberman 1997; Lieberman et al. 1995; Lieberman, Kessides & Gobbo 2008; McLindon 1996).

This form of privatisation, especially vouchers distributed directly to the public, appeared to result in widely dispersed ownership structures or numerous minority shareholdings (Bornstein 1997; Graham 2003; Schmidt & Schnitzer 1997). As a result, inefficient corporate governance mechanisms were created since those retail buyers or investors would be inexperienced and less sophisticated buyers or investors (Bornstein 1997; Graham 2003; Schmidt & Schnitzer 1997). However, mass privatisation through investment privatisation funds acting as institutional investors could help solve the corporate governance problems arising from widely dispersed shareholdings (Alexandrowicz 1994).

Collective workforce buyouts

A collective workforce buyout or management-employee buyout is a technique through which the management, employees, or both, acquire a controlling interest in an enterprise (Berg & Berg 1997; Bornstein 1997; Graham 2003; Havrylyshyn &

McGettigan 1999; Megyery & Sader 1997; UNCTAD 1993). Employing this form of privatisation, the government can offer favourable and attractive terms to would-be buyers through a price discount or a series of payments. In many cases, buyers finance their purchases through bank loans, with company assets used as collateral. Some studies (McLindon 1996; Pirie 1988; UNCTAD 1993) have suggested that the technique of collective workforce buyouts is relatively advantageous in terms of speed, ease of implementation and increased productivity and efficiency. This method also not only helps secure the cooperation and support of labour and management during a period of transition, but can also, it is argued, minimise the social costs associated with employee lay-offs or liquidation of the enterprise (McLindon 1996; Pirie 1988; UNCTAD 1993). This method can also create real working incentives for both employees and managers, which helps reinforce future productivity and efficiency (McLindon 1996; Pirie 1988; UNCTAD 1993).

Although management-employee buyouts have certain advantages, it has been argued that they also have some potential risks (Bornstein 1997; Elliott, Marquis & Neal 2013; Havrylyshyn & McGettigan 1999; UNCTAD 1993). For example, an insider-dominated company may experience financial and operating difficulties under this arrangement, owing to any lack of entrepreneurial experience among the workforce. In other words, the insiders may lack the skills and expertise necessary to succeed in a market-oriented economy. Consequently, the privatised SOEs could be either insolvent or bankrupt after privatisation. Furthermore, employee-owned firms may end up with excessive wage increases, maintaining an above-optimal workforce or undertaking insufficient investments (Havrylyshyn & McGettigan 1999). Unlike management-employee buyouts in industrialised countries, where insider ownerships can evolve into investor ownerships over time, Cheryl Gray (1996) presented evidence that insiders in transition economies tend to block sales of their enterprises to outside investors. This inhibits competition in the buying process. Specifically, “the strength of the insiders' incentives to block a sale is likely to be correlated with the potential profitability of the firm itself, and thus it may be harder to sell the better firms – exactly those for which there is likely to be greater demand from outside investors” (Gray, C 1996, p. 186).

Joint-venture arrangements

Joint-venture arrangements, referred to as capital dilution or capitalisation, are often used to support undercapitalised SOEs or infrastructure projects while allowing them to remain, at least partially, under state ownership (Berg & Berg 1997; Guislain 1992; Megyery & Sader 1997; Sader 1995; Vuylsteke 1988). This form of privatisation can result in either the capital increase of an existing SOE while the government's equity ownership declines, or the creation of a new public-private joint enterprise. This arrangement is widely viewed as an effective policy tool to attract foreign investment, which can lead to technology transfers and improved operational know-how (Berg & Berg 1997; Guislain 1992; Sader 1995; Vuylsteke 1988). However, Sader (1995) warned that in these arrangements, the government may be left with ownership of only the most unprofitable parts of the enterprise.

Direct sales

A direct or 'trade' sale involves the sale of a proportion of, or outright, controlling interests in an SOE to the private sector (an individual buyer or consortium) through either non-competitive direct negotiation or competitive bidding techniques. However, many argue that a direct sale through an open competitive tender⁵ not only fails to yield high government revenues but also fails to allow fair, transparent and creditable transactions (Berg & Berg 1997; Graham 2003; McLindon 1996; Megyery & Sader 1997; Schmidt & Schnitzer 1997). In a situation where the whole or main part of a public sector operation does not attract any bidders, Pirie (1988) suggested that two or more of (economically feasible) parts of a public sector operation may be combined together as a package to make a viable proposal for a private buyer(s).

A disadvantage of using direct sales alone is that it not only limits the participation of potential investors in the buying process, but may also retard healthy development in capital markets (Berg & Berg 1997; McLindon 1996). Importantly, the privatisation process (especially through a non-competitive bidding process) may be publicly

⁵ A direct sale method through an auction process can fall into three types: (1) a commercial tender (an offer price driven method); (2) an investment tender (an offer price plus other key factors like investment and job retention); or (3) an open-outcry auction used specifically for small SOEs (McLindon 1996).

questionable in regard to transparency, fairness and creditability since such transactions are finalised behind closed doors and may be subject to opportunistic actions and/or corruption (Birdsall & Nellis 2003; Honkkila 1997; Kaufmann & Siegelbaum 1997; Megginson 2005; Ramanadham 1995; Stiglitz 2008).

Public share offering

Privatisation through public share offerings or share issue privatisations involves offering some or all of the state ownership in an SOE (already sufficiently equitised) to public investors, perhaps through stock exchanges. According to some authors (Berg & Berg 1997; Graham 2003; McLindon 1996; Megginson et al. 2004; Megginson & Netter 2003; Megyery & Sader 1997; Parker 2006; Pirie 1988; Vuylsteke 1988), this kind of privatisation has been widely used for large, profitable and relatively well-known enterprises in developed economies where their local capital markets are well developed. However, it is little evident in transition economies, often, it appears, because of the lack of developed capital markets. Although this method may have some drawbacks, such as being time consuming, creating difficulties with the evaluation of a firm's value (especially in countries where stock markets do not exist), and expensive consultation and marketing costs, it has many advantages. These include helping to attract small investors and mobilise large scale domestic savings, as well as broadening share ownership and promoting an equity culture and equity investing in order to minimise socialisation of risk (Berg & Berg 1997; Graham 2003; McLindon 1996; Megginson et al. 2004; Megginson & Netter 2003; Parker 2006; Pirie 1988; Vuylsteke 1988). Specifically, this form of privatisation, many argue, can promote greater transparency, fairness and creditability. This enhances public trust and confidence (Berg & Berg 1997; Graham 2003; McLindon 1996; Megginson et al. 2004; Megginson & Netter 2003; Parker 2006; Pirie 1988; Vuylsteke 1988).

Liquidation

If all other privatisation techniques are deemed inappropriate, liquidation or asset sales is another option. Liquidation refers to a process through which a government disposes of an enterprise by transferring the ownership of its assets (and liabilities), rather than transferring the enterprise itself (Graham 2003; Guislain 1992; Megyery & Sader 1997; Sader 1995). This technique appears to be the best option in cases where restructuring

of an enterprise does not seem viable as a going concern; for example, SOEs with poor accounts or unknown, uncertain or contingent liabilities. Using this form of privatisation, the government may run the risk of selling only the most attractive parts of the SOE to private sector buyers (Megyery & Sader 1997; Sader 1995), leaving the SOE effectively ‘stripped’ of its value.

2.6 Definitions of successful privatisation programs

There seems to be no general consensus on how to define successful privatisation programs (interchangeably used in this study with ‘favourable or positive privatisation outcomes’). Privatisation success or failure can be justified according to different viewpoints, pre-determined privatisation objectives and post-privatisation outcomes, ranging from fully implemented transactions to welfare optimisation. In a narrow sense, privatisation programs are considered successful when transaction agreements have been finalised and ownership actually transferred to private hands (Edwards 1987; Kikeri, Nellis & Shirley 1992; Megyery & Sader 1997; Miller 2000; Vuylsteke 1988). However, Vuylsteke (1988, p. 6) warned that “privatisation is not an end in itself” and judgements of success should be based on the performance of efficiency improvements within privatised SOEs (Boubakri & Cosset 1998; D’Souza & Megginson 1999; Megginson, Nash & van Randenborgh 1994). Other authors (Bös 1991; Galal et al. 1994; Kikeri & Nellis 2004; Ramanadham 1995; Tandon 1995; Tornell 1999) perceived privatisation success as producing optimal social welfare gains for all stakeholders (i.e. taxpayers, investors, employees and consumers). Therefore, the achievements of a privatisation process can be measured by how privatisation affects the economic welfare of interest groups, balancing between the fundamental needs of improved economic performance and those of distributional equity. Similarly, other authors (Donaldson & Wagle 1995; McLindon 1996; Tandon 1995; Vuylsteke 1988) have viewed privatisation successes as delivering wider economic benefits (including capital market development) through strong economic growth and increased competitiveness within the economy.

Based upon the above discussion, the researcher decided to use these five dimensions of privatisation success in this study, namely: fully implemented transactions; maximum proceeds from privatisation; productivity and efficiency improvements; social welfare gains; and gross economic benefits (including capital market development).

2.7 Critical factors for implementing successful privatisation programs

Owing to the complexity of privatisation and the lack of agreement as to what is the right approach for executing perfect privatisation programs, the challenging question in this study was how to establish which privatisation strategy needs to be implemented to ensure favourable outcomes from privatisations. This is particularly pertinent to a small economy like Laos, where many essential pre-conditions for success might be lacking. Given that considerable experience has been gained over the past 30 years of global privatisation initiatives, a growing number of international perception-based studies⁶ have presented sound evidence of the existence of a general consensus concerning the range of critical factors that can enhance privatisation success. Thus, this study focuses on the seven most influential factors: 1) government commitment; 2) legal and regulatory frameworks; 3) institutional arrangements (factors two and three are classified as new institutional economics); 4) stakeholder involvement; 5) public education and awareness; 6) firm-level privatisation strategy; and 7) fairness and transparency. These factors are included in formulating the conceptual framework for this study to answer research question 1 (*what are the critical factors driving the likelihood of favourable privatisation outcomes (privatisation success) in Laos as perceived by key stakeholders in light of theoretical and practical perspectives?*) and question 2 (*In what ways would such perceived critical factors influence these privatisation outcomes?*).

2.7.1 Government commitment

As privatisation is a political process, political considerations, many authors have argued, can either facilitate or hinder the entire process of implementing privatisation efforts (Calabrese 2008; Edwards 1987; Ernst & Young 2010; Guislain 1997; Megyery & Sader 1997; Milne 1991; OECD 2003; Pfeffermann 1988; Vuylsteke 1988; Welch &

⁶ For further details, see these perception-based studies: Adam, Cavendish and Mistry (1992); ADBI (2000); Calabrese (2008); Donaldson and Wagle (1995); Edwards (1987); Ernst & Young (2010); Esfahani and Hosseini (2009); Gallo (1993); Guislain (1997); Kikeri, Nellis and Shirley (1992); Lieberman (1993); Lieberman and Fergusson (1998); McLindon (1996); Megyery and Sader (1997); Milne (1991); OECD (1998); Pfeffermann (1988); UNCTAD (1993); Vuylsteke (1988); Welch and Frémond (1998); White and Bhatia (1998); and World Bank (1995).

Frémond 1998; White & Bhatia 1998; World Bank 1995). The Asian Bank Development Institute (ADBI 2000, p. 1) emphasised that “privatisation is a political process and, therefore, requires political will, commitment and clarity”. For this reason, Megyery and Sader (1997, p. 9) recommended that strong government or political **support** and commitment “indicates the government’s willingness to withdraw from the economy”, which is a critical prerequisite for privatisation success. Esfahani and Hosseini (2009, p. 142) argued that “A political power is required to overcome the types of obstacles to a successful privatisation: opposition, bureaucratic inertia, and lack of coordination”.

In a study of ten Sub-Saharan African nations, White and Bhatia (1998) also presented strong evidence that privatisation initiatives would fail mainly due to lack of government will, **support** and commitment. These authors emphasised that government commitment should not just be stated in a policy statement, but also reflected and implemented in other actions and **support** relating to privatisation, such as formal rules and regulations, stakeholder involvement, and selection of candidates (SOEs). These could serve as the essential ingredients for establishing credibility and maintaining public confidence in privatisation programs (White & Bhatia 1998). Douglas (1994, p. 22) argued that “the key to credibility is consistency in policy communication”. According to the World Bank (1995), the three conditions of political desirability, feasibility and credibility should be taken into account in order to ensure successful reform and/or privatisation of SOEs since such reforms could change a country’s political and/or economic landscapes. These conditions are summarised as follows:

1. Political desirability: SOE reforms are politically desirable to the leadership and its constituencies (supports) since such reforms can involve a change in government and/or economic crisis (i.e. a significant drop in GDP);
2. Political feasibility: SOE reforms are politically feasible when the leadership can not only secure the approval and support of other government entities whose cooperation is considered critical to success, but also resist opposition to reform from potential losers, such as SOE employees; and
3. Government credibility: SOE reforms are creditable, meaning that governments have a reputation for keeping and delivering on promises. Specifically,

governments must ensure that they will not renationalise privatised SOEs and/or they must deliver on any promises, such as future compensation to SOE employees.

Given this discussion, the following hypothesis was proposed:

***Hypothesis 1:** Government commitment will be positively associated with favourable or positive privatisation outcomes or 'privatisation success.'*

2.7.2 New institutional economics concerning privatisation

New institutional economic views concerning privatisation can be divided into the two aspects of institutions and organisations. North (1995, p. 23) clearly distinguished institutions from organisations:

Institutions are the rules of the game of a society, or, more formally, are the humanly devised constraints that structure human interaction. They are composed of formal rules [for example, laws, rules, contracts and regulations], informal constraints [for example, conventions, beliefs, norms of behaviour and codes of conduct], and the enforcement characteristics of both. Organisations are the players: groups of individuals bound by a common purpose to achieve objectives [for example, political, social and economic bodies].

In introducing successful privatisation programs, formalised documents or processes are therefore thought to be essential since they will, it is thought, allow relevant organisations to make decisions in the light of a stable, coherent and transparent privatisation process (Megyery & Sader 1997). Therefore, **good or appropriate** legal and regulatory frameworks for actions between negotiating parties need to be formed precisely in order to reduce uncertainty and promote public confidence (Ménard & Shirley 2005; North 1995; World Bank 2002). These frameworks, it is further argued, can also reduce the transaction costs involved in privatisation. According to North (1995) and Ménard and Shirley (2005), transaction costs arise when people have incomplete information and limited mental capacity. Consequently, they face

uncertainty about unforeseen occurrences and incur transaction costs to access information. Coase (1998, p. 73) argued that “the costs of exchange [therefore] depends on the institutions of a country [which] govern the performance of economy”. In order to minimise transaction costs, government interventions should influence the shaping, defining and enforcing of **good** economic game rules, including the privatisation process.

In addition to a reduction in transaction costs, for new institutional economics, these legal and regulatory frameworks help ensure equal treatment and protection of property rights for individual and entities and promote a level playing field through fair, transparent and consistent processes. Furthermore, numerous authors (Adam, Cavendish & Mistry 1992; Guislain 1997; Kikeri, Nellis & Shirley 1992; Megyery & Sader 1997; Shirley 1992; Welch & Frémond 1998; White & Bhatia 1998) have argued that **good** legal, regulatory and institutional frameworks not only provide a solid foundation for implementing privatisation programs effectively but also for enhancing private sector economic activities. However, these authors warned that an appropriate legal and regulatory environment should be put in place prior to privatising SOEs with natural monopolies (i.e. energy, water distribution and telecommunication). This would help prevent private operators from monopolising public utilities. The authors maintained that failure to regulate properly may hurt consumers and reduce public support for privatisation efforts. Esfahani and Hosseini (2009) also suggested that laws and regulations are needed in order to direct publicity and openness in the implementation of privatisation programs. For these reasons, many countries have reversed their policies to renationalise their previously privatised SOEs. Following the above arguments, a second hypothesis was proposed:

***Hypothesis 2:** The existence of a legal and regulatory framework will be positively associated with positive privatisation outcomes.*

It is widely believed that a key factor in improving the likelihood of privatisation success is the establishment of institutional or organisation arrangements by the government for an entire divestiture process (ADBI 2000; Ernst & Young 2010; Guislain 1997; Megyery & Sader 1997; Welch & Frémond 1998; White & Bhatia 1998). If institutional arrangements are weak and unclear, privatisation efforts are likely

to fail. In order to adopt institutional structures for implementing privatisation programs that can meet their specific circumstances, it follows that countries should set up either a special government agency, a special department in a sectoral ministry, or an ad hoc committee. Ernst & Young (2010) have suggested that an ad hoc privatisation approach may not produce optimal outcomes from privatisation, because this approach tends to be inconsistent and hinders the ability of governments to leverage best practice from one privatisation to another. Ernst & Young (2010) and Megyery and Sader (1997) emphasised that any privatisation body needs to be mandated with sufficient powers, autonomy and freedom from political interference to execute privatisations. They also need to be equipped with sufficient financial and human [technical] resources. Given the above arguments, the following hypothesis was proposed:

Hypothesis 3: The existence of institutional arrangements will be positively associated with positive privatisation outcomes.

2.7.3 Stakeholder involvement

Stakeholders are usually defined as those who can affect or are affected by the achievements of an organisation. Edward Freeman (1984) argued that each group of stakeholders can play an important role in the success of the organisation in its existing environment. With regard to SOEs, each group may have a different degree of influence over the enterprise due to their unique position and multiple points of dependency within the enterprise. Many authors (Ernst & Young 2010; Guislain 1997; Gupta, Christian & Ma 1999; Megyery & Sader 1997; Ramanadham 1995) have agreed that privatisation is bound to affect many interest groups, including government members, SOE employees, taxpayers and consumers.

As Ernst & Young (2010, p. 9) have pointed out “governments have a broader, more complex group of stakeholders to satisfy, often with conflicting objectives.” They maintain that stakeholders’ objectives need to be clearly defined at the outset. If not, they fear that SOEs may run the risk of stakeholders believing that their interests have not been met. For this reason, SOEs would need to ensure that their stakeholders fully understand the objectives of the privatisation and that their needs and preferences can be optimally accommodated in the privatisation program. Furthermore, the measures of

success need to be agreed in advance, with clarity around any value trade-offs that may be required in delivering overall success. Therefore, consensus building and communication among relevant stakeholders is essential for achieving the common objectives of privatisation.

Owing to the fact that privatisation can impact on the vested interest groups, a stakeholder-oriented model can not only help them better understand and assess their collective perceptions and attitudes toward privatisation, but also help policy-makers formulate privatisation programs that can enhance benefits for all key stakeholders and manage possible tensions between them (Calabrese 2008; IFC 2007; Vuylsteke 1988; Welch & Frémond 1998). Ernst & Young (2010, p. 20) have argued that “communication is critical to keep all stakeholders aligned and supportive of the privatisation and fully aware of the benefits and challenges it can bring”. For these reasons, the following hypothesis was proposed:

***Hypothesis 4:** The existence of stakeholder involvement will be positively associated with positive privatisation outcomes.*

2.7.4 Public education and awareness

In addition to stakeholder involvement, many have argued that public education and awareness through various campaigns and advertisements play a crucial role in encouraging and broadening public interest in privatisation (Pirie 1988; UNCTAD 1993; Vuylsteke 1988; Welch & Frémond 1998). Thus, public education and awareness are essential for helping the population understand the benefits and objectives of privatisations and enhancing public trust and confidence in the privatisation process (Edwards 1987; Lieberman 1993; McLindon 1996; Megyery & Sader 1997). White and Bhatia (1998) predicted that there would be delays in adopting privatisation programs when the public is not well informed. The better people are informed about a privatisation program, the more likely they are to support it and confidently participate in its process (Durant & Legge 2002). Thus, the following hypothesis was proposed:

***Hypothesis 5:** Public education and awareness will be positively associated with positive privatisation outcomes.*

2.7.5 Firm-level privatisation strategy

Firm-level privatisation strategies should, it is argued, focus on the principle of business orientation, as this helps signal strong government commitment and enhance investor trust and confidence (Megyery & Sader 1997). Although such firm-level privatisation strategies can reflect a wide range of aspects, this study focuses on the four fundamental aspects of: selection of SOEs offered for privatisation; pre-privatisation activities; enterprise valuation and pricing; and post-privatisation ownership structure. Here the identification and selection of companies for privatisation is the first step in the entire process (Edwards 1987; Megyery & Sader 1997; Vuylsteke 1988; Welch & Frémond 1998). The criteria for selecting SOEs can be developed according to size, corporate governance and management, business performance, and financial and accounting practices. Vuylsteke (1988) stressed that the selection of SOEs suited to privatisation is of critical importance in the success or failure of the entire privatisation plan.

The second aspect of firm-level privatisation strategies is the pre-privatisation activities, including initial assessment of readiness, provision of SOE information, corporate restructuring, potential objectives and methods of privatisation, and marketing and/or promotion of the SOE. Generally speaking, a feasibility study should be done in order to determine the necessity of SOE restructuring and also to define an appropriate strategy for addressing possible labour issues (Esfahani & Hosseini 2009). Numerous authors (Donaldson & Wagle 1995; Edwards 1987; Gallo 1993; Megyery & Sader 1997; Shirley 1992; Vuylsteke 1988) have suggested that such preparation activities will improve the probability of implementing successful privatisation programs.

The third aspect of firm-level privatisation strategies is enterprise valuation and pricing. According to many authors (Shirley 1992; UNCTAD 1993; Vuylsteke 1988; Young 1987), this can be a challenging task. These researchers have warned that when the price is too high, potential investor interest will be lost, causing the privatisation effort to fail; and when the price is too low, there will be public criticism and losses to the state budget.

In regard to the fourth fundamental aspect of firm-level privatisation strategies, post-privatisation ownership, many authors (Donaldson & Wagle 1995; Megyery & Sader 1997; Vuylsteke 1988) have stated that controlling interests are critical to privatisation success. Here the challenges include determining the acceptable balance between state and private ownership, achieving a widespread distribution of private ownership, and deciding to whom ownership should be distributed.

Following the above discussion about the importance of such firm-level issues, this hypothesis was proposed:

***Hypothesis 6:** Firm-level privatisation strategy will be positively associated with positive privatisation outcomes.*

2.7.6 Fairness and transparency

Many have argued that the attitudes and perceptions about fairness and transparency in all aspects of the privatisation process are critical elements of privatisation success (Donaldson & Wagle 1995; Guislain 1997; McLindon 1996; Megyery & Sader 1997; Shirley 1992; Vuylsteke 1988; Welch & Frémond 1998). Therefore, according to Ernst & Young (2010), privatising governments need to adopt systematic and structured privatisation approaches that ensure consistency, fairness and transparency across all elements of the processes in order to maximise the values of privatisation transactions and influence the likelihood of realising success. Shirley (1992) suggested that creating a strong, lean, centralised and transparent process is a necessary pre-condition for privatisation success. A fair and transparent privatisation process can not only help eliminate possible corruptions, but also encourage more potential investors to participate in these processes (Esfahani & Hosseini 2009). Here White and Bhatia (1998) warned that privatisation transactions using non-competitive methods (such as those undertaken in many Sub-Saharan countries) would result in a lack of fairness, transparency and credibility and cause potential buyers to shy away from buying the shares of SOEs offered for privatisation.

To address this issue, this study employs the concept and dimensions of fairness as specified in equity theory. The governing principle of 'fairness' is to ensure that shares

are proportional to claims in their distribution (Greenberg 1987; Rescher 2002). Specifically, the three corresponding factors of equity, impartiality and uniformity should be satisfied to ensure equity or fairness (Rescher 2002). Rescher (2002) further explains equity as having people's shares be proportionate to their claims; 'impartiality' as avoiding favouritism and treating claimants with even-handedness in the allocation procedure; and 'uniformity' as proceeding via the uniform application of appropriate principles. Although the term 'fairness' is a broad concept, this study focuses on four dimensions of perceived fairness as found in the literature. These are:

1. *Distributive fairness* deals with the perceived fairness of outcomes (Adams 1963, 1965). People appear to be more concerned about the fairness of their outcomes relative to inputs, rather than the absolute level of outcomes, which significantly affects people's perception and attitudes. In light of its focus on outcomes, distributive fairness has been found to be related mainly to cognitive, affective and behavioural reactions to certain outcomes (Cohen-Charash & Spector 2001).
2. *Procedural fairness* refers to a process in which outcomes or decisions are achieved (Leventhal 1976; Thibaut & Walker 1975). In order to ensure procedural fairness, Leventhal (1980) suggested that a decision-making process should follow six procedural rules: consistency, representativeness of all affected groups, correctability, accuracy, non-bias, and ethicality.
3. *Interpersonal fairness* refers to the relational treatment of politeness, dignity and respect that people receive from those responsible for implementing the decision when procedures are being enacted (Bies 2002; Bies & Moag 1986).
4. *Informational fairness* (sometimes viewed as the second element of interactional fairness) refers to the perceived fairness of communication activities, including distribution of information for decision-making and explanations about privatisation that may occur as part of the transaction (Colquitt 2001). The distribution of information or underlying reasons for decisions made must be presented in a timely, clear, truthful, and adequate manner during the implementation of procedures (Colquitt 2001).

Based on the above arguments, the following hypothesis was proposed to determine how perceived fairness affects privatisation programs:

Hypothesis 7: Fairness will be positively associated with positive privatisation outcomes.

2.8 Privatisation and capital market development

Vuylsteke (1988) and Waters (1985) suggested that there may be more private sector savings in liquid forms outside the banking system than governments may anticipate, especially in developing countries. Therefore, mobilising private funds from informal financial markets⁷ through share issue privatisations (SIPs) can serve as a policy tool to help enhance formal financial markets. According to Rozental (1967), financial markets can reinforce development by enlarging the scope of formal financial systems while at the same time limiting the size and scope of informal financial markets. This suggests that although there is a natural place for informal credit markets, their role and scope should diminish as a healthier financial ecosystem evolves.

There is, many have argued, a symbiotic relationship between privatisation and capital market development, with privatisation helping the development of capital (stock) markets (Donaldson & Wagle 1995; Esfahani & Hosseini 2009; Fine & Karlova 1998; Guislain 1997; Kikeri, Nellis & Shirley 1992; Vuylsteke 1988). Lieberman and Kirkness (1998, p. viii) emphasised that, “the relationship between privatisation and emerging equity markets is direct but subtle”. The World Bank (1989, p. 110) also claimed that “privatisation of state-owned enterprises can be another stimulus to securities markets”. In this way, privatisations not only kick-start newly-created equity markets, but also deepen and diversify the emerging stock markets. For example, many

⁷ Informal financial markets are referred to as those falling outside the officially regulated jurisdiction. Importantly, activities undertaken in these markets are facilitated by social relationships that enhance trust, trustworthiness and creditability (Montiel, Agénor & Haque 1993; Rozental 1967; World Bank 1989). Specifically, moneylenders provide credits to borrowers at high interest in order to help offset associated high risks due to the fact that lending is uncollateralised and they have very limited legal recourse. A rotating savings and credit association (ROSCA) is defined as a group of people who form an association and agree to make fixed contributions to the fund on a regular basis and then a fund, in part or whole, is distributed to each contributor in rotation (Montiel, Agénor & Haque 1993; Rozental 1967; World Bank 1989).

transition economies have implemented privatisation initiatives in connection with the establishment of their capital (stock) markets, such as China in 1990, Mongolia in 1991 and Vietnam in 2000. This suggests that those initiatives have been aimed at enhancing the financial ecosystems. Furthermore, privatisations not only contribute to spreading direct ownership of shares more widely, but also significantly boost stock market development by supplying shares to the markets (market capitalisation) and increasing the liquidity of local stock markets (Bortolotti, Fantini & Siniscalco 2001; Bortolotti & Siniscalco 2004; Boubakri & Hamza 2007; de la Torre & Schmukler 2007; McLindon 1996). Governments in developing countries often use the SIPs as a means to develop a robust stock exchange.

Following the above arguments, privatisation would not only be seen as contributing to the development of formal financial markets while minimising the role and scope of informal credit markets, but also promoting the growth of domestic stock markets. If this is the case, in answering research question 3 (*in what ways would the perceived privatisation outcomes impact on the development of capital (stock) markets in Laos?*), the following hypothesis was proposed:

***Hypothesis 8:** Positive privatisation outcomes will be positively associated with the development and strengthening of Laos' domestic financial system, not limited to capital markets.*

2.9 Socialisation of risk

This section specifically presents the concept of 'socialisation of risk' in relation to privatisation. Socialisation of risk refers to the process of shifting from a society in which individuals bear excess risks themselves, to one in which society as a whole bears those risks more equitably (Horioka & Kanda 2010; Mann 1945). Horioka and Kanda (2010) classified mechanisms for socialising risk into two categories. The first category fits the mechanisms as being implemented by the government (so-called state intervention), while the second category involves market mechanisms. The first category is vulnerable to inappropriate exploitations, whereas the second category allows individuals and/or entities to decide to voluntarily participate in certain economic activities in which they shoulder all risk (Horioka & Kanda 2010).

According to Zysman (1983) and Wade (1985, 1988, 1990), the socialisation of risk has provided an effective mechanism through state intervention for achieving social and economic development goals in countries such as Japan, South Korea and Taiwan. In these countries, governments have intervened to socialise risks through a wide range of policy instruments, including income redistribution, credit, tax, and trade policies, in pursuit of economic and industrialisation goals. In regard to credit policies, Zysman (1983, p. 249) commented that “the government lead is thought to provide additional security to [bank] loans in the form of implicit assurance that firms will not fail”. Importantly, loans granted to priority sectors are generally implicitly or explicitly guaranteed by the governments to socialise risk in order to revitalise industries and/or the economy as a whole.

Socialising risk through state intervention does not always prove successful (see Sub-section 2.2.2). This study therefore proposes that when privatisation programs are properly implemented, they can serve as a policy tool to promote an equity culture and/or domestic equity investing in a way that minimises socialisation of risk through state intervention but also promotes socialisation of risk through voluntary participation in economic activities in Laos. In doing so, certain risks will be shifted away from the government to private investors who are willing to take those risks through alternative risk-and-reward mechanisms. Assuming that this is the case, in order to answer research question 4 (*in what ways would such perceived privatisation outcomes stimulate and promote an equity culture in a way that simultaneously minimise socialisation of risk through state intervention in Laos?*), the following hypothesis was proposed:

Hypothesis 9: Positive privatisation outcomes will be positively associated with people’s behavioural intentions to buy shares of SOEs to be privatised.

2.10 Pre- and post-privatisation business performance of newly-privatised firms

Generally speaking, numerous international empirical studies have presented evidence that privatisation helps improve the financial and operating performance of newly-privatised firms. Saunders & Harris (1994, p. 21) stated that “the argument that a change of ownership from public to private can of itself improve a company’s performance rests on both theoretical and empirical grounds”. Theoretically, privatisation results in a change in the incentive structures for managers, whereas empirically, private firms perform more efficiently than their state-owned counterparts (Saunders & Harris, 1994). For example, Megginson, Nash and van Randenborgh (1994 - so-called MNR methodology) compared the pre- and post-privatisation financial and operating performance of 61 firms in 18 countries (12 industrial and 6 developing countries) across 32 different industries in 1961-1990. These sample companies were those partially or fully privatised through share issue privatisations and had pre- and post-privatisation accounting data.

In measuring the post-privatisation financial and operating performance of newly-privatised firms, testable predictions in the MNR methodology are divided into six groups: profitability, operating efficiency, outputs, leverage, dividend payouts, and employment. These are shown in Table 2.4. Each mean proxy is estimated over the pre-privatisation (years -3 to -1) and post-privatisation (years +1 to +3) period. Specifically, the year of privatisation (year 0) includes both pre- and post-privatisation and financial data for that year (year 0) are excluded from the mean calculations. In this way, two observations are available for the pre-privatisation and post-privatisation windows. By comparing these testable predictions, Megginson, Nash and van Randenborgh (1994) could calculate whether partial and/or full privatisation help improve firm performance.

In examining the firm-level effects of privatisation on business performance, Megginson, Nash and van Randenborgh (1994) found that, on average, newly-privatised firms were likely to become more profitable and efficient. This indicates that privatisation resulted in an increase in real sales and investment spending, and strong improvements in their operating efficiency. Although these firms were able to significantly reduce their debt levels and dividend payments to their shareholders, they insignificantly decreased their employment levels.

Table 2.4 Selected indicators of pre- and post-privatisation performance

Proxies	Change
Profitability	
Return on sales (ROS) = net income ÷ sales	Increase
Return on assets (ROA) = net income ÷ total assets	Increase
Return on equity (ROE) = net income ÷ total equity	Increase
Operating efficiency	
Sales efficiency (SALEFF) = total revenue ÷ # employees	Increase
Net income efficiency (NIEFF) = net income ÷ # employees	Increase
Outputs	
Real sales (SAL) = nominal total incomes ÷ consumer price index	Increase
Real net incomes (RNI) = nominal net incomes ÷ consumer price index	Increase
Leverage	
Debt to assets (LEV1) = total debts ÷ total assets	Decrease
Long-term debt to equity (LEV2) = long-term debts ÷ equity	Decrease
Payout	
Dividends to sales (DIVSAL) = cash dividends ÷ sales	Increase
Dividends payout (PAYOUT) = cash dividends ÷ net income	Increase
Employment	
Total employment = total number of employees	Decrease

Source: Megginson, Nash and van Randenborgh (1994, p. 422)

Using the MNR methodology to compare the business performance of newly-privatised firms in developed and/or large developing countries, many authors⁸ have presented similar results to those reported by Megginson, Nash and van Randenborgh (1994). Although Boubakri and Cosset (1998, 2002) documented significant increases in

⁸ A selection of literature on the financial and operating performance of firms having experienced partial or entire privatisations includes: Aussenegg and Jelic (2007), Boubakri and Cosset (1998, 2002), D'Souza and Megginson (1999), Sun and Tong (2003), and La Porta and López-de-Silanes (1999). These authors respectively studied 166 firms from three Central European transition economies (1990-1998), 79 firms from 21 developing countries (1980-1992), 16 African firms from five countries (1989-1996), 85 firms from 28 countries (1990-1996), 634 Chinese firms (1994-1998), and 218 Mexican firms (1983-1991).

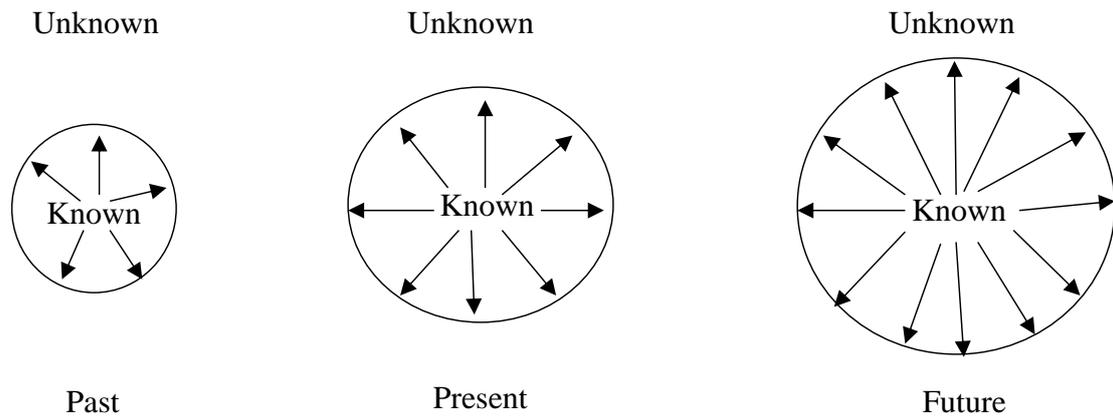
employment, La Porta and López-de-Silanes (1999) found significant declines in employment during the post-privatisation period in developed and/or large developing countries. Moreover, some authors found that privatisation in low- or lower-middle-income countries tended to produce weaker improvements in firm performance than high-income countries (Aussenegg & Jelic 2007; Boubakri & Cosset 1998, 2002; D'Souza & Megginson 1999; Megginson, Nash & van Randenborgh 1994).

The above empirical evidence shows that privatisation can indeed help improve the financial and operating performance of newly-privatised firms, depending on the level of country development. In employing this MNR methodology, this study sought to answer research question 7 (*in what way would privatisation affect the financial and operating performance of the newly-privatised firms in Laos?*).

2.11 Learning curve effects

The wide range of arguments and options suggests that a learning process can lead to performance improvements since it provides an essential tool to observe, track and enhance organisational processes in a systematic fashion. This is applicable to privatisation processes. Lapré (2011) referred to the process of learning from one's own experience and/or from others' experience and activities in order to do things more effectively and enhance institutional successes, as 'learning curve effects'. Lapré emphasised that an institutional success or failure can depend on whether the organisation has learned by its experiences. When an organisation learns, he argued, they can more easily adapt, improve, innovate and succeed. In 1962, Rogers (1983) first coined the term 'diffusion of innovations' as a process by which people learn, develop, create, diffuse and adopt an innovation (new idea, knowledge, product, practice, philosophy, etc.) and promote it to other members of a social system through communication channels.

Lawrence and Lorsch (1969) presented a pattern of knowledge development to illustrate the ways in which people explore the unknown and apply new knowledge in a heterogeneous social system and/or organisational setting. This is presented in Figure 2.3 below.



Source: Lawrence and Lorsch (1969, p. 236)

Figure 2.3 Development of knowledge

The authors explained that the development of knowledge can come from outside the system in the form of requests to undertake new or expanded tasks, and/or from inside the system from members who seek wider scope for their own activities and new opportunities to develop. Importantly, any desired behaviour changes need to be structural and procedural, and carried out by an appropriate authority. Through the learning process, individuals and organisations can acquire the necessary skill, knowledge and abilities to explore the unknown and improve their performed tasks. Lawrence and Lorsch (1969, p. 232) emphasised the paramount importance of using both structural modifications and education in the development of knowledge:

The educational approach gives people a chance to be familiar with the proposed change, to comprehend the reasons behind it, possibly to contribute to its design, and to test out behaving in new and different ways. The structural approach sets up mechanisms that serve to reward the desired behaviour and punish conduct that is no longer approved. Both approaches are based on well-established learning theories, and each can serve to strengthen the other.

In developing knowledge, some have argued, the learning and adoption process has proven successful in many contexts, including the economic achievements of Japan, South Korea and Taiwan (Johnson, C 1982; Wade 1990; Zysman 1983). Zysman (1983)

emphasised that the productivity gains of these countries in terms of higher production volumes and lower production costs, had partly resulted from learning curve effects and modifications in product and process technology. In the context of privatisation, Pirie (1988, p. 11) pointed out that:

The methods used in practice to achieve that transfer have been learned by experience, in some cases by unpleasant experience. No single policy has been found to cover the process, much less a simple formula capable of being applied universally. On the contrary, the experience has been that every single case is different and needs a unique treatment. Privatisation may look from afar like the straightforward sale of state assets. From close in it can be seen as an array of complex policies, each one tailor-made for an individual item of state activity, and each designed to achieve transfer to the private sector in a way which is politically rewarding as well as economically successful.

Owing to the complex and subtle experiences of privatisation processes, numerous authors (Douglas 1994; Ernst & Young 2010; Guislain 1997; Miller 2000; Pirie 1988; UNCTAD 1993; Vuylsteke 1988; Welch & Frémond 1998) have acknowledged that there is no standard or right approach to implementing a perfect privatisation program, as best practices from one country are not necessarily relevant to another. Every privatisation program needs to be designed, tailored, adjusted and executed according to enterprise-specific, industry-specific and country-specific circumstances. A case-by-case privatisation approach is of critical importance. Consequently, lessons learned from prior experiences in relevant contexts need to be analysed in a systematic fashion. In doing so, experiences and lessons that can be learned from previous privatisations will provide important insights and best practices in order to streamline future privatisation programs and achieve privatisation goals (Ernst & Young 2009a, 2009b, 2010). Ernst & Young (2010, p. 19) recommended that “governments should ensure they have an appropriate framework for collecting and sharing leading practices across all the relevant state entities in order to utilise learning from previous transactions”. Monitoring and performance evaluation can be a crucial contributing factor in continuing the privatisation process successfully (Esfahani & Hosseini 2009).

From the above arguments, understanding of learning curve effects is considered to be sufficiently basic to carrying out successful privatisation programs. This study therefore aimed to answer research question 8 (*how might a learning curve in the adoption process shift the Lao government's development policies over time, given the importance of capital market development through privatisation programs?*).

2.12 Proposed perception-based privatisation model and testable hypotheses

Based on the literature review, this study proposed a perception-based privatisation model of potential conditions for successful privatisation programs. This is presented in Figure 2.4. This model provides a basis for exploring the structural relationships between success factors and positive privatisation outcomes. This will help determine the factors believed to contribute to positive outcomes and also assess how such outcomes are thought to affect the development of domestic capital markets and promote an equity culture or equity investing in a way that minimises the socialisation of risk through state intervention in economic activities in Laos.

The proposed hypotheses developed to answer research questions 1 – 4 are aligned to the variables presented in Figure 2.4 below. To summarise, these nine hypotheses used in the hypothetical privatisation model in Laos are:

***Hypothesis 1:** Government commitment will be positively associated with favourable or positive privatisation outcomes.*

***Hypothesis 2:** The existence of a legal and regulatory framework will be positively associated with positive privatisation outcomes.*

***Hypothesis 3:** The existence of institutional arrangements will be positively associated with positive privatisation outcomes.*

***Hypothesis 4:** The existence of stakeholder involvement will be positively associated with positive privatisation outcomes.*

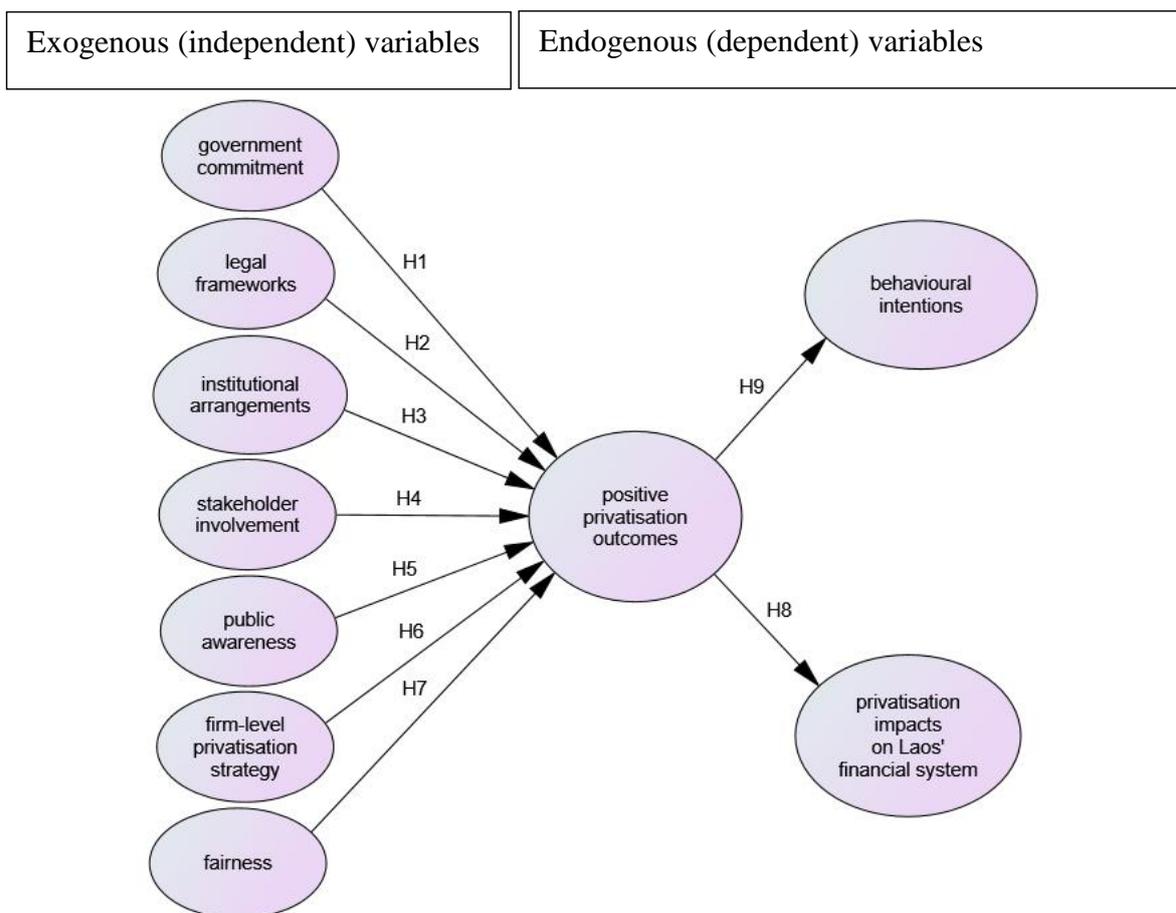
***Hypothesis 5:** Public education and awareness will be positively associated with positive privatisation outcomes.*

Hypothesis 6: Firm-level privatisation strategy will be positively associated with positive privatisation outcomes.

Hypothesis 7: Fairness will be positively associated with positive privatisation outcomes.

Hypothesis 8: Positive privatisation outcomes will be positively associated with the development and strengthening of Laos' domestic financial system, not limited to capital (stock) markets.

Hypothesis 9: Positive privatisation outcomes will be positively associated with people's behavioural intentions to buy shares of SOEs to be privatised.



Source: Adapted from Megyery and Sader (1997, p. 9)

Figure 2.4 Hypothetical model of privatisation in Laos

In addition to these four research questions, this study attempted to examine whether or not the moderating effects of gender, educational level and workplaces would have influential impacts on the proposed privatisation model shown in Figure 2.4. Specifically, it aimed at answering research question 5 (*In what ways would moderator(s) of gender, educational level and workplaces affect a privatisation process in Laos*).

2.13 Chapter conclusion

Following an explanation of the theory of privatisation, this chapter has presented a detailed discussion of the perceived critical factors found in the literature that are thought to improve the probability of privatisation success. An in-depth view on the history of privatisation from its inception until the present has been presented, specifically describing the learning curve effects apparent in privatisation processes. Arguments were explored in relation to the notions that privatisation can result in efficiency improvements, social and economic benefits to relevant stakeholders, and development of domestic capital markets that can ultimately enhance economic growth. Numerous international studies were reviewed to determine the key factors identified as influencing privatisation, which might help achieve success in Laos. In total, seven key factors were determined to influence the effective implementation of privatisation programs. These were identified as: government commitment; legal and regulatory frameworks; institutional arrangements; stakeholder involvement; public education and awareness; firm-level privatisation strategy; and fairness and transparency. Discussion also centred on the ways in which perceived privatisation outcomes can affect the development of domestic capital markets and promote an equity culture that can help minimise socialisation of risk (as illustrated in the hypothesised model in Figure 2.4). The following chapter presents the research approach and methodology used for obtaining secondary and primary data to answer the research questions presented in Chapter 1.

Chapter 3

Research Approach and Methodology

3.1 Introduction

In the preceding chapter, the literature concerning theories associated with privatisation was discussed and used to generate the hypotheses. This chapter begins with the presentation of preliminary fieldwork activities prior to conducting the research. The research paradigm and research methodology are then discussed. This chapter also discusses the use of two specific research methods: semi-structured interviews and self-administered survey questionnaires. It then outlines how quantitative data are analysed using structural equation modelling (SEM), specifically describing the meaning of SEM and other techniques for handling specific statistical requirements. These techniques are: measured variables per construct; a single variable construct; item parcelling; ‘don’t know’ responses; tests for data normality and determination of the SEM estimation method; and bootstrapping. Following the discussion of ethical issues and considerations, the next section describes the quantitative research approach using secondary data in order to assess business performance of privatised SOEs.

3.2 Preliminary fieldwork activities prior to conducting this study

Prior to conducting the actual data collection processes using both qualitative and quantitative approaches, preliminary fieldwork activities were considered critical to this study. Mason (2002) suggested that this approach helps the researcher to gain understanding and experience about a given study, focused on: research questions, sampling strategies, data generation and analytical techniques experience, and some aspects of the research process. According to some writers (de Vaus 2002; Gray, DE 2004; Veal 2005), findings derived from such activities will help clarify and confirm the potential of intended research methodologies. This lays a foundation for developing and formulating research instruments (i.e. interview questions and survey questionnaires) in order to ensure the validity and reliability of research findings, and also gather information pertinent to the research and its context that may not be publicly available.

The preliminary fieldwork activities were conducted in Vientiane Capital and Savannakhet Province in Laos from 28 March to 10 April 2014. The initial findings helped the researcher to secure a broad understanding and awareness of surrounding and changing environments relative to the research project. This was achieved by mapping the views and perceptions from formal and informal discussions (altogether 48 interviews) with multiple stakeholders from both government and private sectors concerning their perceptions and views on SOEs and privatisation programs, as well as the development of financial markets (capital market) in Laos. The preliminary fieldwork activities could be considered an exploratory study. Therefore, the information acquired was carefully analysed using a thematic analysis technique. The initial results confirmed the research findings from the literature review, while new findings from the fieldwork activities also emerged. Supplementing the literature review, the findings from the fieldwork activities and some information collected during the interviews were used to define the research questions, the development of survey questionnaires and interview questions, research procedures, actual data collection and data analysis processes. This then enabled the objectives and research questions to be finally formulated in this study.

3.3 Research paradigm

A paradigm is defined as “a basic set of philosophical beliefs about the nature of the world [which] provides guidelines and principles concerning the way research is conducted” (Veal 2005, p. 24). As suggested by de Vaus (2002), a research paradigm can be defined according to how research gets started: deductive reasoning (the starting point of theory testing) versus inductive reasoning (the starting point of theory building). Paradigmatic assumptions very often guide researchers in a variety of ways – including the selection of certain research problems, the choice of methods selected, and how the researcher will analyse and interpret his or her data (Hesse-Biber 2010). According to numerous writers (Creswell 2009; Gray, DE 2004; Hesse-Biber 2010; Mason 2002; Veal 2005), researchers make claims about five perspectives: ontology (what is knowledge), epistemology (how we know it), axiology (what values go into it), rhetoric (how we write about it), and methodology (the process of research). Specifically, three major paradigms include positivism, constructivism and pragmatism.

3.3.1 Positivist paradigm

A positivist paradigm – also referred to as quantitative, empiricist, or deductive research – refers to “the central belief that there exists an objective reality and that *facts* are independent of any individual’s subjective experience and values” (Hesse-Biber 2010, p. 26). de Vaus (2002) referred to a positivist paradigm as being the process of theory testing, which involves predicting whether certain things should follow if a given theory is true. In light of the position adopted in quantitative perspectives, statistical and mathematical techniques form an integral part of the positivist research paradigm by using theories and models developed in advance of the empirical part of the study (Creswell 2009; Gray, DE 2004; Hesse-Biber 2010; Veal 2005). Consequently, positivists use experimental and quantitative research methods to test and verify hypotheses to answer research questions (Creswell 2009; Gray, DE 2004; Hesse-Biber 2010; Veal 2005).

Specifically, this study faces two main challenges. First, in part due to the problem of extremely limited and unavailable information concerning SOEs and privatisation programs in Laos, little analysis and literature exists and there have been no comprehensive studies on this research topic in the Lao context. As a result, many critical questions remain unanswered. Second, this study deals with measured variables within the context of complex real-life social experience, based on people’s perceptions and attitudes about the research subject. Therefore, the use of a positivist paradigm was considered not sufficient for this study.

3.3.2 Constructivist paradigm

In contrast to positivism, a constructivist paradigm – also referred to as qualitative, interpretive, critical, or inductive research – suggests that “the social world is socially constructed and subjective, and that the *reality* which should be studied is the perceptions of the actors involved in a given social milieu, rather than a model of reality imposed by the researcher” (Veal 2005, p. 24). de Vaus (2002) referred to a constructivist paradigm as a process of theory building, which involves starting with particular observations and then drawing out a theory from those observations. In light of the perception-based nature of their data, constructivist researchers are considered part of the research process, rather than independent of it (Creswell 2009; Gray, DE

2004; Hesse-Biber 2010; Veal 2005). Consequently, interpretive researchers consider interview and observation techniques as the effective methods they should use to gather and capture rich information from research subjects who provide their own explanations of their situations or behaviours in context-specific settings (Creswell 2009; Gray, DE 2004; Hesse-Biber 2010; Veal 2005). Veal (2005) argued that qualitative research is significantly dependent on the researcher's skills in extracting and understanding human experience from the gathered information. Since this study considers the importance of some measurable and objective concepts, such as government commitment and fairness, a constructivist paradigm was considered unsuitable.

3.3.3 Pragmatic paradigm

In social science, a pragmatic paradigm falls into the middle ground between the positivist and constructivist perspectives (Creswell 2009). The concept of pragmatism assumes that quantitative and qualitative research methods (a mixed research method) can be used in a single study to gain a broader understanding of the issues (Creswell 2009; Gray, DE 2004; Hesse-Biber 2010; Tashakkori & Teddlie 1998; Veal 2005). Pragmatists agree with positivists that there is an external reality but they disagree that there is an absolute truth (Tashakkori & Teddlie 1998). Under the pragmatic worldview, the research question is considered more important than either the research methodology or the model assumptions that underlie the research method; researchers have freedom of choice in regard to their methods, techniques and procedures of research (Tashakkori & Teddlie 1998). Furthermore, Tashakkori and Teddlie (1998, p. 24) stressed that “decisions regarding the use of either qualitative or quantitative (or both) depend upon the research question”.

From these perspectives, this study lies within this research pragmatism, with a mixed research method combining qualitative and quantitative research techniques considered the most appropriate approach.

3.4 Research methodology

A research methodology is the way research is conducted in a particular paradigm in terms of the forms of data collection, data analysis, and data interpretation (Creswell 2009; de Vaus 2002; Hesse-Biber 2010; Tashakkori & Teddlie 1998; Veal 2005;

Zikmund et al. 2009). In gathering data in any research, the qualitative approach, quantitative approach, or mixed approach can be employed according to the needs and purposes of the research.

3.4.1 Qualitative research approach

A qualitative approach can be regarded as “providing rich data about real life people and situations and being more able to make sense of behaviours and to understand behaviour within its wide context” (de Vaus 2002, p. 5). Its main objective is to understand people’s perceptions and attitudes and crucially the meanings that they attach to people and events (Veal 2005). Creswell (2009) suggested that qualitative research is not only an appropriate approach for exploratory theory (when little research on certain concepts or phenomena has been done), but also useful when the researcher has limited knowledge and understanding about the important variables to be examined. Qualitative methods include in-depth interviews, focus groups, direct observations, and case studies. Specifically, an in-depth interview technique was used for this study since it allowed research participants to talk openly about a topic while the ethical code of conduct for the researcher was observed (Creswell 2009).

The strengths of a qualitative approach are that it provides richness of responses and detailed description of a central phenomenon under study. This is partly due to the fact that this type of approach is more flexible during data collection processes (Creswell 2009; de Vaus 2002; Hesse-Biber 2010; Mason 2002; Tashakkori & Teddlie 1998; Zikmund et al. 2009). However, de Vaus (2002, p. 5) argued that “qualitative research is often criticised for lacking generalisability, being too reliant on the subjective interpretations of researchers and being incapable of replication by subsequent researchers”. Data collection also tends to be time-consuming and costly to produce (Hesse-Biber 2010). As a result, such weaknesses need to be taken into account prior to selecting a method of data collection.

3.4.2 Quantitative research approach

A quantitative research approach involves “the gathering and analysis of numerical data [and then] relies on numerical evidence to draw conclusions or to test hypotheses” (Veal 2005, p. 25). Its main aims are to objectively measure relationships among variables in

the social world, to test hypotheses and to predict human behaviours (Creswell 2009). Qualitative research is useful when researchers attempt to test a theory or to explain and/or identify factors that influence results using statistical procedures (Creswell 2009). The strengths of quantitative research are that it can provide factual reliable data from a sample studied as representative of a large population, allowing researchers to generalise the sample findings (Creswell 2009; de Vaus 2002; Hesse-Biber 2010; Tashakkori & Teddlie 1998; Zikmund et al. 2009). Conversely, quantitative research is often criticised for lacking rich and detailed descriptions about the human behaviours, attitudes and perceptions of subjects to be studied (Creswell 2009; de Vaus 2002; Hesse-Biber 2010; Tashakkori & Teddlie 1998; Zikmund et al. 2009). Conducted alone, quantitative research risks the potential of ignoring local meanings and imposing outside prejudices.

Quantitative research methods include self-administered and interview-administered surveys, experimental research, or case study methods. According to many writers (Creswell 2009, 2012; de Vaus 2002; Gray, DE 2004; Veal 2005; Zikmund et al. 2009), a quantitative survey is an effective tool for gathering and ascertaining self-reported knowledge, opinions, beliefs, values, behaviours, attitudes and/or perceptions. This technique specifically involves the systematic collection of data and results and the standardisation or generalisation of data, as the data is quantitative (Creswell 2009, 2012; de Vaus 2002; Gray, DE 2004; Veal 2005; Zikmund et al. 2009). In this way, the data can be statistically analysed, and consequent results used to describe trends about responses to questions, as well as test research questions and/or hypotheses. Based on these perspectives, quantitative surveys were considered appropriate in this study.

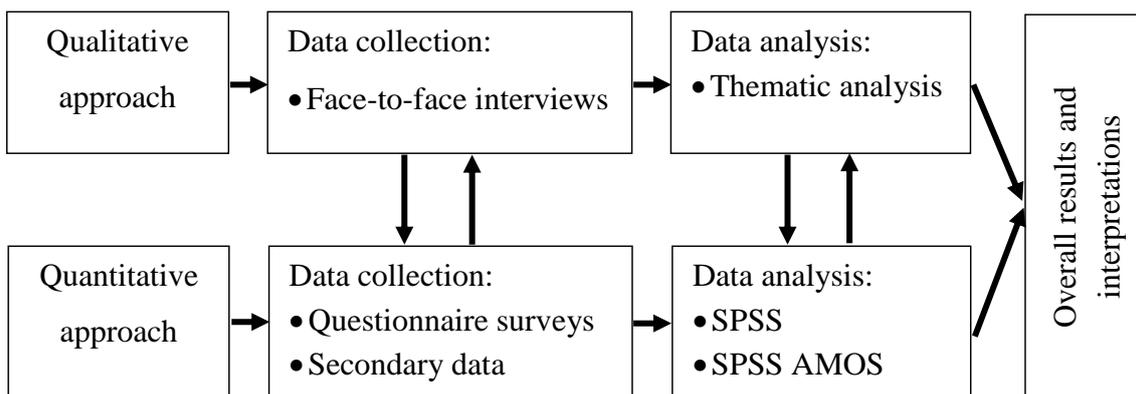
3.4.3 Mixed research method

A mixed research method uses both qualitative and quantitative approaches to examine the same dimensions of a research problem in a single study (Hesse-Biber 2010). The main aim is to “ultimately [fortify and enrich] a study’s conclusions, making them more acceptable to advocates of both qualitative and quantitative methods” (Hesse-Biber 2010, p. 4). Veal (2005, p. 39) argued that “The methods used are often complementary in that the weaknesses of one approach are complemented by the strengths of another”. This research method helps researchers to specify their research questions and acquire a

deeper understanding of the research subject or context to be studied (Creswell 2009; Hesse-Biber 2010; Hurmerinta-Peltomaki & Nummela 2006; Tashakkori & Teddlie 1998; Zikmund et al. 2009). Importantly, this method can help strengthen the validity and reliability of the research findings through quantitative or statistical evidence and qualitatively rich information gathered from research subjects. Consequently, it can support and enhance the generalisation of research findings. In short, the mixed research method is viewed as neutralising or cancelling the possible biases inherent in any single method, thus improving the research quality.

3.4.4 Research design

In light of the application of a mixed research method combining qualitative and quantitative approaches, this study adopted a concurrent triangulation strategy. Creswell (2009) referred to such a strategy as occurring when a researcher collects both quantitative and qualitative data concurrently and then compares the two databases to determine if there is convergence, difference, or some combination of the two. Ideally, priority is given equally to both methods and the integration or comparison of findings from two datasets is conducted side-by-side during the interpretation stage of the findings (Creswell (2009)). A diagram depicting this strategy, as used in this study, is presented in Figure 3.1.



Source: Author's compilation

Figure 3.1 Diagram reflecting the concurrent triangulation strategy for this study

The concurrent triangulation strategy was selected for several reasons. First, this strategy allows the findings to be confirmed, cross-validated and corroborated within a single study (Creswell 2009; Hesse-Biber 2010; Tashakkori & Teddlie 1998; Zikmund

et al. 2009). Second, the concurrent data collection results in a shorter data collection time since both forms of data are collected at the same time at the research site (Creswell 2009; Hesse-Biber 2010; Tashakkori & Teddlie 1998; Zikmund et al. 2009). Lastly, this study focuses on the target population who reside in Vientiane Capital, the capital city of Laos, so it made sense to use this strategy to save time and costs, which are often incurred during the data collection phases.

3.4.5 Research setting

In addition to deciding on a research method and designing and defining other elements of a given piece of research, a research setting is considered a critically important part of conducting a study. This is because it can significantly affect research findings and conclusions (Creswell 2012). A research setting is the location in which data collection is actually carried out. As already mentioned, this study was conducted in Vientiane Capital, the capital city of Laos. First, this research site was selected because Vientiane Capital accommodates the largest number of existing and previously privatised SOEs in Laos. Second, there were 141 SOEs nationwide in 2011 but almost all medium- and large-sized SOEs were reported to be located in the capital. Third, it was believed that most key influential government entities and stakeholders associated with SOEs and privatisation efforts were located in the capital city. Lastly, anecdotal evidence suggested that more than 95% of local residents who bought shares in BCEL and/or EDL-GEN through initial public offerings lived in the capital. Consequently, Vientiane Capital was considered the most appropriate research site for this study.

3.4.6 Sampling frame

In any mixed methods research, a sample needs to be selected from those who represent the target population who are the focus of the study (de Vaus 2002; Fink 2003; Gray, DE 2004; Veal 2005). Therefore, the researcher is required to develop a sampling frame in order to identify a suitable range of subjects for the study. A sampling frame contains an entire list of potential elements from which a sample is about to be drawn, while excluding others who are not applicable to the study (Creswell 2012; Lyons & Doueck 2010; Mason 2002). Owing to the research questions and problems, and the availability of data and information, this study focused on multiple stakeholders from both public and private entities who were believed to have been involved in SOEs and

privatisations, either directly or indirectly, as well as those who had knowledge and understanding of the research context. Specifically, laypersons (i.e. the general public) were excluded from the study's sampling frame since the research is technically specific and required potential interviewees and respondents with certain knowledge and understanding of SOEs and privatisation processes. In order to enhance findings and avoid biased conclusions, study respondents for both qualitative interviews and quantitative survey were randomly drawn from this pre-determined sampling frame. The sampling frame included:

1. Sectoral ministries and local government authorities in legal and economic areas;
2. Financial institutions: commercial banks and securities-related entities;
3. Mass media: newspapers and television;
4. SOEs;
5. Privatised SOEs;
6. Private sector enterprises;
7. Educational institutions in the economics, business and/or legal areas; and
8. International organisations.

3.5 Qualitative approach using semi-structured interviews

Owing to the fact that information and data regarding SOEs and privatisation in the Lao context are relatively limited, unreliable and inaccessible, assessing and analysing informed attitudes and perceptions to serve as a primary data source was paramount to answering the research questions of this study. In order to collect rich information from a limited number of research subjects, face-to-face interviews were employed. The main purpose was to explore and understand 'local expertise' – the views and perceptions of well-informed stakeholders concerning SOEs and privatisation efforts in Laos. Specifically, this study sought to analyse and identify critical factors affecting perceived privatisation outcomes and how these outcomes influenced the development and strengthening of Laos' financial system and people's intentions to buy shares in SOEs selected for privatisation.

This section discusses the development of interview questions, the validity and reliability of those questions, the sample size for qualitative interviews, and technical

details of face-to-face interviews with information-rich stakeholders (which are analysed in Chapter 5).

3.5.1 Development of interview questions

An interview can be categorised into one of three groups according to its level of formality: unstructured, semi-structured and structured (Creswell 2009, 2012; Darlington & Scott 2002; Mason 2002; Zikmund et al. 2009). Unstructured interviews involve open-ended questions through which participants are encouraged to direct the flow of the conversation; semi-structured interviews use both pre-determined (closed-ended) and open-ended questions, with participants allowed to add more information; and structured interviews involve a standard set of pre-determined questions (i.e. a limited range of response options), with the intent of generalising from a sample to a population (Creswell 2009, 2012; Darlington & Scott 2002; Mason 2002; Zikmund et al. 2009). In semi-structured interviews, the interviewer is able to guide the conversation through a set of closed-ended questions and direct the discussion in line with the needs and objectives of a given study. Yet such interviews give flexibility to the interviewee to engage in the interview process and provide their in-depth opinions and perceptions (Creswell 2009, 2012).

Based on this understanding, a semi-structured interview technique was employed in this study, allowing the researcher to obtain more insightful information from participants, and more easily offer explanations to interviewees about aspects of privatisation that were new to them. The interview questions were formulated and developed in the context of the findings from the literature review (see Chapter 2) and the preliminary fieldwork conducted in 2014. Specifically, the interview format included both closed and open-ended questions in line with the semi-structured approach.

3.5.2 Validity and reliability of interview questions

Qualitative validity indicates that the researcher has checked for the accuracy of findings using certain procedures; qualitative reliability means that the researcher's approach is consistently applied across the research (Creswell 2009; Hesse-Biber 2010; Mason 2002; Zikmund et al. 2009). In meeting these goals, this study adopted the seven

steps of planning and preparation procedures for qualitative interviews as recommended by Mason (2002). These are:

- Step 1.** Assembling the *big* research questions to be explored and answered.
- Step 2.** Subdividing the big research questions into *mini*-research questions, linking the big questions and the mini questions.
- Step 3.** Developing possible interview topics and questions to ask research participants in an interview situation.
- Step 4.** Cross-referencing the possible interview topics and questions with the big and mini research questions, and vice versus.
- Step 5.** Developing some ideas about a loose structure (unstructured) or format, for interviews; for example, open-ended questions.
- Step 6.** Developing any standardised questions in the planned interviews if applicable; for example, personal and social characteristics.
- Step 7.** Cross-checking that the format, and any standardised questions or sections, cover the possible topics and questions adequately and appropriately.

In addition to these steps, a pilot study is recommended by researchers, with the testing of interview questions not only enhancing content validity, but also improving questions, format, and scales (Creswell 2009, 2012). In conducting a pilot, a researcher can change and modify a research instrument based on comments from a small number of individuals who complete and evaluate the instrument.

The pilot for this study was conducted in mid-December 2014. A set of draft interview questions was forwarded to three Lao PhD candidates at Australian universities for their feedback and comments. The draft questions were then modified accordingly, addressing any appropriate feedback and comments. A set of modified interview questions was forwarded to five potential interviewees in Laos for further feedback and comments. Their relevant comments were then incorporated into a final instrument following detailed consultation with the researcher's supervisors.

3.5.3 Sample size for qualitative interviews

Sample size is an important element in the adoption of a qualitative interview technique since it helps researchers justify to what extent the findings can or cannot be generalised

to other people and situations. Creswell (2012, p. 146) argued that “a general rule of thumb is to select as large a sample as possible from the population”. Desired accuracy is not the only factor in determining the sample size, budget, time and access to research participants should be also taken into consideration (Creswell 2012; de Vaus 2002; Gray, DE 2004; Zikmund et al. 2009). In regard to qualitative interviews, six to eight subjects drawn from a homogeneous group and 12 to 20 subjects drawn from a heterogeneous sample are considered sufficient, according to (Kuzel 1999). Whereas, Daymon and Holloway (2002) suggested that an adequate sample size should range from four to 40 subjects. While suggestions for the sample size for qualitative interviews varied, this study adopted a sample size ranging from ten to 20 participants, to be randomly drawn from the sampling frame discussed earlier (see Sub-section 3.4.6). Research findings from the qualitative interviews could therefore be justified, in line with the varied sampling recommendations outlined in the literature.

3.5.4 Face-to-face qualitative interviews: technical details

Face-to-face semi-structured interviews were conducted from 28 February to 12 April 2015 in Vientiane Capital. These involved in-depth discussions with well-informed stakeholders about SOEs and privatisation programs in Laos. Before performing the interviews, twenty invitation letters were personally delivered to senior officers in target organisations in order to request their participation. Each invitation package was comprised of a cover letter and three related documents: a consent form, research information sheet, and tentative questions (see Appendix 1-1). Since the three research documents were written in English, they were translated into the Lao language by an accredited translation company to ensure the accuracy of the translation (see Appendix 1-4).

Following the delivery of the invitation packages, an administrative procedure (i.e. a list of contact persons and follow-up calls) was put in place in order to improve the participation rate. The researcher was able to clarify any concerns or answer any questions that potential interviewees had before agreeing to participate. This aided their willingness to participate in the study (Gray, DE 2004). Importantly, research ethical requirements were prioritised, emphasising voluntary participation, informed consent,

confidentiality and anonymity, and the privacy of the research participants. As a result, 14 out of 20 potential interviewees agreed to be interviewed.

Before each interview started, interviewees were asked whether the session could be audio-recorded, assuring them that the information would be used only for the purpose of this study. With permission from the interviewees, all the interviews were audio-recorded. Each interview was carried out in as similar a format as possible and lasted from 30 to 90 minutes. Each interview was conducted in Lao since the researcher and interviewees all spoke this native language. The interviews were immediately transcribed in Lao and later translated into English by the researcher.

The interviews began with the researcher providing a brief background of the study and referring to the research information sheet provided in the interview package. The interviewees were then encouraged to talk about themselves and their work experience concerning SOEs and privatisation in Laos. This helped facilitate a smooth and friendly communication flow. Next, the pre-determined questions were used as a guide during the interview sessions and notes were taken and transcribed into a Word document on the same day to avoid losing information. As a result, qualitative data were transformed into both audio and written records (Creswell 2009). An interactive mode of discussion was also encouraged to allow participants to shape the themes emerging from the interview processes, creating rich and extensive information for the study (Creswell 2009, 2012; Mason 2002; Zikmund et al. 2009).

The identity of each interviewee was removed and aliases or pseudonyms for individuals and places were adopted. In this way, the researcher was able to protect identities and guarantee informant confidentiality and anonymity (Creswell 2009, 2012; Mason 2002; Zikmund et al. 2009). A thematic analysis approach was applied to the qualitative data. This involved a process of categorising the responses into themes and then transforming the word responses into numbers (e.g. participants mentioned “unreliable accounting records” 15 times) (Creswell 2012). From this, the researcher was able to identify and assess the central themes and interpret the meaning of the data.

3.6 Quantitative approach using questionnaire-based survey

In addition to the qualitative interviews, a self-administrated questionnaire survey was used to collect primary data. This focused on the perceptions of key stakeholders about privatisation and the development of Laos' domestic financial ecosystem. This section begins with a discussion of the development of the quantitative survey methods used, followed by the development of survey questionnaires, pre-testing, and choice of sample size. It concludes by outlining the final layout of the questionnaire and how it was used to collect data for this study.

3.6.1 Development of quantitative survey methods

A questionnaire-based survey method appears to be the most common technique used to collect quantitative data in business and commercial settings (Gray, DE 2004; Veal 2005). According to Creswell (2012) and Gray, DE (2004), quantitative surveys can be divided into two broad groups: interview-administered versus self-administered methods. Gray, DE (2004) and de Vaus (2002) suggested that three things should be taken into account when choosing the survey method(s): the purpose of the survey; the kinds of research questions to be answered; and available resources (e.g. time and budgets).

Interview-administered questionnaire surveys

This form of data collection includes face-to-face structured interviews and telephone questionnaires. In face-to-face structured interviewing, a researcher conducts an in-person interview with research respondents and records their answers to closed-ended questions (Creswell 2012; de Vaus 2002; Gray, DE 2004; Lynn 2008; Veal 2005; Zikmund et al. 2009). This method offers several advantages: the flexibility of using visual aids and/or observing the body language of respondents; the ability of a researcher to answer respondent questions, clarify misunderstandings and/or probe answers to open-ended questions; audio-recording and/or note-taking to record the answers; and a high response rate. This method helps generate high quality and in-depth information from participants involved in research (Creswell 2012; de Vaus 2002; Gray, DE 2004; Lynn 2008; Veal 2005; Zikmund et al. 2009). Gray, DE (2004) and Creswell (2012) however emphasised that face-to-face interviews appear to be the most

time-consuming and costly survey method, and do not protect the anonymity of the respondent as successfully as other questionnaire formats.

Telephone interviews have similar strengths, except the researcher is no longer able to use visual aids and/or observe the body language of respondents. Response rates for telephone surveys are considered relatively high, but slightly lower than for individual interviews (de Vaus 2002; Gray, DE 2004; Lynn 2008; Zikmund et al. 2009). Although telephone interviews allow the researcher easy access to interviewees who are geographically dispersed, this method can be costly (i.e. long-distance telephone calls) and may not ensure anonymity. Since the interviewer cannot see any non-verbal communication on the part of interviewees, it is often recommended that telephone interview questions be brief and fairly simple, with the types of response choices few and short (de Vaus 2002; Gray, DE 2004; Lynn 2008; Zikmund et al. 2009).

Given the above discussion, the self-administrated face-to-face and telephone interview surveys were considered unsuitable data collection methods for this study.

Self-administered questionnaire surveys

Self-administered questionnaire surveys include postal, online or web-based, and delivery and collection questionnaires. A postal questionnaire is simply mailed to the sample by the researcher. Many writers (Creswell 2012; de Vaus 2002; Gray, DE 2004; Lynn 2008; Zikmund et al. 2009) have argued that postal questionnaires generally have several advantages: avoidance of over-elaborate questions; straight-forward answers from respondents; a cost effective form of surveying in the case of budget or staff constraints; a convenient way to reach a geographically dispersed sample; the time flexibility for respondents to consult documents and to complete the questionnaire in their own time; and often leading to a high response rate when the topic is relevant to the respondents. However, researchers have also warned that postal questionnaires have some major disadvantages in terms of the risk of lower response rates (especially, when the topic is viewed as irrelevant) and the inability to ask for further explanation or clarification about the answers given by respondents. If one or both of these are apparent, making strong generalisations on the basis of the data can be problematic.

Added to this, in light of the fact that the postal service in Laos is not efficient, postal questionnaires were considered inappropriate for this study.

An online or web-based questionnaire survey is delivered to members of the sample via a website and/or as a word-processed document attached to an e-mail. With web-based surveys, the website can be password-protected. If it is not password-protected, it can be difficult for the researcher to monitor and/or control who actually responds to the questionnaires (Gray, DE 2004). Unlike online surveys, an e-mail survey method allows the researcher to distribute the questionnaires to the target sample when their e-mail addresses are available. According to many writers (Creswell 2012; de Vaus 2002; Gray, DE 2004; Lynn 2008; Zikmund et al. 2009), online questionnaires have similar advantages and disadvantages to postal questionnaires, although paper and/or labour requirements are lower. Some concerns about using web-based questionnaires include: they are limited to target respondents with e-mail addresses and access to the internet; there is a potential for sample selection bias that may limit the ability to generalise research findings; and they are associated with a lack of anonymity and confidentiality due to website security problems (Creswell 2012; de Vaus 2002; Gray, DE 2004; Lynn 2008; Zikmund et al. 2009). Given the above arguments and the fact that the internet service in Laos might not be efficient enough, web-based questionnaire surveys were considered inappropriate for this study.

Delivery and collection questionnaires are simply delivered in person by the researcher to be collected later. Specifically, experts say that this approach can result in achieving a high response rate, obtaining representative samples and a better quality of answers from respondents (Creswell 2012; de Vaus 2002; Gray, DE 2004; Veal 2005; Zikmund et al. 2009). Moreover, this form of self-delivery and collection allows the researcher to establish some direct contact with potential respondents and encourage a larger proportion of the sample to complete the questionnaire. Like all questionnaires, high response rates can be achieved only if potential respondents find the survey interesting and relevant to them. Specifically, the researcher is able to provide an opportunity for potential respondents to seek clarification if required and, as a result, improve survey quality (Creswell 2012; de Vaus 2002; Gray, DE 2004; Veal 2005; Zikmund et al. 2009). One of the important limitations of this approach is “the time and effort of

delivering and collecting the questionnaires” (Gray, DE 2004, p. 109). However, taking all the advantages into consideration, the self-delivery and collection questionnaire survey method was chosen for this study.

3.6.2 Development of survey questionnaires

Creswell (2012, p. 385) stated that “designing good survey instruments is a challenging and complex process”. In seeking to ensure high-quality data (i.e. accurate, valid, and reliable data), this study applied three steps. First, a set of survey questions was formulated and developed based on the findings from the literature review about privatisation efforts, as well as the preliminary fieldwork completed in 2014. Second, it was essential to determine whether an existing survey instrument was available to measure the observed variables to be analysed in this study. If this was the case, such an instrument could be modified to meet the research needs and objectives (Creswell 2012). However, the literature review showed that no suitable research instrument was found. The third step was therefore to create a new research questionnaire. In doing this, several guidelines for designing a new data collection instrument were adopted, as recommended by de Vaus (2002), Gray, DE (2004) and Creswell (2012). These guidelines focused on the wording of questions, question formats, various guiding principles for developing question responses, response formats, ‘don’t know’ response options, and questionnaire layout.

First, the wording of questions needs to be clear, using simple and appropriate language, setting manageable tasks and providing necessary information (Converse & Presser 1986; Creswell 2012; de Vaus 2002; Gray, DE 2004). Specific and/or straight-forward questions are preferable to general ones, whereas both leading questions and double-barrelled questions (i.e. containing two questions) should be avoided since such questions may result in response errors. Questions should also be relevant and related to each other in a meaningful way (Converse & Presser 1986; Creswell 2012; de Vaus 2002; Gray, DE 2004). Allocating items under a shared common introduction and/or identical answer scale can produce evident advantages with regard to data quality, efficiency and speed (Andrews 1984). Negatively worded questions should be avoided since their meanings can be unclear. Such questions should be reworded to eliminate negative connotations or leading words (Creswell 2012; de Vaus 2002; Gray, DE 2004).

In addition, wordy questions should be avoided. When the question is too long, it is recommended to remove unnecessary words to simplify and shorten the questions. The literature, however, this is culturally-specific and in some cultures questions might need to be wordy (Creswell 2012; de Vaus 2002; Gray, DE 2004). Some researchers argue that medium or long questions (i.e. 16-24 or 25+ words per question, respectively) can result in higher data quality than short questions (Andrews 1984). Finally, questions with jargon or technical words should be modified, either by using words familiar to all participants or providing some background information (de Vaus 2002).

Second, researchers need to decide on question formats: open- versus closed-ended questions (Converse & Presser 1986; Creswell 2012; de Vaus 2002; Gray, DE 2004). Open-ended questions have no pre-set response options and allow respondents to provide their own responses to questions. Although open-ended questions result in information-rich data, the respondents' answers may not match the intent of the question and may be hard to code (Converse & Presser 1986; Creswell 2012; de Vaus 2002; Gray, DE 2004). Closed-ended questions have a number of response options from which respondents choose one or more. They provide a means of coding responses or assigning a numeric value to allow statistical analysis of the data. However, closed-ended questions need to be constructed to accommodate all possible response options that are mutually exclusive, or distinct from each other, and include the typical responses a respondent might provide (Converse & Presser 1986; Creswell 2012; de Vaus 2002; Gray, DE 2004). Given the identified advantages, closed-ended questions were used for this study.

Third, there are three guiding principles when designing question responses: inclusiveness, exclusiveness and balancing categories (de Vaus 2002). Under the principle of inclusiveness, the response options provide a sufficient range of possible answers to cover all potential respondent answers. For example, a question that asks about educational levels and includes only 'bachelor degree' and 'master's degree' as alternatives, meaning that these options limit the ability of respondents to answer if they have neither or perhaps a PhD or diploma. de Vaus (2002, p. 100) has argued that "Attitude questions should generally include a 'don't know' or 'no opinion' option, so that those with no opinion are provided for". Exclusiveness means that only one answer

to the question should be provided by a respondent, consequently the alternative responses should be mutually exclusive (de Vaus 2002). If a respondent believes they could select more than one of the alternative answers provided, this might create a problem. To address this, the researcher might add an additional category (e.g. both) and/or to treat each response as a separate question or variable using rating scales on each question (e.g. 'agree', 'disagree', etc.). For the balancing principle, response categories need to be balanced, ordering high to low scales either side of what is considered the neutral position. Balancing categories is essential since unbalanced response alternatives can produce bias and underestimate the level of respondent disapproval (de Vaus 2002).

Fourth, this study adopted two ranking response techniques. A binary response format (e.g. a yes/no response) was used in order to analyse respondents' willingness to take a certain action. However, a binary response often provides a poor response distribution because the responses fall into the two extremes: yes versus no (Creswell 2012; de Vaus 2002; Gray, DE 2004). Consequently, a 5-point Likert scale using model analysis variables was also applied since this approach to measuring attitudes and perceptions involves providing statements that indicate a particular opinion or perception (Creswell 2012; de Vaus 2002; Gray, DE 2004). Respondents were given the choice of 'strongly disagree' (1), 'agree' (2), 'neutral' (3), 'disagree' (4), and 'strongly disagree' (5). de Vaus (2002) suggested that this scaling technique can provide a measure of intensity, extremity and direction. Providing these categories also results in a standard set of responses, making the data easier to analyse (Gray, DE 2004).

Fifth, 'don't know' response options are recommended for inclusion in attitude or perception questions because respondents may feel they lack the requisite information and/or knowledge of the subject under study (Andrews 1984; Converse & Presser 1986; de Vaus 2002; Moustaki & O'Muircheartaigh 2002). Without the 'don't know' option, respondents may be forced to express an opinion or attitude they really do not have, resulting in false and unreliable responses. Andrews (1984) confirmed that the inclusion of an explicit 'don't know' option could enhance data quality and validity and lower residual errors. Although a possible drawback of using 'don't know' alternatives is that

respondents may select them without careful thought (de Vaus 2002), ‘don’t know’ categories were considered valuable in designing model variables in this study.

Finally, questionnaire format should be taken into account since this can improve the response rate and data quality (Andrews 1984; Creswell 2012; de Vaus 2002; Gray, DE 2004). Answering procedures and the requisite way of answering multiple-choice questions (e.g. ticking boxes or circling numbers) should be consistent throughout (Creswell 2012; de Vaus 2002; Gray, DE 2004). Questionnaire instructions (i.e. general, section and question instructions) should be provided in order to introduce the purpose of the questionnaire, how the respondents are recruited, the assurance of confidentiality, how and when to return the questionnaire, and how to answer the questions. These principles were applied to the survey instrument in this study. Higher data quality appears to come from items ranging from 26th to 100th positions in the list of questions (Andrews 1984). Consequently, for this research, ‘easy’ questions (i.e. demographic data and general questions) were positioned at the beginning of the questionnaire. Consent forms and research information sheets were also included in order to seek the respondent’s consent prior to participating in the research (Creswell 2012).

3.6.3 Pre-testing the questionnaire

After the survey questionnaire had been developed, a pre-testing or pilot testing of the questions was essential, as it had been with the interview questions. The main purpose of pre-testing is to evaluate how participants in the sample interpret and understand the questions’ meanings and help researchers to decide to eliminate and/or modify questions that are likely to mislead (Campanelli 2008; Converse & Presser 1986; Creswell 2012; de Vaus 2002; Gray, DE 2004; Zikmund et al. 2009). Gray, DE (2004) suggested that a sample size for a pre-testing study should range from 20 to 40 respondents.

A pre-testing study was conducted in mid-December 2014. A set of draft survey questions was forwarded to 30 potential respondents in Laos for their feedback and comments. The draft questionnaire was then modified with relevant feedback addressed to create a final version of the instrument version after detailed consultation with the researcher’s supervisors (see Appendix 1-2).

3.6.4 Sample size for quantitative questionnaires

Although a large sample size is of critical importance as it helps establish representativeness for accuracy, generalisation and the stability of research findings that are likely to be replicated, other factors should also be taken into consideration. These factors include time, budgets and access to research participants (Creswell 2012; de Vaus 2002; Gray, DE 2004; Veal 2005; Zikmund et al. 2009). This study employed SEM analysis techniques (discussed later in Section 3.7), a method used with large samples. When the sample size is not large enough, some statistical estimates in SEM may be problematic and inaccurate, such as non-convergence and improper solutions. However, there seems to be no agreement as to how large a sample size should be in SEM in light of model complexity and estimation techniques.

In performing a SEM analysis, Ding, Velicer and Harlow (1995) and Anderson and Gerbing (1984, 1988) suggested that 100 to 150 subjects is statistically sufficient to achieve a convergent and proper solution when performing SEM. For others, however, a minimal sample size of 200 or more is considered appropriate, in the belief that if the sample size is less than 200, statistical estimates are questionable (Barrett 2007; Boomsma & Hoogland 2001; Hair et al. 2006; Hoyle 1995; Kline 2011; Tanaka 1987). Furthermore, Boomsma and Hoogland (2001) and Schumacker and Lomax (2010) respectively recommended 400 subjects and an absolute number (range: 250 – 500) as a minimum sample requirement. Comrey and Lee (1992) proposed a detailed scale of sample size adequacy: 50 - very poor, 100 – poor, 200 – fair, 300 – good, 500 – very good, and 1,000 – excellent. Cattell (1978) also suggested that 500 subjects would be a good sample size, but 200 or 250 cases could be acceptable. Consequently, it was decided to randomly distribute 500 survey forms to potential respondents in order to achieve a sample size in the range of 200 - 500 cases, since this range appears to be diffusible.

3.6.5 Self-administered survey questionnaires

The survey questionnaire was provided with a consent form and research information sheet. These were initially written in English but, once finalised, they were translated into Lao by an accredited translation company to ensure the accuracy of the translation (see Appendix 1-4).

A self-administered survey questionnaire using self-delivery and collection was distributed between 28 February and 12 April 2015 in Vientiane Capital. In recruiting 500 potential respondents drawn from the sampling frame (see Sub-section 3.4.6), this study employed two contact methods: indirect and direct. Under an indirect contact method, potential respondents were recruited through their employing organisations. Each questionnaire package comprised a cover letter, an empty envelope for inserting an answered questionnaire, the survey questionnaire, research information sheet, and consent form. These were personally delivered to target organisations and addressed to directors or managers in charge of those organisations. Based upon the judgements and decisions of those directors or managers, they themselves might answer and/or recruit their colleagues to answer the questionnaires. Each answered questionnaire was then kept in the empty envelope provided and collected at an agreed time.

A direct contact means that the researcher personally approached and recruited potential participants through his personal and/or professional networks. Often participants were recommended by other respondents. The complete questionnaire packages were personally delivered to the participants. Each answered survey form, kept in the envelope provided, was personally collected by the researcher at an agreed time.

Following the delivery and distribution of the survey questionnaires, an administrative procedure (i.e. a list of contact persons and follow-up calls) was put in place in order to improve the participation rate, as it had been with the interview invitations. Again, this provided an opportunity to clarify any respondent concerns. Research ethical requirements were once more highly prioritised regarding voluntary participation, informed consent, confidentiality and anonymity, and privacy of the research participants. As a result, a high response rate (i.e. 80%) was achieved, with 400 out of 500 survey forms returned to the researcher. The majority of non-respondents (20%) tended to be those who worked in private sector entities.

3.7 Data analysis: structural equation modelling

The questionnaire data – the model variables – were analysed using SEM techniques in SPSS AMOS 22. This section opens with a discussion on the reasons for using SEM,

followed by an outline of the numbers of observed items per construct, how to handle a single-item construct, and the importance of using item parcelling. Statistical requirements for performing normality and determining an estimation method for performing SEM are also discussed. This analysis shows the extent to which local Lao knowledge either supports the hypotheses obtained from the literature review or contrasts with the foreign expert views in the literature surrounding the theory of privatisation.

3.7.1 What is structural equation modelling?

SEM is a multivariate technique combining factor analysis and path analysis or causal modelling. SEM can be viewed as a confirmatory factor analysis (e.g. hypothesis-testing approach), rather than an exploratory factor analysis (EFA). It can analyse data in order to capture certain phenomena from which researchers can draw a causal inference (Bollen 1989; Byrne 2010; Hair et al. 2006; Ho 2006; Hoyle 1995; Kline 2011; Raykov & Marcoulides 2006; Schumacker & Lomax 2010; Stevens 2009; Ullman & Bentler 2013). A causal inference involves a hypothesised cause-and-effect relationship. Consequently, this technique allows researchers to use factor analysis to create unobserved variables from multiple observed variables and then combine these factors with path analysis (i.e. multiple regression modelling) to examine causal relationships among the factors. Unlike path analysis, where each regression coefficient (relationship) in a system of structural equations is estimated separately (equation by equation), SEM uses all of the information from all equations that make up a model to compute all estimates (Hair et al. 2006). In doing so, SEM is capable of assessing and correcting for measurement errors (Hair et al. 2006). Ignoring measurement errors can lead to bias in estimating parameters.

In SEM, there are two main types of variables: unobserved variables and observed variables. Unobserved (latent) variables are explanatory variables (factors or constructs) presumed to reflect a hypothetical concept that cannot be observed or measured directly but can be inferred from observed variables. Observed (measured or indicator) variables are variables used to measure or infer the latent variables (Bollen 1989; Byrne 2010; Hair et al. 2006; Ho 2006; Hoyle 1995; Kline 2011; Raykov & Marcoulides 2006; Schumacker & Lomax 2010; Stevens 2009; Ullman & Bentler 2013). Furthermore,

latent variables can be categorised as either exogenous or endogenous. An exogenous variable is a variable that is not influenced by any other variables in the model, whereas an endogenous variable is a variable that is influenced by other variables (Bollen 1989; Byrne 2010; Hair et al. 2006; Ho 2006; Hoyle 1995; Kline 2011; Raykov & Marcoulides 2006; Schumacker & Lomax 2010; Stevens 2009; Ullman & Bentler 2013). Exogenous and endogenous variables are respectively known as independent and dependent variables.

Broadly speaking, SEM consists of two components: a measurement model and a structural equation model. The measurement model specifies the rules governing how the latent variables are measured in terms of the observed variables, and it describes the measurement properties of those variables. That is, measurement models are concerned with the relations between observed and latent variables. The structural equation model is a flexible, comprehensive model that specifies the pattern of relationships among independent and dependent latent variables (Bollen 1989; Byrne 2010; Hair et al. 2006; Ho 2006; Hoyle 1995; Kline 2011; Raykov & Marcoulides 2006; Schumacker & Lomax 2010; Stevens 2009; Ullman & Bentler 2013).

3.7.2 Measured variables per construct

In using SEM techniques, a multiple indicator measurement per construct (latent variable) is preferable since more items per construct result in more proper solutions, more accurate parameter estimates, greater reliability and generalisability. The pre-assumption is that multiple indicators are capable of measuring variability of latent constructs (Bollen 1989; Byrne 2010; Hair et al. 2006; Ho 2006; Kline 2011; Raykov & Marcoulides 2006; Schumacker & Lomax 2010; Stevens 2009). Even though there is no agreement on a maximum number of observed variables per construct, too many variables per construct make it difficult, if not impossible, to fit a model to data (Bentler & Bonett 1980; Hair et al. 2006; Kenny 1979; Marsh et al. 1998).

As a general rule, three is the preferred minimum number of measured variables but, under some circumstances, two may be sufficient (Bollen 1989; Ding, Velicer & Harlow 1995; Hair et al. 2006; Raykov & Marcoulides 2006; Schumacker & Lomax 2010). A three-item model is known as just-identified, meaning that it includes a degree

of freedom that is just enough to estimate all free parameters and results in χ^2 goodness-of-fit statistics of zero. Hair et al. (2006, p. 771) stated that “just-identified models have perfect fit, meaning that a fit assessment is not meaningful”. Hair et al. (2006) and Kline (2011) recommended that at least three to four indicators per construct is statistically sufficient, with four or more items per construct resulting in an over-identified model, meaning that all model fit values can be estimated and strengthen the findings. As a general practice, “two might be fine, three is better, four is best, and anything more is gravy” (Kenny 1979, p. 143). Based on these arguments, this study adopted a four-item per construct technique wherever possible.

3.7.3 Handling a single-variable construct

Unlike multiple-item measurement models, a single-item model could bias the results and raise scepticism about the construct reliability. Specifically, the reliability of a single-item construct cannot be computed (Anderson & Gerbing 1988; Hair et al. 2006; Jöreskog & Sörbom 1982; Kline 2011; Raykov & Marcoulides 2006). In order to handle a single-variable construct, this study employed the measurement technique recommended by Jöreskog and Sörbom (1982). In doing so, a standard error of the observed variable is set at $(1 - \text{reliability}) \times \text{its variance}$. If that is not possible, a conservative arbitrary value such as 0.85 is recommended to compute a reliability estimate. A reliability value of 0.85 is a better assumption than an equally arbitrary value of 1.00, however, the assumed reliability value can affect parameter estimates and measurement error (Jöreskog and Sörbom (1982).

3.7.4 Item parcelling

Item parcels are quite common in SEM models, and are used particularly with latent-variable analysis. Item parcelling or summated scales can be defined as aggregate-level items comprising the sum or average of two or more items, responses, or behaviours. Item parcelling can be conducted in either non-random or random fashion and the parcelled item is then used as a replacement variable to measure the target construct (Bandalos & Finney 2001; Hair et al. 2006; Ho 2006; Kline 2011; Little, TD et al. 2002; Marsh et al. 1998; Matsunaga 2008; Spector 1992). Specifically, item parcelling not only reduces measurement error by using multiple indicator items, but also captures the multiple aspects of a concept in a single measured item (Hair et al.

2006). The main purpose of item parcelling is to combine multiple measured items rather than analysing them separately (Spector 1992).

This technique helps reduce a large number of items into a small number of composite indicators to be analysed in SEM, stabilising parameter estimates, and improving model fit. Item parcelling results in a decline of indicator items and fewer parameters are needed to define a construct. Consequently, sample sizes required in original SEM models (i.e. 5 cases per parameter) become smaller (Bandalos & Finney 2001; Ho 2006; Little, TD et al. 2002; Matsunaga 2008; Spector 1992). Finally, responses to individual items appear to violate the assumption of multivariate normality (e.g. binary items), but item parcelling can help mitigate the problem of non-normality and normalise the distribution of data due to the assembled items. Importantly, the use of item parcels relies on the unidimensionality of the indicator items being summed or averaged. Tests for unidimensionality of indicator variables with an exploratory or confirmatory factor analysis need to be performed first (Bandalos & Finney 2001; Ho 2006; Little, TD et al. 2002; Matsunaga 2008; Spector 1992). If the unidimensionality of the items being parcelled cannot be found, such a technique should not be employed. Given these perspectives, this study adopted an item parcelling technique.

3.7.5 Handling ‘don’t know’ responses

As discussed in Sub-section 3.6.2, a ‘don’t know’ response option was used in the survey questionnaire to enhance data quality and avoid biased responses in the case of closed-ended questions. According to some writers (Acock 2005; Carpita & Manisera 2011; Little, RJA & Rubin 2002; Moustaki & O’Muircheartaigh 2002; Rubin, Stern & Vehovar 1995), ‘don’t know’ responses usually fall into two categories: the respondents having no knowledge of the subject or they wish to avoid expressing an opinion. However, it is difficult to treat the ‘don’t know’ response as a ‘missing value’ or a ‘certain value’ since it cannot be determined into which category they fall. Although there is no consensus on how to treat the ‘don’t know’ responses, as a general practice, they are treated as missing values (Acock 2005; Carpita & Manisera 2011; Little, RJA & Rubin 2002; Moustaki & O’Muircheartaigh 2002; Rubin, Stern & Vehovar 1995). Acock (2005, p. 1025) emphasised that “if a *don’t know* response is interpretable as being somewhere on an underlying continuum between [one value, for example, agree

or yes] and [another value, for example, disagree or no], then assigning or imputing a value may be reasonable”. Put another way, a ‘don’t know’ response falls between two sample spaces x and y or y and x . If this is not the case, a ‘don’t know’ response is problematic (Acock 2005). It is believed that there are no studies on how ‘don’t know’ responses should be treated empirically in the Lao context. Taking the various arguments into account, the researcher decided to treat ‘don’t know’ responses as missing values, with an assumption that these responses had certain meanings (scales) between the sample space: either the *agree* or *disagree* category or *yes* or *no*.

3.7.6 Tests for data normality and determination of estimation methods

Several steps must be taken in order to examine whether data is normal or non-normal, as the distribution of data can impact on how to assess parameter estimates in analytical techniques such as SEM. According to Finney and DiStefano (2006) and Kline (2011), three indices of non-normality are typically used to evaluate the data distribution: univariate skewness (a symmetry of a distribution); univariate kurtosis (a peakedness of a distribution); and multivariate kurtosis (a joint distribution of all variables). However, there is no clear consensus regarding a minimum degree of non-normality. Under normal distribution conditions, univariate skewness and kurtosis coefficients are equal to 0; if they are evidently distinct from 0, any univariate and multivariate normality assumption is violated. If the univariate distributions are non-normal, then the multivariate distribution will often be non-normal (Curran, Finch & West 1996; Muthén & Kaplan 1985, 1992; Nevitt & Hancock 2001; Raykov & Marcoulides 2006).

If skewness and kurtosis statistics are found, a suitable statistical estimation method using the SEM techniques in SPSS AMOS 22 needs to be determined. Maximum likelihood estimation (MLE) is perhaps the most commonly used method. Like the least squares criterion in multiple regression, MLE is a procedure that iteratively (repetitively) improves parameter estimates to minimise a specified fit function (Hair et al. 2006). Although the MLE technique makes the distributional assumption that indicator variables have a multivariate normal distribution in the sample, it is fairly robust to violation of the normality distribution (Bollen 1989; Curran, Finch & West 1996; Finney & DiStefano 2006; Muthén & Kaplan 1985, 1992; Raykov & Marcoulides 2006). Muthén and Kaplan (1985, p. 187) suggested that “if most variables have

univariate skewnesses and kurtoses in the range -1.0 to +1.0, not much distortion is to be expected". Specifically, the MLE technique has proven sufficiently robust to moderately non-normal data (i.e. skewness ≤ 2 , kurtosis ≤ 7), but non-normality becomes significantly problematic above those points (i.e. skewness > 2 , kurtosis > 7) (Curran, Finch & West 1996; Finney & DiStefano 2006; Muthén & Kaplan 1992). If model variables used in this study had skewness and kurtosis values falling into the suggested points, the MLE method to analyse the SEM models was used.

3.7.7 Bootstrapping procedures and the Bollen-Stine bootstrap method

If the data are accepted to be non-normally distributed, a bootstrapping technique can be used in SEM models. Bootstrapping serves as a re-sampling procedure by taking repeated samples from the original sample data, considered as representative of the population distribution (Bollen & Stine 1993; Byrne 2010; Kline 2011; Loehlin 2004; Nevitt & Hancock 2001). From here, multiple sub-groups of the sample from the original data are drawn randomly, with replacements from the population selected to produce data from the empirical investigation of the variability of parameter estimates and fit measures. With a fair size sample (e.g. ≥ 200), bootstrapping appears to provide an attractive alternative to manage non-normal data conditions. However, if the sample size is below 200, bootstrapping should be avoided (Nevitt & Hancock 2001).

Specifically, in this study, the Bollen-Stine bootstrap technique was used together with other model fit indices because it is capable of assessing a hypothesised model under non-normal data conditions. According to Bollen and Stine (1993), this bootstrapping procedure re-assesses a new 'adjusted' critical chi-square value that represents a modified chi-square goodness-of-fit statistic. The result of the new critical chi-square value is used to compare with the original chi-square value, which is sensitive to a large sample size, non-normality, and model complexity in terms of the number of parameter estimates in the model (Bollen and Stine (1993). The Bollen-Stine p -value (i.e. $p < 0.05$) is utilised for model rejection, whereas the non-significant p -value (> 0.05) is evidence that the model fit the data well. A consensus on the minimum number of bootstrap samples is lacking; however, Bollen and Stine (1993) and Nevitt and Hancock (2001) suggested that the number of bootstrap samples (i.e. $B \geq 250$) should be sufficient in order to produce reliable results.

3.8 Ethical issues and considerations concerning primary data collection

Ethical issues arise when research involves human subjects and/or their personal and sensitive information. Thus, five fundamental ethical principles need to be satisfied. These are: voluntary participation, informed consent, beneficence of participant treatment (maximising good outcomes and minimising risk), confidentiality and privacy, and justice (fair treatment) (Creswell 2009, 2012; de Vaus 2002; Gray, DE 2004; Veal 2005; Zikmund et al. 2009). Obtaining ethical approval from a relevant organisation(s) to collect data from human subjects is a mandatory requirement (Creswell 2009). Consequently, once the research instruments used in this study were finalised, an ethics application was submitted to the Victoria University Human Research Ethics Committee through the College of Business for ethics approval before performing actual data collection. Ethics approval was granted for two years from the 24th February 2015. Data collection was conducted in Vientiane Capital, Laos between 28th February and 12th April 2015.

It is the moral responsibility of the researcher to collect, handle and use the primary data in line with the above ethical principles. As indicated earlier, information sheets were provided to all participants, with the intention of giving a brief description, objectives and significance of this study. Each participant's consent was also sought through a consent form which detailed his/her voluntary participation in the interview or survey with the assurance of strict confidentiality and anonymity. The return of the survey questionnaire was taken as informed consent to participate in the study. Approval was sought from all interviewees to audio-record interview sessions. The questions in both data collection methods posed minimal risk to the participants in terms of emotional and physical distress. The questions covered general issues concerning SOEs and privatisation programs in Laos and did not involve business secrets or confidential information.

In addition, the full package for the survey questionnaire or interview questions was forwarded to potential participants in advance and/or on the spot. Consequently they were able to make an informed decision about whether they wished to participate in the research. All participants had the opportunity to have any questions answered and could withdraw from the study at any time without jeopardising themselves in any way. The

information provided was also treated with total confidentiality and anonymity and stored under secure conditions at Victoria University, Melbourne. Neither the name of the survey respondent nor that of their organisation was used in any documents based on the survey. Only the research supervisors and the researcher had access to the participant data. No specific name or organisation was identified in the research outcomes.

3.9 Quantitative approach using secondary data

As previously outlined, in order to assess and compare the financial and operating performance of privatised SOEs in Laos (see research question 7), this study adopted the MNR methodology proposed by Megginson, Nash and van Randenborgh (1994) (see Section 2.10). Although the privatisation initiative in Laos emerged in 1989, only very limited data and information about the financial and operating performance of either existing or privatised SOEs is publicly available and accessible. As a consequence, this study only focuses on two previously-privatised SOEs – BCEL and EDL-GEN since they are the only privatised SOEs listed on the LSX, with their annual reports and financial statements available in public domain.

3.10 Chapter conclusion

This chapter has discussed the preliminary fieldwork activities undertaken prior to conducting the research, its objectives and research questions, and its conceptual framework and testable hypotheses. It also explained the research paradigm and research methodology employed in this study. A concurrent triangulation approach was designed, comprising both qualitative semi-structured interviews and quantitative self-administered questionnaires. This research design allowed for the generation of a rich and diverse dataset to assess the extent to which the hypotheses derived from the literature review were supported by data reported from key stakeholders in Laos. This chapter also discussed the use of SEM techniques to analyse the quantitative questionnaire data, as well as the quantitative research approach using secondary data to assess the business performance of two partially privatised case study Lao SOEs. The following chapter discusses privatisation policies in Laos before the analyses of qualitative and quantitative data are discussed in Chapter 5.

Chapter 4

Privatisation Policy in Laos

4.1 Introduction

In Chapter 3, the research approach and methodology used in this study were discussed. This chapter discusses rationales for, and pitfalls of, SOEs in Laos. It then outlines the Lao government's evolving privatisation policy from 1989 to 2015, following on from the NEM of 1986. The chapter also presents data on privatisation procedures, using direct sales or public share offerings. Following this, two sections outline recent developments in Laos' privatisation policy and the current status of remaining SOEs. The penultimate section examines the impacts of privatisation on the business performance of two partially-privatised strategic SOEs – BCEL and EDL-GEN – as two case studies. The chapter ends with a concluding section.

4.2 Rationales for and pitfalls of SOEs in Laos

Becoming an independent country in 1975, Laos immediately adopted a Soviet-style centrally-planned mechanism in order to restore and improve the country's war-torn economy (see Sub-section 1.2.1). From 1976 to 1986, under this economic mechanism, the Lao government nationalised existing privately-owned companies and simultaneously created new SOEs. More than 500 SOEs were established between 1976 and 1982 (LNSSI 2011), although the exact number is not known. Anecdotal figures for the number of SOEs established by the late 1980s range from 640 up to 800 (ADB 1997; Daniel 2000; IMF 1998; Livingstone 1997; LNSSI 2011; Pham 2004b; Suzuki 2002). Out of those SOEs, 70% were provincially-managed and 30% centrally-managed. It is evident that SOEs played a dominant role in the Lao economy in the 1980s. Specifically, the state-owned factories accounted for some 80% of national industrial outputs, whereas mostly privately-owned small workshops accounted for only 20% (Bourdet 1992; LNSSI 2011; Pham 2004b).

According to some authors (LNSSI 2011; Saignasith 1997; Shimomura et al. 1994; Thavisay & Quang 1999), the SOEs were considered pure production units and had no operating autonomy or freedom to decide either what they produced or whom they

produced for. Indeed, their tasks were normally to receive inputs and execute production plans formulated by either corresponding departments or ministries. The SOEs were required to directly transfer their finished products to these departments or ministries. Under a pre-determined plan, viable (profit-making) enterprises were obliged to deliver their entire operating surplus to the national budget while non-viable (loss-making) enterprises were subsidised from the national budget (LNSSI 2011; Saignasith 1997; Shimomura et al. 1994; Thavisay & Quang 1999).

Facing the severe economic challenges (see Sub-section 1.2.2) partly resulting from the SOE sector, the government started to reconsider the merits of the model it had been implementing (Bourdet 1992; LNSSI 2011; Yamada 2013). At the Seventh Plenum of the Second National Party Congress in December 1979, initial changes to the model were made in regard to economic development policies and improvements to SOE performance. In 1980 the government first granted a degree of operating autonomy to small SOEs and then partially to strategic sectors, such as electricity and wood products (Bourdet 1992; LNSSI 2011; Yamada 2013). Some SOEs were also commercialised – that is, they were to operate according to commercial principles. In mid-1985, SOEs were granted full financial and operating autonomy and allowed to determine their production levels and product mix, investment, price policies, employment and salaries (Bourdet 2000; Lee & Nellis 1990; LNSSI 2011; Otani & Pham 1996; Pham 2004b; Saignasith 1997; Shimomura et al. 1994). By the end of 1988, around 400 SOEs had been granted such autonomy (Lee & Nellis 1990). Furthermore, they were permitted to sell their products directly to other companies or even to final consumers. SOEs were also permitted to retain 40% of their net income for enterprise use after transferring 60% of to the state budget (LNSSI 2011). In addition to the full autonomy in investment and capitalisation given to SOEs in the early 1980s, the government limited financial subsidies to encourage operational self-sufficiency based on a profit motive (LNSSI 2011).

Initially, the economic policy made some considerable achievements with respect to diverse industrial production. However, the SOEs still encountered many managerial problems in terms of state intervention in their internal affairs, unclear business objectives (whether non-commercial or commercial orientations), overstaffing, and

obsolete equipment and production facilities. Broadly speaking, reform measures from 1980 to 1989 did not prove successful and the conclusion was often drawn that this was because the root problem of SOEs was not addressed. Notably, prices were still centrally determined and SOEs retained access to subsidies and policy loans and the practice of frequent state intervention remained unchanged (LNSSI 2011). Shimomura et al. (1994, p. 175) stated:

The problem of the money-losing state enterprises was [...] cause of the increasing financial burden. Because state enterprises decide prices without considering costs, the increase of product just to achieve the norm caused the expansion of deficits.

In order to address these problems, in 1989 the government initiated a program of privatisation under the overall umbrella of its strategic goal of securing (at a suitable pace) transition to a market-oriented economy under the NEM reform strategy of 1986.

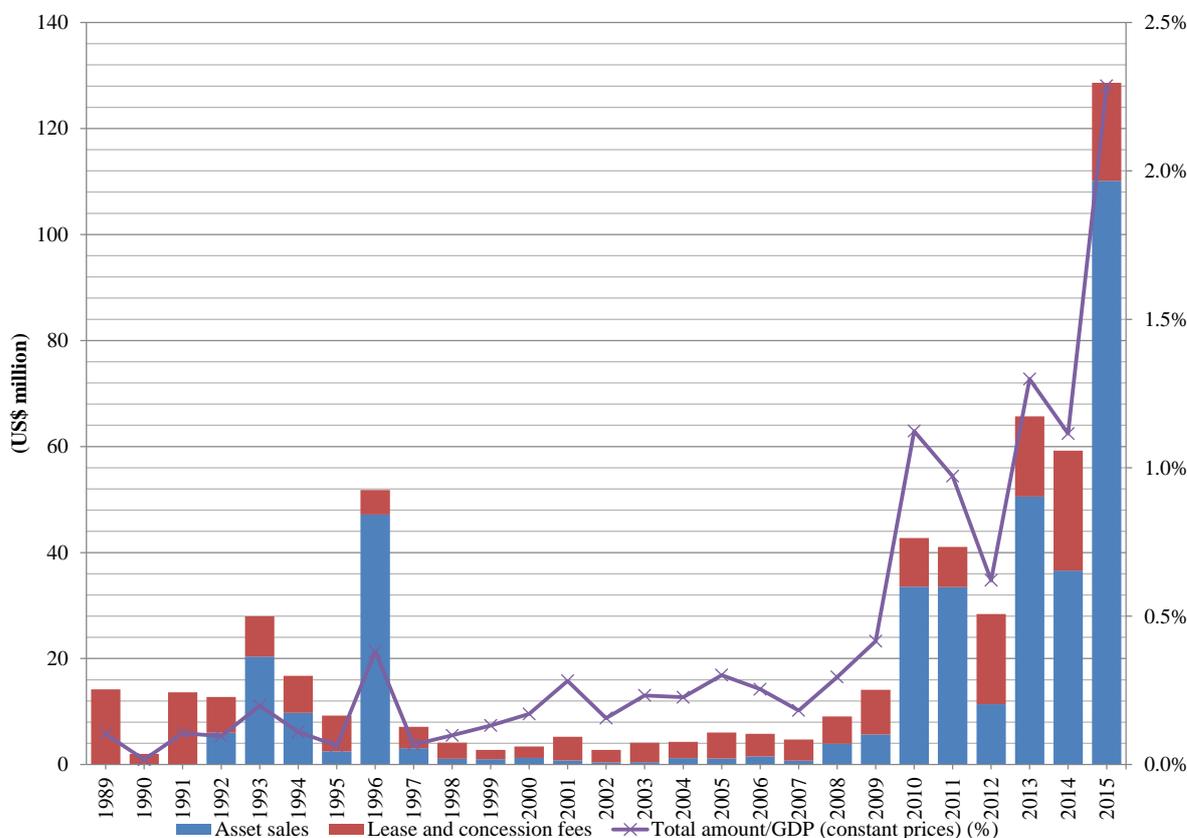
4.3 Privatisation policy in Laos: A historical perspective

This section discusses five aspects of privatisation: proceeds, stages and techniques, inferring objectives, institutional arrangements, and perceived barriers.

4.3.1 Proceeds of privatisations

Although information on privatisations in Laos is lacking and not usually publicly available, it can be said that privatisation has played a relatively important role in generating government revenues. Figure 4.1 below shows state revenue obtained between 1989 and 2015 from privatisation programs through sales of state assets and revenue fees from lease and concession contracts. Prior to 2010, such annual revenues were relatively small (on average, US\$10 million per year), representing less than 0.5% of GDP. Except for 1996, the total revenues generated from the sales of assets and other concession and lease arrangements fees peaked at around US\$50 million before privatisation started to be built at a slow pace from 1997 to 2010. However, the revenues from privatisations significantly increased from about US\$45 million (1.0% of GDP) in 2010 to US\$130 million in 2015, representing 2.3% of GDP. On average,

revenues from asset sales and lease and concession fees respectively accounted for 70% and 30% of total revenues from privatisation programs between 2010 and 2015.



Source: Adapted from BOL (2015b)

Figure 4.1 Revenues generated from privatisation programs, 1989-2015

4.3.2 Stages and techniques of privatisation

Based on the revenue pattern shown in Figure 4.1 and the privatisation of Lao SOEs from 1989 and 1997, as presented in Table 4.1 below, privatisations in Laos were classified into three stages for this study: pilot, expansion and re-emergence. In the pilot stage (1989-1991), the Lao government very carefully launched its privatisation programs through lease arrangements and liquidation, starting with small and medium-sized SOEs (ADB 1997; Daniel 2000; IMF 1998; LNSSI 2011; Pham 2004b; Suzuki 2002; Thavisay & Quang 1999). Many of the very small economically unviable SOEs were liquidated while medium-sized SOEs were privatised through collective workforce buyouts. As shown in Table 4.1, 16 out of 17 privatisation cases were conducted through lease contracts. Out of a total privatisation value of nearly US\$30

million, foreign capital represented about 89%. For example, the government privatised Lao Tobacco,⁹ selling to a Thai investor for US\$14 million under a five-year lease contract in late-1989; however, the detailed terms and conditions of this lease contract was unknown. The contract was not renewed in early 1996 as the leaseholder failed to undergo modernisation of the company's production machinery and facilities. Suzuki (2002, pp. 223-4) stated:

As the government's test case of privatisation, [...] The reason for choosing *lease* instead of a joint venture was because the government had not yet accumulated any know-how on joint ventures and wanted to show actual results of privatisation as soon as possible. [Lao Tobacco] were [therefore] the first to be privatised in the form of lease.

Table 4.1 Privatisation of Lao state-owned enterprises, 1989-1997

	1989 – 1991 <i>(Pilot stage)</i>	1992 – 1997 <i>(Expansion stage)</i>	1989 – 1997 <i>Grand Total</i>
Methods (cases)	17	86	103
- Lease	16	39	55
- Asset sales	1	45	46
- Other	-	2	2
Cases by investors	17	73	90
- Domestic investors	9	41	50
- Foreign investors	8	32	40
Values (US\$ million)	30	97	127
- Domestic investors	3	8	12
- Foreign investors	27	89	115

Source: Adapted from IMF (1998)

In order to facilitate a privatisation process, privatisation guidelines in Decree No. 17/PCM were issued by the Council of Ministers in 1990. As specified in Article 2 of

⁹ Lao Tobacco was a 100% state-owned tobacco manufacturing firm. In 2001, it was re-privatised through a joint-venture arrangement after the re-nationalisation of 1996 (Suzuki 2002). The joint-venture was owned by the Lao government (47%), a French company (34%), and domestic investors 19%.

this decree, the SOEs to be kept under state control were those having strategic importance to the economy, society, defence, and internal security (Daniel 2000; IMF 1998; Suzuki 2002). Originally, those target industries covered such key areas as electricity generation and distribution, post and telecommunications, pharmaceuticals, banking and insurance, commercial airlines, mining, logging, and national defence industries. Therefore, 32 so-called strategic SOEs remained wholly state-owned in the 1990s (Daniel 2000; IMF 1998; Suzuki 2002).

During the expansion stage (1992-1997), the government focused on privatising large and/or profitable SOEs through direct sales and joint-venture arrangements (Daniel 2000; IMF 1998; Suzuki 2002). For example, the government sold 51% ownership in the Lao Brewery Company¹⁰ (US\$10.2 million) to Thai investors in 1993, and 49% ownership in Lao Telecom to a Thai telecom firm in 1996 under a 25-year concession contract (US\$45 million). Table 4.1 illustrates that 86 SOEs were either partially or fully privatised during this period, over 50% of which were divested through sales of assets, including joint-venture arrangements. Out of total privatisation values of around US\$97 million, foreign capital acquired over 90%. Anecdotally, more than 500 SOEs were privatised between 1989 and 1997 (Rigg 2005; Suzuki 2002; UN 2006), and specifically, 103 out of about 190 centrally-controlled SOEs were privatised in that period (IMF 1998).

After the expansion stage, privatisation was carried out at a slow pace. It then regained public attention in 2010 as part of national strategy development, which renewed interest in SOEs offered for privatisation, and privatisation proceeds and techniques. The third or re-emergence stage of privatisation in Laos thus began in 2010. During this stage the government decided to not only partially privatise strategic SOEs, but also to grant concessions of land and infrastructure projects to private companies. As shown in Figure 4.1, since 2010 there has been an increasing trend in privatisation values generated from the sale of assets and lease and concession contract fees. On average, the

¹⁰ In 2002, the Thai investors sold their entire shareholding to Carlsberg Asia Co. and TCC International Co. (Lao Brewery Co. 2015). This resulted in a slight change in ownership structure: the Lao government (50%) and foreign partners (each held 25%). In 2005, the foreign partners sold their shareholdings to Carlsberg Group (held 50%). According to Carlsberg Group (2015), since 2013 this company has been owned by three parties: Carlsberg (61%), Lao government (29%), and domestic investors (10%).

government's revenues from asset sales accounted for about 71% (equivalent to US\$61 million) of total privatisation values from 2010 to 2015. In 2009, the Lao government sold 70% of its ownership in an existing water supply facility, the Savannakhet Water Supply SOE, to a foreign company, forming a new water supply company (Personal communication 2014). In 2011, the government also granted a 45-year concession to a domestic construction company to build a 40-kilometre toll road in a Southern province under a build-operate-transfer scheme (Vientiane Mai Newspaper 2016).

The government also linked its privatisation policy with the establishment and development of domestic capital (stock) markets and promotion of an equity culture or domestic equity investing in Laos at the third stage. According to (MPI 2016), the government privatised ten of the remaining 141 SOEs between 2010 and 2015. Of these privatisations, two significantly differed from other cases in that they supported the establishment of Laos' first-ever stock exchange in 2010 (LSCO 2014). The exchange was expected to create more active investment opportunities in the Lao economy and an alternative way for domestic companies to mobilise private savings. In 2010, the government partially privatised two strategic SOEs by publicly offering 25% of its equity ownership in EDL-GEN and 20% ownership in BCEL. In addition to these two cases, four other partial privatisation efforts were made between 2010 and 2013 (Personal communication 2015), but these efforts were either postponed or cancelled during the preparation processes and the outcome remains unknown.

4.3.3 Inferring the objectives of privatisation

Nearly thirty years of privatisation efforts in Laos have not only secured expansion in productivity and efficiency through competition and the strengthening of private sector activities, but also laid a foundation for promotion of the domestic capital market in Laos. However, many the remaining SOEs are still in need of reform and privatisation continues to be a subject of national debate. Research indicates that the objectives of Laos' privatisation program were never clearly or openly stated. Consequently, these objectives can only be inferred. They seem to fall into seven main sub-categories under the four broad dimensions of privatisation objectives, as outlined in the literature (see Section 2.4). These objectives are: 1) reducing state subsidies to SOEs; 2) bolstering state revenue; 3) stimulating and enhancing private sector activities in the Lao economy;

4) promoting foreign direct investments; 5) increasing efficiency; 6) liberalising certain industries and promoting competition; and 7) establishing and developing domestic capital (especially stock) markets, as well as promoting an equity culture.

First, as in many transition economies, privatisation programs in Laos played an important role in the economic reform process from a centrally-planned to market-driven economy under the NEM strategy of 1986 (Bourdet 1992, 1996; LNSSI 2011; Otani & Pham 1996; Pham 2004a). Rigg (2005, p. 21) stated that “The NEM quite closely follows the mainstream, orthodox recipe for success as purveyed by the [international lending] institutions of the Washington consensus”. In order to support their new economic policy, focused on privatisation, the Lao government permitted private sector involvement in state monopolies in 1988, issued a governmental decree concerning privatisation in 1990, and then accelerated its privatisation programs in 1993 (Rigg 2005). As we have seen, government policy evolved across the pilot, expansion and re-emergence stages.

Second, privatisation aimed at bolstering state revenue and eliminating the need for state investment expenditure and subsidies to inefficient and underperforming SOEs (ADB 1997; Daniel 2000; Lee & Nellis 1990). As shown in Figure 4.1, state revenues generated from the privatisation programs gradually increased from less than 1.1% in 2010 to about 2.3% of GDP in 2015. In order to generate more income from such privatisation programs, the government either partially privatised or attempted to privatise the remaining SOEs, including strategic SOEs like the banking and energy sectors.

Third, privatisation was expected to assist in stimulating and enhancing private sector activities (ADB 1997; Daniel 2000; LNSSI 2011; Otani & Pham 1996), thus reducing or eliminating direct state involvement in commercial activities (ADB 1997). Anecdotal evidence suggests that many small- and medium-sized SOEs were sold to insiders (SOE managers and/or workers, known as collective employees) and domestic buyers. Some private providers were licensed to provide public services, such as garbage collection and long-distance public transportation. Collective employee buyouts were also important for encouraging employee ownership, serving as an important tool for

efficiency gains. In 2015, 99.79% of 100,653 registered companies nationwide were privately-owned, while 131 were state-owned (MPI 2016).

Fourth, given the limited capacity of domestic funds, the government also used privatisation as a policy tool for promoting foreign investments (IMF 1998; LNSSI 2011; Suzuki 2002). Shimomura et al. (1994, p. 182) argued that “the reason is that the domestic private sectors have neither capital nor technology, because the private sector had been excluded from individual activities since [1975]”. The government now wanted to attract foreign investment capital, technology, plant and equipment. The first foreign investment code was promulgated in 1988 and its implementation guidelines were issued in 1989. Many large SOEs, not limited to strategic enterprises, have since then been privatised to foreign investors through various techniques of concession, direct sales, joint-venture arrangements, and public share offerings.

Fifth, privatisation through liberalisation and deregulation served as an effective policy tool to introduce and promote competition (LNSSI 2011). It can be said that nearly every industry (including banking, insurance and telecommunication) is now deregulated and highly competitive. For example, the Lao government liberalised the banking sector by establishing the first joint-venture commercial bank in 1989. As of 2015, the Lao banking industry accommodated 41 commercial banks including three state-owned commercial banks (BOL 2015b). Following the promulgation of Insurance Law in 1990, in 1992 Assurances Générale du Laos became jointly owned by the Ministry of Finance (MOF) (which held 20%) and Assurances Générale de France (which held 80%). In 2015 there were six public-private insurance firms throughout the country in 2015 (Personal communication 2015).

Sixth, in the 1980s the majority of SOEs performed poorly and many were running heavily at a loss. In order to address unprofitability and inefficiency issues, the government gradually reformed the SOE sector (see Section 4.2). Privatisation, it has been argued, improves and fosters the SOE sector’s profitability, efficiency and productivity (Bourdet 1992; Freeman, NJ 2003; LNSSI 2011; Suzuki 2002). While there has been no comprehensive research conducted on how privatisation has improved firm performance in the Lao context, there does seem to have been some efficiency

improvements. According to LNSSI (2011), in 2010 the profitability of public-private joint-ventures averaged at 13.27% while that of the remaining SOEs was around 4.24%.

Finally, in the third re-emergence state, the government employed its privatisation policy to support the establishment and development of Laos' capital (stock) market by partially privatising two strategic SOEs – BCEL and EDL-GEN. As a result, the LSX was jointly established in 2010 by the Bank of Laos (holding 51%) and Korea Exchange (holding 49%) (LSCO 2014). It was the first time a privatisation process had been conducted with an open, transparent and competitive bidding process. It was also the first attempt by the government to implement a privatisation policy, not only to mobilise large scale domestic private capital and foster broad capital ownership, but also to promote the concept of socialising risk. In this way, certain risks were to be shifted away from the government through alternative risk and reward mechanisms.

4.3.4 Institutional arrangements for privatisation

Before February 1992, responsibility for privatisation lay with the NEM Financial Committee under the Ministry of Economy, Planning and Finance (MEPF) (Daniel 2000; Thavisay & Quang 1999). Responsibility for policy formulation was then transferred to the Privatisation Committee of the Committee for Planning and Cooperation, while the policy execution was transferred first to the MEPF's Department of Privatisation (created at the same time as the Privatisation Committee), and then in March 1993, with the reorganisation of the MEPF, to the Permanent Office of the Privatisation Committee (POPC) (Daniel 2000; Thavisay & Quang 1999). However, owing to lack of resources (e.g. only 14 staff worked for the POPC) and information, the POPC delegated its executing responsibility to the line ministries that controlled and managed SOEs. These responsibilities included the functions and duties of identifying, classifying, valuing, prioritising enterprises for privatisation, recommending techniques of privatisation and identifying potential transferees. The POPC maintained supervising and overseeing functions over the privatisation processes (Daniel 2000; Thavisay & Quang 1999).

Generally speaking, previous privatisation programs have been implemented by ad hoc committees since 1989. Once a privatisation transaction were finalised, such an ad hoc

privatisation committee were no longer in effect. For this reason, it can be inferred that learning curve effects (i.e. lessons learnt from previous transactions to identify best practice and optimise privatisation goals) are rather limited. A case-by-case privatisation approach remains the norm of privatisation in Laos, although procedures have evolved over time.

The following provides an example of an ad hoc technical committee working to privatise a medium-sized auto transport enterprise in 1995. This enterprise was under the control and management of the Ministry of Communication Transport Post and Construction (MCTPC). Consequently, the line minister appointed this technical committee and authorised the privatisation transactions (Personal communication 2015). The committee was established as follows:

Technical committee

- | | |
|---|-------------|
| 1. General director, line ministry (MCTPC) | Chairperson |
| 2. Senior official, Ministry of Finance | Deputy |
| 3. Middle official, line ministry (MCTPC) | Member |
| 4. Junior official, line ministry (MCTPC) | Member |
| 5. Managing director or representative of the SOE | Member |

Power, functions and duties of the committee

1. Inspecting and listing equipment, vehicles, materials and other assets of the SOEs;
2. Valuing those assets (the valuation of this SOE was made based on the asset method – Personal communication 2015);
3. Recommending techniques of privatisation (in this case, a collective workforce buyout with three payment instalments was used);
4. Making a report to the line minister for comments and approval.

As another example, an ad hoc technical committee was established in 2010 for privatising an SOE through share issue privatisation or initial public offering (IPO) and listing its shares on the LSX. To my knowledge, the structure of this ad hoc committee could not be used in non-IPO privatisation techniques. Consequently, the Chairperson of the Lao Securities Commission (LSC), who also serves as the Deputy Prime

Minister, had powers and responsibilities to appoint and supervise this technical committee (as with an IPO). The committee was structured as follows:

Technical committee

1. Deputy minister or general director, line ministry	Chairperson
2. Senior official, line ministry	Deputy
3. Representative, Ministry of Finance	Member
4. Representative, National Committee for Business Development	Member
5. Representative, LSC	Member
6. Representative, LSX	Member
7. Managing director or representative of the SOE	Member
8. Representative from local securities, legal and auditing firms	Members

Power, functions and duties of the committee

1. Conducting studies or research in order to formulate a privatisation project;
2. Designing, planning and developing a detailed project for privatising an SOE;
3. Recommending the project to the LSC and concerned governmental authorities;
4. Maintaining coordination with concerned governmental authorities in order to remove hindrances to the privatisation project;
5. Following up the implementation of decisions and agreements in respect to privatisation and seeking solutions to overcome obstacles hindering the process;
6. Constituting sub-committees, whenever necessary, in respect to the project;
7. Performing other duties, in respect to privatisation, as assigned by the LSC.

4.3.5 Perceived barriers hindering privatisation processes in Laos

In order to facilitate privatisation programs, Decree No. 17/PCM was issued by the Council of Ministers in 1990. The decree also specified general principles for implementing a privatisation process, requiring a feasibility study, including financial assessments, asset valuation, employment opportunities or expected employment impact after privatisation, obligations of sellers and buyers, ranking criteria for selecting potential buyers, forms of privatisation, payment dues and business plans (Daniel 2000; Suzuki 2002). Although, according to the decree, information on the SOEs to be privatised and invitations to bid had to be publicly disseminated using mass media and

official bulletins, such practices were only rarely seen from 1989 to 1997 (Daniel 2000; Suzuki 2002). Daniel (2000, p. 74) noted that “Indeed, authorities have tended to favour direct contracts [and negotiations] with potential bidders rather than depend on costly and time-consuming publicity” Shimomura et al. (1994, p. 182) stated that the main criticism of privatisations during the 1990s was “corruption caused by insufficient evaluation of the asset liabilities situation and by unfair bids”. Owing to the limited number of potential buyers, the Lao government lost revenue from privatisation programs (Suzuki 2002). From these views, transparent and fair privatisation processes were considered a real challenge.

In addition to the opaque privatisation processes, five other factors that impeded the efforts of privatising SOEs in Laos from 1989 to 1997 were highlighted by Daniel (2000). These factors were: 1) weak SOE accounting practices resulting in an unreliable financial history for valuation purposes; 2) accounting records of SOEs were not independently audited, eroding the private sector confidence in the privatisation process; 3) the government agency or committee in charge of privatisation processes was insufficiently equipped with human (qualified) and financial resources; 4) the lack of clear ranking criteria for privatisation programs (e.g. for selecting SOEs and potential buyers, defining privatisation objectives, etc.); and 5) the lack of public education and awareness. Furthermore, Bourdet (1992, p. 69) stated:

The lack of a competent authority to handle privatisation and the dissatisfaction with the implementation of Decree 17, particularly with the valuation of the enterprises and the tendering procedure adopted, subsequently slowed down the process. Other factors which have had similar effects have been the lack of a privatisation infrastructure in Laos (legal contractual system, accounts, functioning capital market, merchant bankers, potential buyers, etc.) and the resistance of a certain number of civil servants who wanted to retain profitable enterprises in the public sector.

Even though direct negotiations were the usual basis for privatisations, the government took numerous measures to respond to the identified obstacles associated with previous privatisation programs. Specifically, such measures were implemented through

privatising two strategic SOEs (BCEL and EDL-GEN) with the establishment of the LSX. A review of the prospectuses of BCEL (2010) and EDL-GEN (2010) for initial public share offerings, plus personal experience and communications, suggest that these measures included the following:

1. Ad hoc technical committees for privatisation were appointed and authorised to set up sub-committees when necessary;
2. Private sector experts (i.e. financial and legal advisors) were included in the technical committees;
3. Independent audits of these SOEs were conducted by internationally recognised auditing firms according to international accounting standards;
4. Prospectuses for IPOs and a bidding process were made publicly available and accessible through different media and promotion activities; and
5. Public education and awareness activities were organised in Vientiane Capital and other large provincial capitals.

4.3.6 Summary

In an attempt to address the inefficiencies in the SOE sector, the Lao government undertook a cautious step-by-step privatisation approach through three stages: pilot, expansion and re-emergence. The previous privatisation programs started with small SOEs and were then extended to include large and/or strategic SOEs. The state revenues generated from those programs also increased gradually from 1989 to 2015, and particularly such revenues accounted 2.3% of GDP in 2015. Even though the objectives of privatisation were never clearly stated, the evidence suggests that they ranged from state revenue generation and efficiency improvements to capital market development. In achieving those objectives, a broad range of privatisation techniques were put into action such as lease arrangements, collective workforce buyouts, joint-venture arrangements, and share issue privatisations). Since implementing the privatisation policy in 1989, there has been no special law or decree on privatisation (except for Decree 17 of 1990, which was no longer effective) and no centralised government agency (mostly ad hoc privatisation committees) in charge of executing privatisation processes. This has resulted in opaque privatisation processes. Such unclear processes together with inefficient and unprofitable SOEs could hinder privatisation programs.

4.4 Procedures for privatising SOEs in Laos

Because there is no special law associated with the privatisation of SOEs in Laos, procedures have not been formalised or standardised. However, actual privatisation procedures used in recent privatisations at the re-emergence stage can be explored and mapped through an analysis of official documents, plus personal experience and communications. Gaining some understanding of these procedures helps the researcher to answer some of the research questions. These procedures can be divided into two groups: direct sale and share issue privatisations.

4.4.1 Procedures for direct sale privatisation

Under direct sale privatisation, including collective workforce buyouts and joint-venture arrangements, seven procedural steps were identified as follows:

Step 1. The government agency (e.g. the line ministry or provincial authority) that controls and manages a selected enterprise collaborates with the MOF and NCBD to identify, classify and prioritise SOEs for privatisation (Personal communication 2015). As stated in Article 25 of the Law on State Property (No. 14/NA) promulgated in 2012, the agency will then submit a formal proposal to the MOF and MPI to assess, consider, and further submit a proposal to the government for approval. Subsequently, the agency will inform the privatisation candidate (e.g. an SOE offered for privatisation) on the decision.

Step 2. The agency will issue the decision to establish the company's executive privatisation committee, normally comprised of representative(s) from MOF, NCBD, the selected SOE as a candidate for privatisation, and occasionally those from other relevant government agencies (Personal communication 2015). Generally, the representative from the controlling agency will be appointed chairperson. In the case of medium- or large-sized SOEs, the controlling agency will subsequently appoint a sub-committee for privatisation to support and assist the privatisation process.

Step 3. The company's executive privatisation committee will be responsible for preparing a feasibility study. The study may include the company's financial statements, financial and operating performance, both non-transferable and

transferrable assets, asset valuations, and cost-benefit analysis from privatisation (Article 25). The feasibility study shall include recommendations on potential techniques of privatisation, post-privatisation ownership structure, a wide range of potential selling prices, and method(s) of payment for the selected SOE (Personal communication 2015). The committee is also required to explain the government's policies and regulations to employees of the respective SOEs. Simultaneously, the committee invites buyer(s) to participate in privatisation by direct sale. This can be done through either a direct negotiation or an open and competitive tendering procedure, although the direct negotiation method is more likely.

Step 4. The privatisation committee submits a final report on the selected SOE, together with a detailed privatisation plan, to the controlling agency for review, comments and approval.

Step 5. The controlling agency will then submit a formal privatisation proposal, accompanied by all applicable documents, to both the MOF and MPI. Subsequently, the MOF, in collaboration with the MPI, will review, examine and consider those accompanying dossiers. When the two line ministries agree on the privatisation plan (proposal), the MOF will then submit the proposal to the government for approval (Article 25). If the selected SOE operates in strategic areas, such as national security and energy, the government is required to submit the proposal, together with all applicable documents, to the National Assembly (NA) for approval (Article 14).

Step 6. The controlling agency will execute and authorise a privatisation transaction: transferring partial or entire state ownership in the selected SOE to the buyer(s) and transfer the proceeds to a designated account of the State Treasury under the MOF (Article 42).

Step 7. The selected SOE will finally be converted into other forms of ownership and registered as a new privatised entity with either the central or provincial department of commerce, as applicable to the Law on Enterprises (No. 46/NA) promulgated in 2014.

4.4.2 Procedures for share issue privatisation

Unlike the procedure for direct sale privatisation, that developed for SOEs to be privatised through share issue or public share offerings (listed on the LSX), is divided into eleven steps, as follows:

- Step 1.** The NCBD collaborates with the MOF and government agency to identify, classify and prioritise SOEs for privatisation (Personal communication 2015). The NCBD will then submit a formal proposal together with a list of potential privatisable SOEs to the LSC to assess, consider, and submit to the government for approval. Subsequently, the LSC will notify the agency that controls the selected SOE as a candidate for privatisation on the decision. The agency will then notify the selected SOE.
- Step 2.** The LSC will issue the decision to establish the company's executive privatisation committee, normally comprised of representative(s) from the MOF, NCBD, the controlling agency, LSC Office, relevant government agencies, the selected SOE and external advisors (i.e. auditors, and financial and legal advisors). The representative from the controlling agency will be appointed chairperson. The controlling agency will subsequently appoint a sub-committee (if necessary) to support and assist the committee.
- Step 3.** The company's executive privatisation committee will be responsible for preparing a feasibility study. The study may include the SOE's financial statements, financial and operating performance, both non-transferable and transferrable assets, asset valuations, and cost-benefit analysis of privatisation (Article 25). The feasibility study shall include recommendations on potential techniques of privatisation, post-privatisation ownership structure, a wide range of potential selling prices, and method(s) of payment for the selected SOE (Personal communication 2015). The committee is also required to explain the government's policies and regulations to employees of the selected SOE.
- Step 4.** Simultaneous to Step 3, the committee invites general investors to participate in an open and competitive auction process, which can be done through either a volume-driven or a price-driven mechanism.
- Step 5.** The controlling agency will incorporate and register the selected SOE into a public limited company after receiving approval from the government. Being

incorporated as such, by law the company must have at least 9 shareholders regardless of their ownership portion. The agency will therefore appoint 8 nominees as shareholders (one share each) alongside the MOF as the only major shareholder and propose nominees to represent the board of directors and management team. In this step, the agency, in collaboration with the privatisation committee, directs the selected SOE to organise the first meeting of shareholders. During this meeting the board of directors and management team will be elected and other material issues addressed in relation to the privatisation process.

- Step 6.** The privatisation committee submits a final report on the SOE together with a detailed privatisation plan to the LSC for review, comments and approval.
- Step 7.** The controlling agency will then submit a formal privatisation proposal, accompanied by all applicable documents, to the government for approval (Article 25). If the selected SOE operates in strategic areas such as national security and energy, the government is required to submit the proposal together with all applicable documents to the NA for approval (Article 14).
- Step 8.** The committee directs the newly-established company to file a registration statement with the LSC and lodge listing application forms with the LSX. Any amendments and/or modifications to the registration statement and listing application forms can be made during the process. An underwriter will also be appointed at this stage.
- Step 9.** The committee together with the SOE will also publicly announce its IPO plan and organise a market survey, roadshow and book building processes, for example, in order to figure potential market demands and offering prices. A prospectus on the IPO will be made publicly available.
- Step 10.** If everything is officially approved by the relevant authorities, public offerings of shares will be made through either open price auction or volume auction mechanisms. The offering is considered ‘successful’ only if it can satisfy applicable securities requirements. The proceeds will then be transferred to the designated account of the State Treasury.
- Step 11.** The company will register its new charter capital and ownership structure with the Ministry of Commerce, according to the Law on Enterprises amended in 2014. Shares of the newly-privatised SOE will then be floated on the LSX.

4.5 Recent developments in Laos' privatisation policy

To further facilitate the privatisation of SOEs, the government issued Decree No. 19/PM in September 2013, aimed at improving and establishing enterprises in a new environment (Government's Office 2013). Table 4.2 presents general guidelines for identifying and classifying SOEs relative to their strategic importance in terms of national social and economic development, security and defence perspectives. Specifically, the said decree specifies that strategic SOEs shall remain state-owned, but partial privatisation can be permitted on a case-by-case basis. Non-strategic SOEs can, however, be converted into other forms of ownership through contracting-out and lease arrangements, direct sales, collective workforce buyouts, and/or liquidation.

Table 4.2 Criteria for classifying SOEs in Laos

	Sectors	State ownership
Strategic SOEs (National security and defence)	Enterprises relative to national security and defence, national transmission lines, post and telecommunication, and mining and extraction of specific ore resources.	State monopoly (only partial privatisation is permitted but the level of state ownership shall be defined on a case-by-case basis).
Strategic SOEs (Social and economic development)	Power generation and distribution, airports, lottery, banking sector, goods transportation and warehouses, goods management and redistribution, transportation stations and large-scale transport technical repair centres, waterworks, forestation and water sources management, waste treatment and management.	State ownership (wholly state-owned or jointly-owned enterprises).

Non-strategic SOEs	Small enterprises can be privatised through contracting-out, lease, direct sales, collective workforce buyout or liquidation.	State ownership (Transfer of entire state ownership is permitted).
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Source: Adapted from Government's Office (2013)

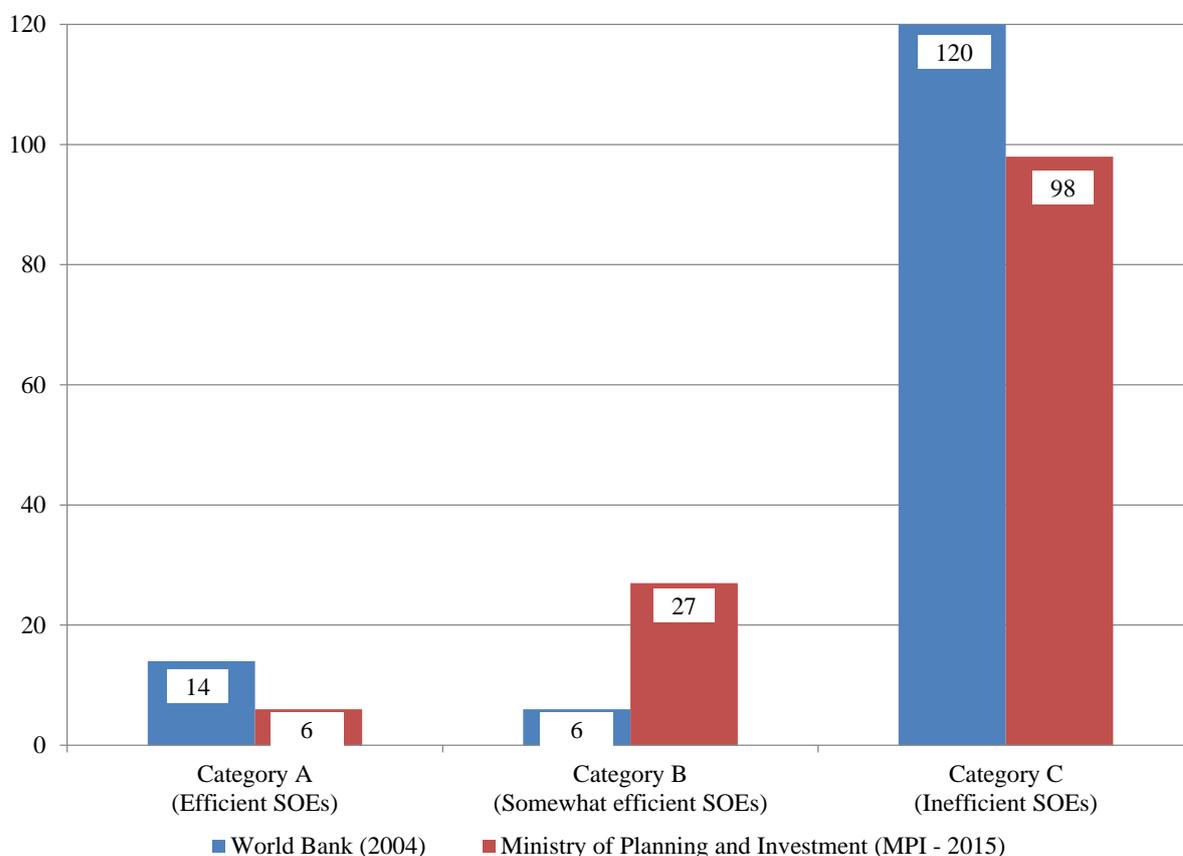
In short, effective implementation of this decree will likely require the time and experience of those who are involved in classifying the remaining SOEs. Privatisation remains a subject of ongoing national debate.

4.6 Recent experience in the remaining SOEs

Privatisation must be seen in the context of a range of issues, including the development of the savings-investment ecosystem, of which the stock exchange is a part. In 2015, it was reported that there were 131 SOEs in Laos, including 55 centrally-managed enterprises (MPI 2016). The overall value of the remaining SOEs' total assets was equivalent to about 33% of GDP in 2015 (MPI 2016) and they employed only 1% of the recorded labour force in that year (Tyler 2016) – according to best estimates, equal to around 30,000 people. Over the next few years, the Lao government plans to further reform and improve conditions to allow its remaining SOEs to be privatised and made public, such as the Lao Cement Factory and Agricultural Promotion Bank (MPI 2016).

Figure 4.2 below presents a classification of SOEs in 2004 and 2015, using an assessment of financial and operating performance indicators. This classification is divided into three categories: Category A (performing efficiently and having good financial records), Category B (performing well but needing some performance improvements), and Category C (performing poorly and needing performance improvements or reform). According to the World Bank (2004), there were 140 SOEs in Laos in 2004, including 43 centrally-managed and 97 provincially-managed. In this year, 14 enterprises fell into Category A, while 6 and 120 enterprises were grouped into Categories B and C respectively. Additionally, there were 31 SOEs making large losses in that year. However, according to (MPI 2016), in 2015 only 6 of the remaining 131 SOEs were categorised into Category A, while 27 and 98 SOEs respectively fell into Categories B and C. Specifically, 23 SOEs were reported to have made large losses in

that year. From these figures it can be inferred that a lack of profitability and efficiency continues to be a challenge for the remaining SOEs.



Source: Adapted from the World Bank (2004) and MPI (2016)

Figure 4.2 Classification of Lao SOEs in 2004 and 2015

In comparing wholly-owned SOE business performance to those of public-private joint-ventures, the former tended to considerably underperform their public-private joint-venture counterparts. On average, the SOEs' profitability indicator was estimated at about 4.2% while that of the joint-ventures stood at 13.3% in 2010 (LNSSI 2011). There were 48 enterprises that successfully operate under joint-venture, with total assets of around 7.3% of GDP and a ratio of profit to revenue higher than that of wholly-owned SOEs in 2015 (MPI 2016). According to Sevic et al. (2016), these SOEs paid total dividends of US\$96 million in 2012, equivalent to 1.1% of GDP. This is relatively low, compared to other countries in the region, such as 33% of GDP in Vietnam, 30% in China and 25% in Thailand (Sevic et al. 2016).

4.7 Business performance in partially-privatised SOEs: Two case studies

This section aims to assess whether partial privatisation can improve the financial and operating performance of newly-privatised companies in Laos. To my knowledge, no research has been conducted in this area in the Lao context since privatisation started in 1989. One of the main reasons for this gap in the literature may be the lack of publicly available information and data about pre- and post-privatisation business performance in these enterprises. In an attempt to answer research question 7 (*in what way would privatisation affect financial and operating performance of the newly-privatised firms in Laos?*), this section focuses on two partially-privatised SOEs – BCEL and EDL-GEN. These case studies were assessed using the MNR methodology (see Section 2.10). Unlike other privatised SOEs, these enterprises have been listed on the LSX since 2010 and their annual reports are available in the public domain.

4.7.1 Banque Pour Le Commerce Extérieur Lao (BCEL)

As part of the structural economic reforms started in 1986, the Lao government transformed a conventional Soviet-style mono-bank system into a two-tier banking structure in 1988, with well-defined and separate functions for the central bank and commercial banks (Otani & Pham 1996). BCEL was separated from the State Bank of Laos (now known as the Bank of Lao PDR, with conventional central-bank roles and functions) and became an independent entity in 1989. BCEL then became a centrally-controlled SOE engaging in commercial banking business.

BCEL remained wholly state-owned until late-2010 when the government publicly offered 20% of its ownership to domestic investors using share issue partial privatisation. As a result, BCEL could mobilise about US\$27.80 million from domestic investors in that year and listed its shares on the LSX on 11th January 2011. Later in July 2011, the government sold a further 13 million BCEL shares (approximately 10%) to a French-based commercial bank at a price of US\$1.37 per share, totalling US\$17.80 million (BCEL 2015). The net proceeds generated from the share issue partial privatisation (US\$27.80 million) and the direct sale to the French strategic partner (US\$17.80 million) were not used to increase BCEL's capital and finance its business activities, but paid back to BCEL's founder, the Ministry of Finance. As of 2015, BCEL

was under the majority ownership of the Lao government (70%), the French commercial bank (10%), and both domestic and foreign investors (20% - floating shares). Specifically, foreign shareholdings of BCEL's floating shares stood at 9.5% of total shares in 2014 (LSX 2015).

After its partial privatisation in late-2010, a number of BCEL's main branches and service units respectively increased from 18 and 22 in 2010 to 19 and 77 in 2015. Out of 41 commercial banks operating in Laos in 2015, BCEL was the largest in terms of assets, deposits and loans. Of roughly US\$12 billion in total assets in the banking system, BCEL's assets accounted for about 27%. This bank also shared about 37% of total deposits (US\$7.10 billion) and 23% of total loans (US\$5.90 billion).

Effects of partial privatisation on BCEL's business performance

Following MNR methodology guidelines and testable predictions (see Section 2.10), all mean proxies were computed for BCEL for the years before and after privatisation in order to measure the effects of privatisation on firm performance. The mean score for each proxy was estimated over the pre-privatisation (years -3 to -1) and post-privatisation (years +1 to +3) periods. Specially, the year of privatisation (year 0) includes both the public and private ownership phases of BCEL and financial data for that year were therefore excluded from the mean calculations. Table 4.3 presents six groups of testable predictions; however, one group (dividend payout) could not be employed in this study due to insufficient data. At least two observations (mean figures) were available for the pre-privatisation and post-privatisation windows.

Profitability

Generally speaking, it is expected that as companies shift from public to private ownership, their profitability should increase since privatisation brings with it private owners who focus on profit-oriented objectives. The managers of newly-privatised firms are expected to focus on profit goals in response to shareholders' needs and expectations. The figures in Table 4.3 below, however, show a significant decline in BCEL's profitability. Such a decline in its profitability can be partly explained by the fact that the competition in the Lao banking sector was very intensive; that is, 41 commercial banks operated and competed in a small economy like Laos in 2015.

Specifically, the mean return on sales (ROS), return on total assets (ROA) and return on equity (ROE) significantly decreased on average from 34.62%, 2.27% and 21.40% before privatisation to 17.11%, 1.01% and 16.14% after privatisation, respectively. Consequently, it can be concluded that BCEL was less profitable over time after privatisation.

Operating efficiency

The great emphasis on profit and the cuts in government subsidies following privatisation should lead firms to use their resources more efficiently (e.g. human, financial, and technological capital). The company's sales efficiency (revenue per employee) and net income efficiency (net income per employee) are used to measure operating efficiency. Specifically, these indicators are adjusted for inflation. As shown in Table 4.3 below, those indicators show a mixed result following privatisation. On average, the sales efficiency rose from about US\$79,000 before privatisation to US\$103,000 after privatisation. However, the net income efficiency significantly declined from US\$28,000 before privatisation to US\$18,000 after privatisation. It can be inferred that BCEL used more employees to boost its revenues. Therefore, higher staff expenses were likely to have been unavoidable. However, staff costs appear to have risen disproportionately, and this seems to have made BCEL less efficient.

Outputs

Privatisation is expected to foster efficiency and thus stimulate new growth. Megginson, Nash and van Randenborgh (1994) however point out that real "inflation-adjusted" sales and real incomes measures cannot be predictable for efficiency due to many possible reasons; for example, higher investment and greater scope of entrepreneurial initiatives. Generally speaking, higher employment can also lead to higher sales and/or higher output. The figures in Table 4.3 below show that, whilst real sales rose significantly from US\$50 million before privatisation to US\$139 million after privatisation, real net income only slightly increased, from US\$17 million to US\$23 million. Such increasing trends in these measures can be considered to reflect improvements in BCEL's productivity (output) following privatisation.

Table 4.3 Pre- and post-privatisation performance of BCEL (the year of privatisation in 2010)

	2007	2008	2009	2010 [†]	2011	2012	2013	2014	2015	Privatisation (mean)	
										Pre- (2007-2009)	Post- (2011-2015)
Profitability											
Return on sales	0.436	0.357	0.245	0.226	0.216	0.218	0.212	0.114	0.095	0.346	0.171
Return on assets	0.031	0.024	0.014	0.011	0.012	0.014	0.014	0.006	0.005	0.023	0.010
Return on equity	1.399	0.606	0.214	0.139	0.162	0.209	0.216	0.116	0.104	0.214*	0.161
Operating efficiency (000 US\$)											
Sales efficiency	87	79	71	76	100	110	103	98	104	79	103
Net income efficiency	38	28	18	17	22	24	22	11	10	28	18
Outputs (US\$million)											
Real sales	43	51	57	75	102	136	147	147	161	50	139
Real net incomes	19	18	14	17	22	30	31	17	15	17	23
Leverage											
Debt to assets	0.978	0.960	0.936	0.918	0.927	0.932	0.935	0.951	0.954	0.958	0.940
Liability to equity	44.592	24.286	14.719	11.205	12.682	13.813	14.456	19.413	20.533	27.866	16.180
Payout											
Dividends to sales	-	-	-	-	0.136	0.112	0.096	0.069	0.041	<i>na</i>	0.091
Dividends payout	-	-	-	-	0.629	0.513	0.453	0.608	0.429	<i>na</i>	0.527

Employment												
Total Employment	499	640	800	997	1,022	1,234	1,427	1,497	1,548	646	1,346	
Per employee salary (US\$)	5,713	7,235	6,565	6,814	10,388	10,379	10,198	10,118	9,993	6,504	10,215	
Payroll and other staff Costs (US\$)	6,180	10,217	10,493	10,754	16,331	21,150	19,519	17,906	17,535	8,963	18,488	

Source: Adapted from BCEL (2010, 2015) and author's calculations.

Note: † The year 2010 refers to the year of privatisation.

* Refers to only data in 2009 (excluding data in 2007 and 2008) due to undercapitalisation of BCEL.

Leverage

The switch from public to private ownership is expected to result in reduced leverage because the government's removal of debt guarantees increases a firm's borrowing costs. Debt-to-asset ratio and debt-to-equity ratio were used to measure the effect of privatisation on the leverage of BCEL. As evident in Table 4.3 above, the ratio of debt-to-assets slightly decreased from 95.83% before privatisation to 93.99% after privatisation on average, while the ratio of debt-to-equity significantly declined from 27.86% to 16.18%. It can be concluded that privatisation had a slightly positive impact on BCEL's leverage partly due to equity financing effects.

Dividend payments

Dividend payments are expected to increase over time since private investors, unlike governments, generally require dividends. The dividend payout ratio as a proportion of its net income and the ratio of dividends to sales are also expected to increase over time. Owing to a lack of necessary data on pre-privatisation dividend payments, only post-privatisation dividend payments could be examined in this regard. BCEL paid dividends to its shareholders across five consecutive years; for example, US\$12 million in 2011 and US\$7 million in 2015. The figures in Table 4.3 above show that the mean ratio of dividends to sales (cash dividend divided by sales) and dividend payouts (cash dividend divided by net income) stood at 9% and 53% respectively between 2011 and 2015. Even though these ratios appeared to be at a high stable level, the dividend payment in an absolute amount gradually declined over time after BCEL publicly reported its cash dividend payment in 2011. It can be inferred that BCEL has been less able to generate incomes and pay dividends after privatisation.

Employment and per employee salary

With privatisation and the reduction of subsidies, it is expected that the shift from public to private ownership will result in a cut in employment in order to improve efficiency. The figures in Table 4.3 above show that the number of BCEL staff steadily increased from 646 before privatisation to 1,346 after privatisation. This evidence, combined with that presented by Megginson, Nash and van Randenborgh (1994) and Boubakri and Cosset (1998), shows that privatisation does not necessarily lead to a decrease in total employment. It is also evident that privatisation appears to lead to higher salaries and

more benefits to employees. On average, annual salary per employee (inflation-adjusted yearly salary per employee) significantly increased from US\$6,500 before privatisation to just over US\$10,000 after privatisation. Taking per employee salary together with other staff costs, increases this figure to approximately US\$18,500 per annum. It can be therefore inferred that privatisation resulted in higher employment and per employee incomes.

4.7.2 EDL-Generation Public Company (EDL-GEN)

Unlike the banking sector, electricity generation and distribution are heavily regulated by the government. In order to improve this electricity sector, EDL-GEN was incorporated as a public company with limited liability in late-2010. It was a spin off from a state-owned electricity enterprise, Electricité Du Laos (EDL) and EDL's seven hydropower plants, with 426 employees transferred to the new company. Simultaneously, the Lao government publicly offered 25% of its ownership in EDL-GEN to domestic and foreign investors using share issue partial privatisation. Consequently, the company could mobilise US\$116 million in that year. In January 2011, EDL-GEN was listed on the LSX. In addition to its initial public offering, the company made two further public offerings of shares, raising US\$200 million in 2012 and US\$350 million in 2015. The net proceeds generated from the share issue partial privatisation (initial public offerings) and two additional public offerings were used to increase capital and fund working capital, development of new power projects, investment in (or acquisition of) existing power projects and maintenance of the existing generation assets of EDL-GEN.

In 2015, EDL-GEN was almost wholly owned by its two largest shareholders – the Lao government (holding 75%) and two subsidiaries of a Thai electricity company (holding about 10%). Six foreign institutional investors and BCEL respectively held nearly 4.7% and 2.3%. Other investors owned the remaining 8% of EDL-GEN. Specifically, around 58% of nearly 420 million of EDL-GEN's free floating shares were held by the Thai electricity company and six other foreign institutional investors. It can therefore be said that EDL-GEN's floating shares have been concentrated in the hands of foreign institutional investors.

Effects of partial privatisation on EDL-GEN's business performance

Unlike BCEL, EDL-GEN had no significant pre-privatisation business records because it was only established as a subsidiary of Electricité Du Laos in late-2010. In order to understand its business performance, this sub-section thus examines moving trends rather than comparisons of its selected predictable indicators. EDL-GEN's post-privatisation business performance is summarised in Table 4.4.

Table 4.4 EDL-GEN's post-privatisation business performance, 2011-2015

	2011	2012	2013	2014	2015
Profitability (percentage)					
Return on sales	64	66	72	70	56
Return on assets	11	9	14	10	5
Return on equity	14	11	16	14	7
Efficiency (US\$ 000)					
Sales efficiency	302	295	409	363	293
Net income efficiency	193	194	295	253	165
Outputs (US\$ million)					
Real sales	129	129	177	164	140
Real net incomes	82	85	128	114	79
Leverage (percentage)					
Debt to assets	25	16	15	28	24
Debt to equity	34	19	18	40	31
Payout (percentage)					
Dividends to sales	49	60	43	45	45
Dividends payout	77	92	60	64	80
Employment					
Total employees	426	436	433	451	478
Payroll and staff costs (US\$)	8,899	10,507	12,804	11,196	14,036

Source: Adapted from EDL-GEN (2015) and author's calculations

Profitability

Broadly speaking, it is expected that as firms move from public to private ownership, their profitability should improve. However, EDL-GEN tended to become less

profitable after privatisation (from 2011 to 2015), according to three indicators (see Table 4.4): return on sales (ROS), return on total assets (ROA) and return on equity (ROE). Its ROS steadily declined by 12%, from 64% in 2011 to 56% in 2015. Specifically, the company's ROA and ROE drastically dropped from 14% and 11% in 2011 to 7% and 5% in 2015, respectively. Such significant decreases in those latter indicators can be partly explained by the fact that electricity tariffs are generally controlled by the government; according to Electricité Du Laos (2012), electricity tariffs were allowed by the government to increase up to 2% annually from fiscal years 2013-2017, there is a gradual increase in the costs of electricity generation and production; that is, EDL-GEN's costs of sales increased around 6.54% annually from 2011 to 2015 (EDL-GEN 2015), and that EDL-GEN's post-privatisation equity increased by almost 130% due to the two additional public offerings of shares in 2011 and 2015. The company relied heavily on sales revenues from its parent company, EDL, which holds a monopoly in the Lao electricity industry. As such, EDL-GEN acts as an electricity generator while EDL (holding 75% in EDL-GEN) has sole control over the distribution system in Laos.

Efficiency

Inflation-adjusted sales (sales per employee) and net income efficiency (net income per employee) appeared to align with the profitability indicators (see Table 4.4). The sales efficiency sharply increased from US\$300,000 in 2011 to US\$410,000 in 2013, but then steadily dropped to US\$290,000 in 2015. Net income efficiency also declined, by almost US\$30,000, from US\$195,000 in 2011 to US\$165,000 in 2015. In particular, in 2015 its sales and net income efficiency dropped respectively by almost 20% and 35%. It can be thus concluded that EDL-GEN became less efficient over the five-year period.

Outputs

Like profitability and efficiency, two output-related indicators - inflation-adjusted sales and net incomes - became weaker after 2013 (see Table 4.4). Sales efficiency sharply increased from US\$130 million in 2011 to US\$177 million in 2013, but then steadily dropped to US\$140 million in 2015. Unlike its counterpart indicator, in 2015 real net incomes slightly dropped below its 2011 level of US\$80 million but then increased to nearly US\$130 million in 2015. Even though real sales improved slightly, real net

incomes stayed relatively unchanged after 2011. In particular, real sales and net incomes dropped by 14% and 30% respectively in 2015. Hence, it can be concluded that privatisation did not help improve EDL-GEN's outputs, especially its capacity to generate net incomes.

Leverage

The debt ratios, measured by the ratio of total debt to total assets and to total equity, are used to represent a company's leverage. These debt ratios appeared to fluctuate over a short period of time (see Table 4.4). From 2011 to 2013, the debt-to-asset ratio reduced from 34% to 18% while the debt-to-equity ratio also dropped from 25% to 15%. Such significant decreases in these ratios can be partly explained by the initial public offerings of shares (US\$116 million) in 2010 and the additional public offering (US\$200 million) in 2012. These two debt ratios rose considerably in 2014, to about 40% and 30%, due to three issues of 5-10 year corporate bonds (equivalent to US\$200 million) in a neighbouring country (Thailand) in that year. As expected, these ratios should have increased following the three issues of corporate bonds in 2014. However, the debt-to-asset and debt-to-equity ratios then dropped to 31% and 34% following a third public offering of shares (US\$350 million) in 2015. In addition to equity and debt (corporate bonds) financing, the company financed its business operations through its retained earnings.

From the above discussion, it can be concluded that privatisation could lead to improvements in EDL-GEN in terms of financial leverage and provide it with a greater opportunity to access alternative sources of financing.

Dividend payment

Dividend payments are likely to increase following privatisation since private investors generally require high capital returns. Indeed, EDL-GEN appeared to satisfy its shareholders, especially large institutional investors, by maintaining high ratios of dividend payouts (see Table 4.4). The company increased its cash dividend payment from US\$54 million in 2011, to US\$73 million in 2013, and to US\$64 million in 2015. From 2011 to 2015, EDL-GEN's yearly dividend-to-sales ratio and dividend payouts respectively stood at an average of 48% and 75%. These ratios can be considered fairly

high in comparison to its capacity for generating absolute sales revenues and net incomes. In particular, the company's dividend payout totalled US\$63 million in 2015 – which was 13% less than that in 2014. Therefore, it can be concluded that EDL-GEN needs to raise its dividend payout ratio in order to maintain high cash dividends to its shareholders. From this viewpoint, privatisation may not necessarily result in increased dividend payments. This is because management can manipulate such payments by increasing the dividend payout ratio, while the company's profitability and income generation capacity noticeably declined.

Employment and employee incomes

EDL-GEN's employment increased only slightly after partial privatisation. Indeed, the company's total employees rose from 426 in 2011 to 478 in 2015 (see Table 4.4). Despite such a small increase, the inflation-adjusted annual income of its employees rose considerably. The yearly payrolls and other staff costs jumped from US\$8,900 in 2011 to US\$14,000 in 2015. Therefore, it can be said that privatisation resulted in higher employment and yearly incomes for EDL-GEN's employees, despite its lack of EDL-GEN's profitability and efficiency.

4.7.3 Summary

The results of these two SOE assessments indicated that partial privatisation with large state ownership (70% and more) produced mixed outcomes. Even though partial privatisation resulted in significant increases in sales efficiency (inflation-adjusted sales per employee) and employment (both in terms of numbers and improved salaries), and led to moderate increases in real sales and slight declines in financial leverage, it led to either moderate or remarkable *decreases* in profitability and net income efficiency (inflation-adjusted net income per employee). Yet, despite their low capacity for generating net incomes, these two enterprises paid relatively large amounts of cash dividends to their shareholders.

Overall, based on the findings from these two case studies, it can be concluded that partial privatisation would not necessarily help improve firm performance in terms of profitability and net income efficiency in a small economy such as Laos. This finding is consistent with previous international studies (Boubakri & Cosset 1998, 2002; D'Souza

& Megginson 1999; Megginson, Nash & van Randenborgh 1994), which have provided evidence that either partial or full privatisation appears to produce weak improvements in business performance for firms in low- and lower-middle-income countries, unlike those with high income per capita.

4.8 Chapter conclusion

This chapter discussed the rationale for, and pitfalls of, SOEs in Laos during the centrally-planned economic period. It then explained the Lao government's privatisation policy and activities from 1989 to 2015. As a consequence, around 75% of about 640 SOEs were partially or fully privatised between 1989 and 1997. Out of ten SOEs privatised between 2010 and 2015, two strategic SOEs were linked with the establishment of Laos' first-ever stock exchange in late-2010. As of 2015, there were 131 remaining SOEs nationwide.

Procedures for direct sale and share issue privatisations were also discussed. In order to facilitate further reforms and privatisations in the remaining SOEs, the government issued Decree No. 19/PM in September 2013, reclassifying these SOEs according to their strategic importance in terms of national economic development, and national security and defence. Assessments of the financial and operating performance of the remaining SOEs were also discussed. It was found that the large proportion (but not all) of the SOEs reported on performed poorly.

This chapter also presented an outline of the impacts of privatisation on financial and operating performance of newly-privatised companies. BCEL and EDL-GEN were selected as two case studies since their pre- and post-privatisation data and information about firm performance was publicly available. The findings suggest that privatisation resulted in weak improvements in business performance in these partially privatised enterprises. Such weak improvements were probably caused by sizable state ownership levels and, consequently, state influence on internal business activities. This weak business performance among listed companies, such as BCEL and EDL-GEN, is a key contributing factor hindering stock trading on the LSX. However, these conclusions still leave many research questions unanswered. Due to the lack of unreliable and publicly available data and information, the following chapters will analyse primary data

collected through qualitative interviews and quantitative survey questionnaires to investigate collective views and perceptions of key stakeholders regarding privatisation in Laos. Chapter 5 presents analysis of qualitative views of well-informed key stakeholders in historical perspectives in relative to past privatisation programs.

Chapter 5

Analysis of Qualitative Views in Historical Perspectives

5.1 Introduction

This chapter presents research results derived from the analysis of primary data gathered through a series of interviews with key well-informed stakeholders in Laos. The main purpose of these interviews was to obtain first-hand insights and critical information from individuals who were viewed as experienced and knowledgeable about SOEs and privatisation processes in Laos. Their opinions and perceptions were analysed by using a thematic analysis technique. The next section provides information on the demographic characteristics of fourteen interviewees. This is followed by an analysis of their perceptions of SOE business performance in Laos, including identified key problems and the challenges faced by SOEs. The subsequent two sections examine the views and perceptions of these fourteen interviewees about privatisation policy and critical factors driving the likelihood of privatisation success and/or failure in Laos.

5.2 Demographic characteristics of fourteen interviewees

Face-to-face semi-structured interviews were conducted between 28 February and 12 April 2015 in Vientiane Capital, where almost all centrally-managed SOEs were located. In order to obtain a valid and representative sample, 20 invitation letters were personally delivered to target organisations in a random manner in order to invite their senior employees to participate in an interview. Of 20 potential interviewees, 14 accepted the invitation. Prior to the interviews, each participant was asked for their consent to audio-record the session; all agreed to permit the recording. The duration of the interviews ranged from 30 to 90 minutes.

The demographic characteristics of these 14 interviewees are presented in Table 5.1. They worked for governmental entities, remaining and privatised SOEs, and public-private joint enterprises. Specifically, most interviewees held senior positions, ranging from managing director to chief of division. They worked in different industries, namely banking and finance, securities, trade and industry, energy, transport, and brewing. Only two interviewees were female. Based on personal observations, interviewees were in the range of 40 to 60 years of age. In order to protect identities and

ensure informant confidentiality, all interviewees remained anonymous and were randomly coded.

Table 5.1 Demographic characteristics of 14 interviewees

Code	Industry	Position	Organisation	Date of interview
Interviewee 1*	Securities	Senior director	Joint-venture	18.03.2015
Interviewee 2	Securities	Senior director	Joint-venture	20.03.2015
Interviewee 3	Securities	Senior director	Public entity	24.03.2015
Interviewee 4	Securities	Senior director	Joint-venture	25.03.2015
Interviewee 5	Banking	Senior director	SOE	26.03.2015
Interviewee 6	Trade	Senior official	Public entity	27.03.2015
Interviewee 7	Banking	Senior director	SOE	27.03.2015
Interviewee 8	Banking	Senior director	SOE	31.03.2015
Interviewee 9	Transport	Senior director	SOE	01.04.2015
Interviewee 10	Brewery	Senior director	Privatised SOE	02.04.2015
Interviewee 11	Energy	Senior director	Privatised SOE	03.04.2015
Interviewee 12	Finance	Senior director	Public entity	06.04.2015
Interviewee 13	Energy	Senior director	SOE	08.04.2015
Interviewee 14	Energy	Senior director	Public entity	09.04.2015

Source: Author's survey

Note: *A group interview included senior directors and the management team

Thirteen of the 14 participants were highly experienced and knowledgeable about SOEs and privatisation processes, since they had hands-on experience of managing SOEs and/or had been directly involved in privatisation programs in Laos. The remaining interviewee, however, had in-depth understanding and extensive experience of supporting and facilitating businesses in Laos. All interviewees were considered highly reliable and credible sources for this study.

5.3 Collective perceptions of SOE business performance

When the interviewees were asked what they thought about SOE business performance, all interviewees believed that the SOE sector performed poorly in terms of profitability

and efficiency, particularly compared with their counterparts (i.e. joint-ventures and private companies). Interviewee 8 stated that:

Broadly speaking, wholly state-owned firms were not profitable and efficient. Persons responsible for managing them often did not act in ways that they were supposed to be servicing the interests of the public according to the government's development policies and objectives. Those unprofitable (money-losing) SOEs were also a main cause of the increasing financial burden to the government and required state subsidies.

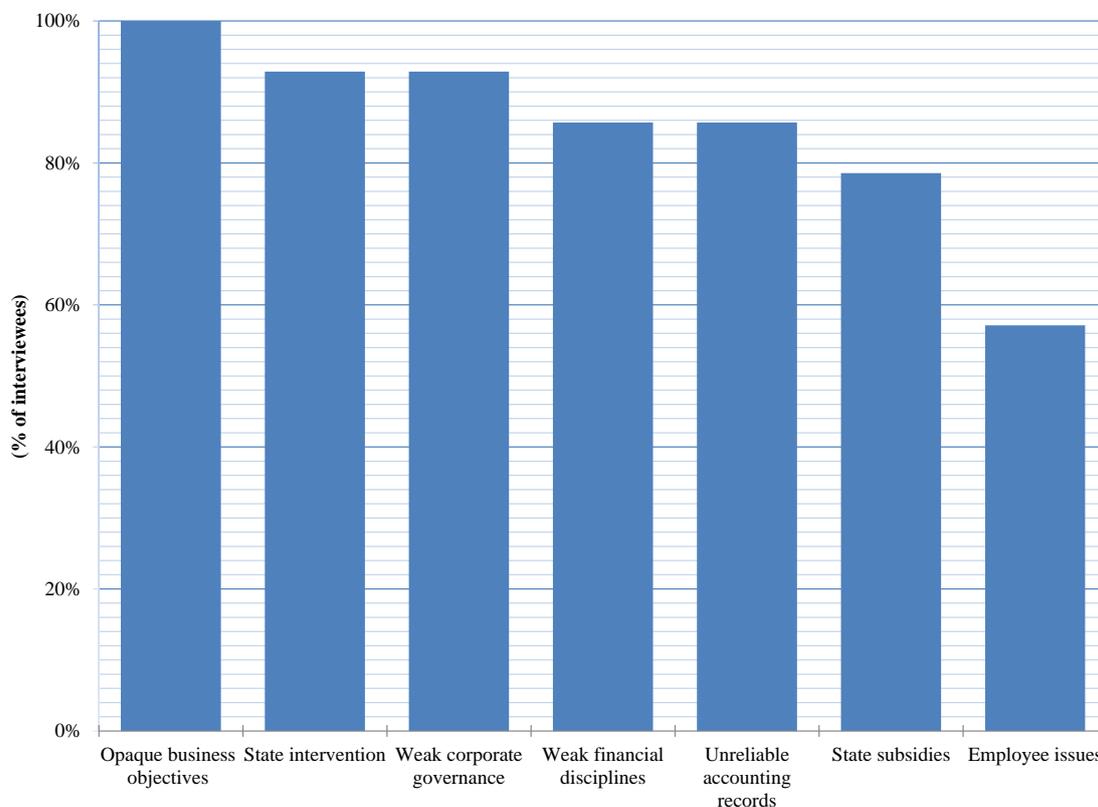
In line with the above statement, Interviewee 12 emphasised that:

According to official documents reported by the relevant government authorities, many SOEs performed poorly and inefficiently. Those SOEs not only experienced one-time severe losses but also a large portion of accumulated losses. Consequently, they were unable to pay their financial obligations in terms of corporate tax and dividends to the state as expected. In many cases, persons in charge of managing the SOEs made unreasonable payments or investment activities. Without government supports and subsidies, those indebted SOEs could not continue their business operations and/or became insolvent.

Even though Interviewee 6 agreed that the remaining SOEs experienced low profitability and efficiency, he/she argued that:

We should not look at only monetary indicators in order to justify whether SOEs are profitable and efficient. But other performance indicators (i.e. job creation, poverty reduction, social interests and financial obligations to the state) should be taken into consideration since these SOEs may serve either profit-oriented or policy-oriented or both. If we take the efficiency criteria applied in private enterprises, it could be misleading and simplistic.

Based on the frequency of themes mentioned by the 14 interviewees, seven problems and challenges were seen as the main factors contributing to the disappointing and inefficient SOE business outcomes. These are shown in Figure 5.1.



Source: Author's calculation

Figure 5.1 Perceived problems and challenges driving SOEs' poor performance

5.3.1 Opaque business objectives

All 14 interviewees believed that many remaining SOEs operated their business activities with objectives that combined a mixture of commercial and non-commercial orientations. In other words, they simultaneously served profit-oriented purposes and public policy objectives (e.g. poverty reduction). These opaque business objectives were identified by interviewees as the main contributing factor associated with disappointing SOE performance and malpractice among those in charge of SOE management. The interviewees believed that it is very difficult to assess firm performance without precise pre-determined organisational objectives. Interviewee 7 stated that:

From the beginning, the government established SOEs to manage economic activities in a desired socio-economic development direction. Owing to their

poor performance, the government ended up subsidising those inefficient SOEs. Under the NEM of 1986, many SOEs had been converted into other forms of ownership while some enterprises remained wholly state-owned. Those enterprises under state ownership were required to become financially self-sufficient and operate under a market-driven mechanism. In practice, some SOEs still operate their business toward policy- and profit-oriented objectives. Consequently, such unclear business objectives become a main obstacle and challenge of the SOE sector.

Interviewee 14 agreed with this statement:

According to the government's long-term development objectives, SOEs are of critical importance, especially so-called strategic enterprises. Broadly speaking, many enterprises serve both commercial and non-commercial objectives simultaneously. This can partly result in non-transparency and malpractices in their operations. I think that we should not allow those enterprises to conduct their business activities as such.

To overcome such a significant problem, about 75% of the interviewees suggested that the government should clearly classify and identify which SOE should operate as a profit-oriented entity and which one should serve as a policy-oriented entity. In doing so, the interviewees perceived that, in the long-term, SOEs would become more productive and efficient.

5.3.2 State intervention

Nearly 95% of the 14 interviewees responded that state intervention in SOEs was not an uncommon practice since they were wholly state-owned. Such state influences were ranked the second key factor contributing to poor performance. Even though SOEs were formally recognised as fully autonomous entities, they tended not to be free from state intervention. Such state intervention was apparent in bureaucratic procedures, decision-making processes and/or in the membership of an SOE's board of directors or management teams. In theory, day-to-day operational activities and decisions are supposed to be addressed through a company's corporate governance mechanisms (e.g.

the board of directors). In practice, however, prior to making any material decisions, an SOE is required to report any important matters to their responsible line ministry for consideration and approval. Owing to these bureaucratic procedures, some critical decisions could be delayed or altered in a way that makes them irrelevant to actual circumstances. In many cases, SOE management personnel are no longer responsible for unfavourable outcomes; some of the blame must be borne by the state. Interviewee 14 observed that:

In many cases, state-run enterprises are required to undertake investment projects according to national socio-economic development objectives. However, some projects are highly unworthy of capital investment. Consequently, poor business performance and state subsidies to these SOEs cannot be avoided.

Given these perspectives, it can be argued that state intervention is likely to bring more costs than benefits to SOEs. In order to enhance the business effectiveness of the remaining SOEs, proper decision criteria and guidelines from policy-makers and/or line ministries responsible for controlling, supervising and managing these SOEs are essential.

5.3.3 Weak corporate governance

By law, SOEs must have a board of directors comprising at least three members: one representing the Ministry of Finance, another from the controlling agency and the third the company's managing director. In practice, the board can have a membership of up to ten, who are recruited from concerned government agencies and SOE(s).

Around 95% of the interviewees believed that weak corporate governance in the remaining SOEs was one of the major problems in terms of soundness, credibility and transparency. Some interviewees asserted that while many SOEs had their board of directors in place, some board members did not fully commit to their duties and responsibilities of guiding and supervising the enterprises. For example, Interviewee 12 stated that:

Such weak corporate governance resulted in severe mismanagement and malpractices; for example, some enterprises engaged in non-core business activities and some enterprises used their business expansion reserves without any approval from either the state (shareholder) or the boards of directors. In many cases, some investment projects and/or business activities executed by those SOEs might not be economically feasible and viable.

In line with the above statement, Interviewee 2 observed:

Directorship and management members of some SOEs were unlikely to be held accountable for downside effects of their actions and/or to be penalised in the case of losses and poor business performance. It seems that the punishment for performing poorly has not always been enforced.

5.3.4 Weak financial discipline

In the context of weak corporate governance, more than 85% of the interviewees believed that unhealthy financial discipline and practices (e.g. misuse of financial resources and unrealistic expenses) were other factors contributing to poor SOE business performance. In many cases, those in charge of managing SOEs had not used their companies' financial and capital resources in line with applicable procedures and guidelines. In addition, the majority of SOEs' financial and accounting records had not been audited and verified by an independent auditor. For example, Interviewee 2 observed:

In many cases, some expense items could be relatively higher than expected. In many cases, those accounting items could not be explainable by persons responsible for managing those concerned SOEs.

In support of this view, Interviewee 1 commented:

A tender for procurement of office supplies and equipment or a construction project (i.e. office building) was conducted in either a closed negotiation or narrow fashion. Only a limited number of bidders participated in the tender.

If we compared those offered prices, they appeared not to reflect current market prices. Such malpractices led to certain economic damages to the concerned SOEs and the society as a whole.

5.3.5 Unreliable accounting records

In addition to poor financial discipline and practices among those in charge of managing SOEs, unreliable and non-transparent accounting records were also likely. According to some earlier studies (Daniel 2000; Suzuki 2002; Thavisay & Quang 1999), a weak accounting system was one of the main issues within Lao SOEs. This issue seems to remain unresolved. Over 85% of interviewees believed that many were sceptical about the accuracy of SOE accounting records and practices. Generally speaking, they believed that SOE financial and accounting data did not truly reflect their business performance and financial situations. This clearly inhibits the ability of SOEs to raise funds either from formal and informal investors, because of the risks associated with inaccurate financial data. For example, Interviewee 4 stated:

Although some SOEs were somewhat profitable, the majority of the remaining SOEs were not profitable and efficient, partly due to malpractices and opportunistic actions of persons who were responsible and accountable for managing those SOEs. They occasionally cooked the books in order to hide the accounting figures.

In relation to the poor accounting records of one particular SOE, Interviewee 2 observed:

An SOE did not actually import high-value equipment but recorded those fake purchases as capital expenditures. When the truth was discovered, [at least three] top directors were removed from office, resulting from their inappropriate managerial behaviours. Consequently, this enterprise is now in a process of corporate restructuring.

In order to improve the reliability, creditability and transparency of the remaining SOEs' accounting and financial practices, many interviewees suggested that practical

and implementable internal control guidelines should be put in place, as well as external audits. In the long run, they expected that these internal control and external auditing mechanisms would strengthen financial and operating performance.

5.3.6 State subsidies to SOEs

Given state intervention in routine operations and decision-making processes, it is not uncommon to see state subsidies in some SOEs. Almost 80% of the interviewees believed that many SOEs retained access to state subsidies. By law, SOEs are not allowed to obtain loans without the written approval of the Ministry of Finance. However, many SOEs are publicly subsidised through the national budget and/or through policy loans. These subsidies have placed financial burdens on the government. Interviewee 12 remarked:

Generally speaking, the government pays reasonably satisfactory attention to supporting and caring about SOEs through various policy measures, for example, state subsidies in SOEs at the time then they made losses, provisions of *policy* lending to them, or SOEs' accesses to bank loans that were collateralised by the government. However, those SOEs still perform poorly. I think that the government should allow the existing SOEs to fully operate under market-oriented principles and prevent them from accessing any form of state subsidies in the case of unreasonable losses. In doing so, the SOEs would operate toward efficiency and profitability orientations.

In support of this statement, Interviewee 4 said that:

Such state subsidies can result in unaccountable and non-transparent governance and management over these SOEs and some SOEs may also run their business activities in response to market-oriented mechanisms. Importantly, many persons in charge of managing SOEs believe that their enterprises remain subsidised by the state in cases of financial losses and/or performing new investment activities.

Interviewee 2 further commented:

It would be difficult to successfully reform and restructure the SOEs if financial subsidies remained available and accessible to them.

In short, state subsidies to SOEs are generally believed to be available. Limiting state subsidies may help improve SOE business performance since they would then have to employ market-oriented principles.

5.3.7 Employee issues

Around 60% of interviewees believed that employee issues were other contributing factors to poor SOE business performance. These issues included overstaffing, unqualified employees, and low work commitment. Specifically, about 60% of interviewees believed that many SOEs were dealing with substantial overemployment, with many jobs redundant. For example, Interviewee 4 observed that:

Many SOEs are overstaffed and notoriously inefficient. Consequently, these enterprises could not generate enough revenues to cover their total expenses, partially contributed by high employee-related expenses.

In addition to overstaffing, around 60% of interviewees believed that unqualified and incompetent workers created further problems. It was their belief that many of those responsible for managing SOEs (e.g. directors and managers) did not have sufficient qualifications, competence or experience to manage an enterprise or perform appropriate management tasks. In many cases, directors and managers did not have direct knowledge of, or expertise in, the businesses they were running. Interviewee 9 commented:

The majority of government employees who are posted in senior positions in many SOEs are quite often inexperienced and/or do not have direct knowledge and qualifications related to the business which they are about to manage. In my case, I graduated in political science and never have any experience in doing business before. Before becoming a managing director of this enterprise, I attended an intensive training on business administration.

Interviewee 1 agreed with the above statement, saying:

From managerial perspectives, many of my colleagues do not have enough knowledge and competence to perform their jobs. Around 98% of my company employees hold either a bachelor's or master's degree. But our enterprise remains inefficient and unable to compete with other private counterparts.

About 45% of interviewees believed that low work commitment among many SOE employees was a critical factor in causing poor business performance. The management and employees of these SOEs were likely to have few incentives to commit to their assigned tasks and duties. Some interviewees explained that whatever business achievements there might be, employee benefits (i.e. salary and other incentives) were relatively unchanged. For example, Interviewee 9 observed:

Ambition, commitment and incentives of managers and employees of many SOEs are lacking since they believe that their salaries and other benefits are unchanged according to their work performance. There are no reasons for them trying to achieve the best they can do.

In support of this statement, Interviewee 4 claimed:

In comparing to those working for private companies, SOE employees have relatively lower working incentives such as salaries and other financial benefits. I think that if they are not motivated enough to work, poor work performance and inefficiency cannot be avoided. On many occasions, malpractices and misuse of company resources seem likely to happen.

5.3.8 Summary

All interviewees believed that the majority of SOEs performed poorly, particularly when compared to their private sector counterparts. At least seven factors were perceived to contribute significantly to the inefficiency and disappointing performance of the remaining SOEs. These factors were: unclear business objectives, state

intervention, weak corporate governance, weak financial discipline, unreliable accounting records, accessible state subsidies, and employee issues. Of these, state intervention (bureaucracy) was considered the dominant factor causing SOE inefficiency and poor performance. Without government commitment to SOE reform, it is believed that issues of inefficiency and poor performance will remain unresolved.

5.4 Collective perceptions of privatisation policy in Laos

A key argument in support of privatisation in Laos is the need to address the identified poor SOE business performance. This section examines interviewee views and perceptions of privatisation programs in respect of legal and regulatory frameworks, institutional arrangements, objectives and outcomes.

5.4.1 Legal and regulatory frameworks concerning privatisation

In order to facilitate a privatisation process for SOEs, the Lao government first issued Degree No. 17/1990. Many interviewees believed that this decree has never been amended and is no longer enforced. Almost all interviewees believed that Laos had neither specific laws nor decrees (including procedure guidelines and manuals) relating to the privatisation of SOEs. For example, Interviewee 4 stated:

There are no special regulations or guidelines on implementation of privatisation programs in Laos. In other words, privatisation processes have not been formalised yet. But general principles of converting state assets and enterprises into other forms of ownership have been specified in several laws: state property law, enterprise law, securities law, and government decree on management of state-invested enterprises.

Interviewee 9 also observed:

Currently, there exist no special rules or detailed instructions to handle privatisation programs. I am quite certain that many key stakeholders do not have clear understanding of procedures of privatising state-owned enterprises. Owing to the lack of detailed guidelines, some privatisation

transactions were conducted in a relatively clean and fair fashion but many cases might be viewed sceptically.

Without clear and detailed legal and regulatory frameworks, almost all interviewees thought that privatisation programs would be hindered and delayed. Even if a privatisation transaction is finalised, public criticism might emerge as transactions are questioned. Interviewees also suggested that precise and implementable rules, regulations and guidelines are essential to create fair, transparent, creditable and predictable privatisation programs. Such programs would not only stimulate and enhance public trust and confidence in privatisation programs, but also, if properly done, bring significant benefits to all concerned stakeholders.

5.4.2 Institutional arrangements for privatisation

Given the non-existence of special rules and/or regulations on the privatisation of state enterprises, most interviewees noted that there was no specific government agency in charge of carrying out privatisation transactions. Since the start of privatisation programs in 1989, all transactions have been handled by ad hoc committees empowered by decree to privatise. Almost all these committees were comprised of representatives from different government authorities, mainly from the Ministry of Finance, the NCBD, and the sectoral ministry responsible for managing the SOE. In cases of share issue privatisations, representatives from the LSC, the LSX, and external advisors (e.g. financial advisors, accounting consultants and lawyers) were also recruited to the committees.

In addition, most interviewees reported a lack of learning processes associated with privatisation and no systematic research conducted to help inform the evolution of privatisation . Interviewee 12 observed:

Since there is no centralised state agency in charge of managing a privatisation process, I understand that no studies and/or assessments regarding previous privatisations have been done in a systematic manner. As a result, learning curve effects in which experience and lessons can be learnt from previous privatisation programs are likely to be relatively minimal.

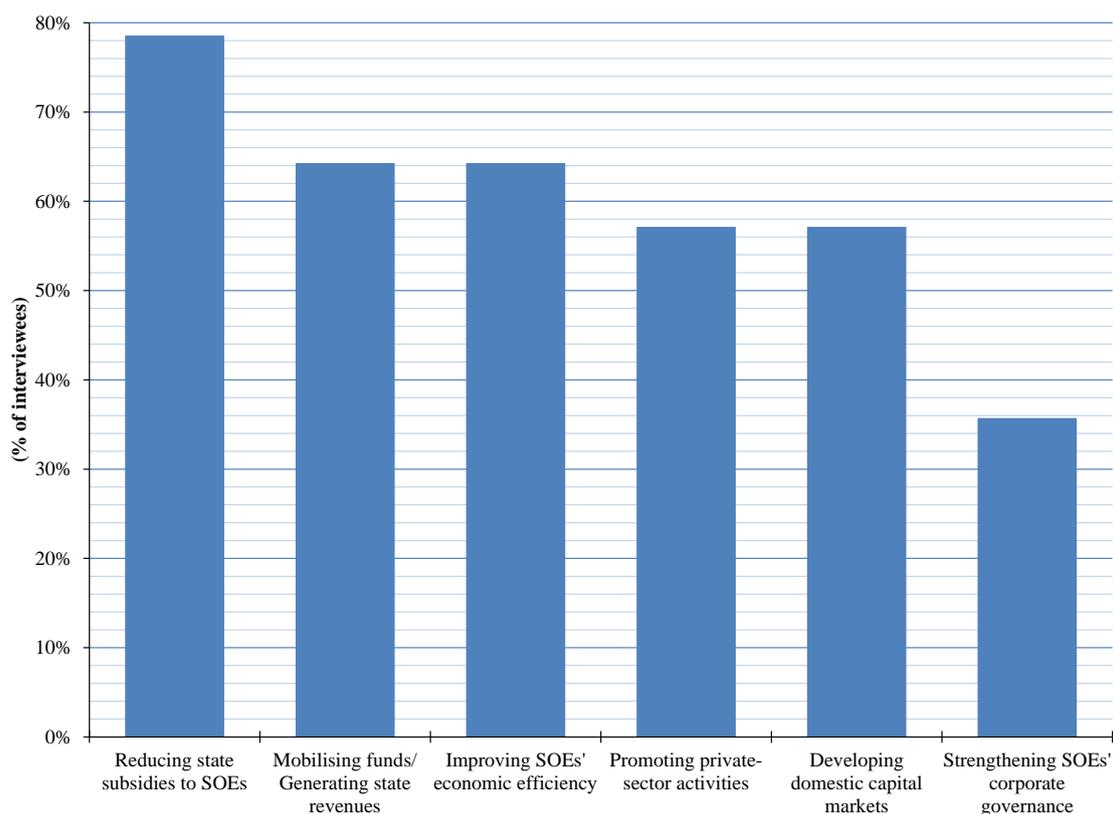
In line with the above statement, Interviewee 3 said:

I understand that privatisations in Laos have been conducted by ad hoc committees. In light of an ad hoc privatisation perspective, member(s) from a previous privatisation committee may not be appointed into another [new] committee. However, I really don't know whether there are any government agencies which have studied, reviewed and/or assessed our previous privatisation programs to learn good and bad practices from those programs. In the cases of BCEL and EDL-GEN, I am sure that we have not studied, assessed and/or reviewed those two programs yet. If any studies, reviews and/or assessments concerning previous privatisations have been done, such studies and reviews may not be carried out in a systematic fashion.

Given that privatisation programs in Laos have been adopted in an ad hoc manner, “consistency across all elements of the privatisation process is a challenge” (Ernst & Young 2010, p. 5) and learning processes have not been systematically implemented. As a result, learning from the lessons of previous privatisation programs has been limited.

5.4.3 Inferring the objectives of privatisation

Scholars have argued that privatisation serves a multiplicity of objectives (see Section 2.4). Based on the views of interviewees in this study, privatisation in Laos has been associated with six inferred objectives. These are similar to those discussed in Sub-section 4.3.3. Figure 5.2 presents these six objectives according to the frequency of themes mentioned by the interviewees: reduction and elimination of state subsidies to SOEs (80%); revenue generation to the government and/or fund mobilisation (65%); improvements in SOE economic efficiency (65%); promotion of private sector activities in the economy (55%); establishment and development of Laos' domestic capital markets (55%); and strengthening SOE corporate governance (35%). Generally speaking, the interviewees seemed to believe that privatisation generally aimed at economic development and/or efficiency objectives.



Source: Author's calculations

Figure 5.2 Perceived objectives of privatisation

5.4.4 Inferring privatisation outcomes

Owing to the multiplicity of the above privatisation objectives, previous privatisation programs were believed to have produced some positive or favourable outcomes. The findings from the interviews suggest that such outcomes can be divided under four headings: strengthening and development of Laos' financial ecosystem, reduction in state subsidies in SOEs, income generation to the state, and efficiency enhancements.

First, privatisation partly contributes to strengthening and developing a financial ecosystem in Laos. The findings from these interviews seem reflective and supportive of this perspective. Roughly 85% of the 14 interviewees responded that privatisation programs have had a significant impact on the development of securities-related and/or banking sectors in Laos. It is evident that the share issue partial privatisations of BCEL and EDL-GEN resulted in the establishment of the first-ever stock exchange in Laos in late-2010. In addition, Pham (2004b, p. 9) argued that “[during the mid-1990s,] the financial weakness of SOEs has placed the constraint of heavy policy lending on

state-owned commercial banks (SOCBs) and has been the root of [sizable non-performing loans] of these banks”. Partially due to past SOE reform efforts and privatisation programs, many interviewees believed that SOCBs became financially healthier since policy lending (loans) lending from the SOCBs to the SOEs became relatively small. According to BOL (2015b), loans granted to the SOEs by all commercial banks increased from US\$37 million in 2006 to US\$590 million in 2015. However, between 2006 and 2015, these loans averaged less than 10% of the total loan portfolio of these commercial banks and nearly all bank loans to the SOEs had been granted by the SOCBs (BOL (2015b). Interviewee 8 observed:

In addition to the establishment and development of our domestic stock market, privatisation either directly or indirectly helps strengthen and develop our banking sector, especially state-owned commercial banks. As a consequence, these banks are able to provide a variety of financial services and [good] quality services to their customers. General speaking, people now have more confidence in our banking system.”

Second, SOEs are a burden on the national budget because they become too reliant on state subsidies. Around 80% of interviewees believed that privatisation helped reduce and/or eliminate state subsidies to loss-making SOEs and the non-viable investment projects executed by some SOEs. Consequently, the government is no longer obliged to subsidise these poor performers, allowing for the allocation of its limited resources to finance other social and economic priorities. Interviewee 4 observed:

Converting SOEs into other forms of ownership not only lessens state deficits, but also generates some revenues to the government. This will also assist in minimising budget drainages and promoting good corporate governance of these SOEs. I believe that the state subsidies would then be reduced, and when these SOEs start making profits and performing efficiently after privatisation, they will even more significantly contribute to the government’s long-term social and economic development goals.

Privatisation could boost state revenues from the sale of SOEs. However, many privatisation cases might not produce good returns, as Interviewee 8 observed:

Almost all previous privatisation programs were executed through either a direct negotiation or a narrow bidding mechanism. Under the narrow bidding form, only a limited number of potential buyers participated in a bidding process. As a result, the government didn't gain much money from those privatisation transactions. Offer prices of those SOEs were relatively low since we sold them at the time when they performed poorly.

Finally, Lao SOEs were perceived to be unprofitable and inefficient (see Section 6.3). About 50% of interviewees responded that privatisations not only helped improve the financial and operating performance of the privatised SOEs, but also strengthened corporate governance and professional management. Specifically, participation of foreign investors in the process brought in capital, expertise and access to foreign markets that were previously unavailable. Due to either partial or full private ownership, those in charge of managing these enterprises became more accountable and responsible for their actions and managerial behaviours. Interviewee 10 stated:

This state-owned enterprise was proportionally sold to foreign institutional investors in the 1990s. It has since then become more profitable and efficient. We now have sound corporate governance, strong financial performance and good accounting practices. We are able to attract highly qualified, skilful and knowledgeable staff. Despite improved business performance, the number of our staff increased by 400% (1,000 staff now) and our production output also rose by 20-30 times after privatisation. Since 1997, we have exported our products to many countries such as Australia and Japan. We are now one of the largest tax payers in Laos, with an annual tax payment equivalent to about US\$200 million.”

Yet, some interviewees argued that privatisation might not always improve firm performance. They pointed out that many SOEs no longer exist and discontinued their normal business activities after being transferred into private ownership. Other privatised enterprises minimised their business scope and/or departed from their original core business. For example, Interviewee 8 said:

I don't deny that privatisation leads to improved firm performance. Before selling our SOEs to domestic and/or foreign buyers, we therefore need to clearly understand what the real objective(s) of those buyers is. Under normal conditions, I believe that most buyers would be interested in buying the profitable SOEs. This may not always be the case since they may have 'hidden' objectives of buying a particular SOE. For example, some of our major SOEs were sold to investors from our neighbouring countries. However, they didn't put their efforts to run those SOEs (e.g. a sugar factory and animal breeding factory) since I guess that their real objectives of buying such SOEs were to control domestic markets and import their products in those countries to Laos instead. If we specified detailed buyer terms and conditions (e.g. they are required to continue and expand business activities in a certain timeframe), I am in doubt whether or not those investors would buy that SOE.

Interviewee 10 had a similar viewpoint, saying:

Which techniques of privatisation we should use should depend upon business activities and the size of an SOE. Experience suggests that many SOEs had been privatised through a collective workforce buyout in the past. Only some of those privatised SOEs can survive and some have already been turned into individual ownership. We can therefore infer that collective management proves somewhat inefficient in this regard. Understanding and selecting potential buyers is essential, for example, their buying objectives, capital potentials and business plans. In many cases, those buyers acted as middlemen and searched to re-sell those SOEs to other investors. In this sense, privatisation could bring little benefit to those SOEs because the buyers only aimed at short-term profits. Therefore, selling an SOE to middlemen should be avoided.

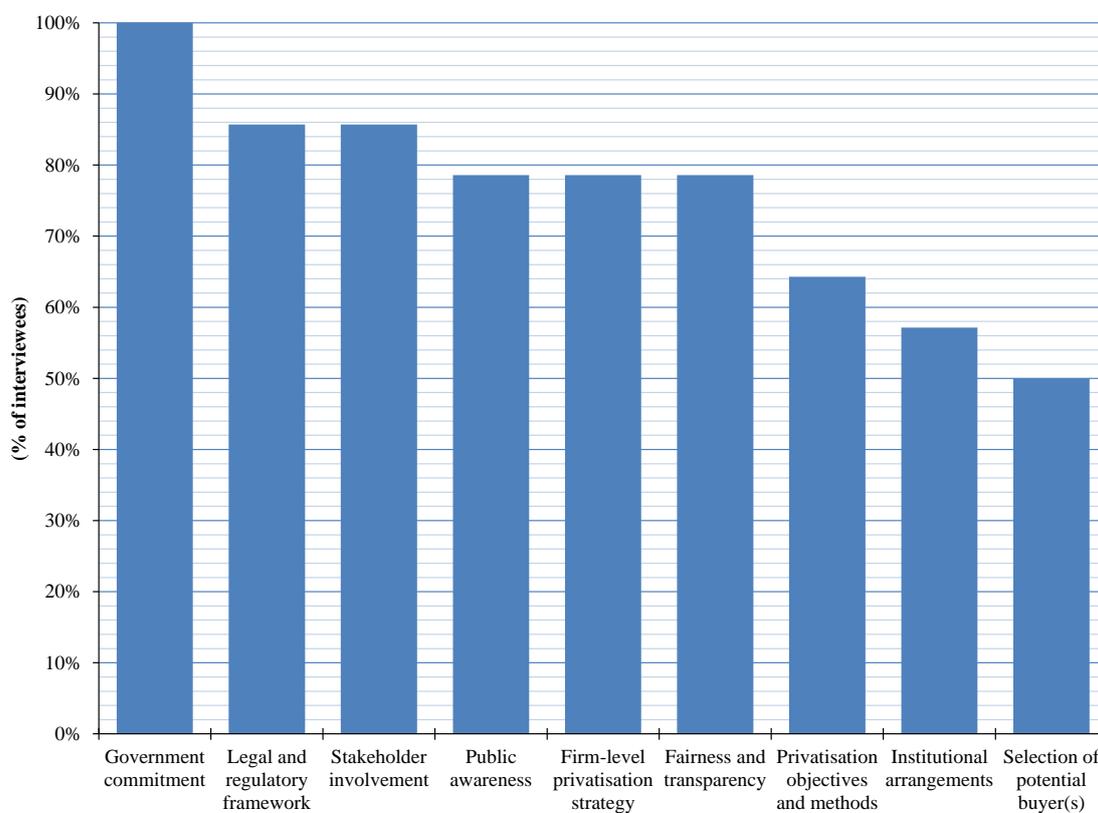
5.4.5 Summary

Almost all interviewees asserted that, to their knowledge, no special law or specific government entity exists to execute privatisation processes. Broadly speaking, previous privatisation programs were implemented in an ad hoc fashion and learning curve

effects about privatisation were limited. In short, a systematic privatisation approach has been absent. This absence has led to a lack of consistency in approach and delivery, low private sector confidence in privatisation processes, reduced state revenues generated from privatisation programs, and minimised the likelihood of privatisation success. Without concrete data on pre- and post-privatisation firm performance, it is very difficult to directly assess whether privatisation results in efficiency improvements. However, the experience of the interviewees suggested that the impact of privatisation on business performance and efficiency was mixed. Many interviewees agreed that privatisation helped improve SOE business performance; others disagreed.

5.5 Critical factors driving successful privatisation

This section presents several critical factors perceived by the interviewees to influence the success or failure of privatisation in Laos. Specifically, nine key success factors were identified from the interview data, according to the frequency of themes raised by the interviewees, as shown Figure 5.3 below.



Source: Author's calculations

Figure 5.3 Perceived factors influencing the likelihood of privatisation success

5.5.1 Government commitment

Most interviewees agreed that one of the most essential prerequisites for the effective implementation of privatisation policy was government commitment – the desirability and willingness to enforce the policy consistently. As noted by the World Bank (1995, p. 10), “reform [privatisation] must be politically desirable to the leadership and its constituencies”. Indeed, as the most decisive factor in the privatisation process, government commitment can influence whether a program is successful and can achieve its expected objectives and outcomes (see Section 4.3). Since the inception of the LSC in 2009, a deputy prime minister in charge of economic affairs has served as its chairperson (LSCO 2014). The LSC is also believed to oversee and supervise share issue privatisation programs in connection with the development of Laos’ stock market, since an ad hoc working committee for preparing the privatisation of an SOE and its listing on the LSX is appointed by the LSC chairperson (Personal communication 2015). In relation to this, Interviewee 3 stated:

Government commitment and intentions are the most critical factor in order to effectively implement a privatisation policy. Importantly, such government commitment and policies must be clear, stable and enforceable. Experience suggests that many government policies and directives concerning SOE reforms have not been implemented yet – for example, a government decree on conversion of SOEs into other forms of ownership. If government will and policies are more precise, certain and implementable, we may see more SOEs listing their shares on our stock exchange.

While recognising the paramount importance of government commitment and intentions in support of its privatisation policy, some evidence suggests that the level of government commitment is still unclear and inconsistent. Interviewee 1 remarked:

My question is “why isn’t an SOE enthusiastic about turning itself into a public company and offer its shares to public investors?” For some inexplicable reasons, some government policies and plans might not be clear, consistent and enforceable. As a consequence, no other share issue

privatisations of SOEs have been implemented since BCEL and EDL-GEN went public in 2010. For some SOEs, their preparation activities for privatisation were either postponed or cancelled during privatisation processes.

In line with this view, Interviewee 2 said:

Support and push from the government is of paramount importance to carry out privatisation programs effectively. When the government issues its directive or policy concerning SOE reforms and/or privatisations, such an issued directive or policy should be kept unchanged and consistent. If this is not the case, converting an SOE into other forms of ownership privatisation is unlikely to succeed.

It is evident from these comments that while many interviewees believed that government commitment and intentions were an essential factor in influencing the likelihood of privatisation success, they raised some concerns about the level and clarity of that commitment. As a result, government commitment was perceived, to date, to have minimal impact on the likelihood of privatisation success in Laos.

5.5.2 Legal and regulatory frameworks

Around 85% of interviewees agreed that legal and regulatory frameworks were critical to privatisation success. Megyery and Sader (1997, p. 17) suggested that a “legal environment is not only the basis for privatisations, but also it effectively represents the cornerstone for private economic activities”. Despite other market-friendly rules and regulations, a specific law on privatisation may not always be deemed necessary (Megyery & Sader 1997). As discussed in Sub-section 5.5.1, however, many interviewees perceived that specific rules on privatisation (including guidelines, manuals or instructions) are needed to define a clear and consistent privatisation process. These rules would clarify the accountability and formal authority of entities (committees) responsible for conducting the program, and what is to be privatised. Rules and regulations need to be precise, predictable and enforceable.

The analysis so far (as outlined in Chapter 4) suggests that almost all previous privatisation programs were conducted through direct sales (private placement) and collective workforce methods. Thus, some transactions might generate lower incomes to the government than expected, and some might become suspicious in terms of decision processes, buyer selection and selling prices. To overcome such challenging problems, a specific law on privatisation would ensure fair, transparent and creditable privatisation programs. Such a law would not only encourage and convince serious SOEs and potential investors to participate in privatisation programs, but also protect these programs from inappropriate actions and misconduct.

5.5.3 Stakeholder involvement

Stakeholder involvement is also considered another decisive factor in influencing the success of privatisations. As discussed in Sub-section 5.5.2, almost all members of an ad hoc technical committee were recruited from different key government entities. Such ad hoc privatisation mechanisms were believed to not only assist in promoting timely communications and uniformity of these key stakeholders, but also in accommodating their objectives and concerns into the privatisation program. Around 85% of interviewees perceived that stakeholder participation was a driving factor for privatisation success in Laos.

Around 64% of interviewees believed that observable outcomes from some privatisation programs appeared to be unsatisfactory, as membership of ad hoc committees was limited to government officials and SOE senior directors. Other stakeholders were excluded from the committee, so its objectives and opinions might not reflect a broad range of key stakeholder views. Interviewee 9 recommended that:

We should not limit representatives from only government entities but [we should] include persons from other organisations (e.g. private firms, education institutions and mass media) in these ad hoc committees. I think that broader opinions and ideas concerning privatisation of SOEs are of critical importance. Therefore, ad hoc committees should be left open to representatives from non-government entities. As we can see, some problems remained unsolved and/or became even worse after privatisation of those SOEs.

The majority of interviewees believed that stakeholder involvement played an important role in the effective implementation of privatisation policies in Laos. But many felt that stakeholder involvement effects were likely to be somewhat limited to favourable privatisation outcomes because the ad hoc privatisation committees were recruited from government-related entities and concerned SOEs while people from private-sector entities were excluded. Interviewees recommended that committees should be broadened to include various representatives from different non-government entities and interest groups that might be affected by privatisation transactions. This could help build public trust and confidence in the privatisation process and maximise potential outcomes for all relevant stakeholders.

5.5.4 Public education and awareness

In addition to stakeholder involvement in the privatisation processes, some 80% of interviewees agreed that public education and awareness were critically important to the success of privatisations. The government should use various marketing communication mediums (i.e. advertisements, promotional tools and roadshows) to raise public awareness about the privatisation process. Yet the interviewees observed that, to date, public communication and privatisation awareness campaigns were rarely seen in Laos. As Interviewee 10 observed:

So far there have been limited public consultations and discussions about the privatisation process. Er, I can say 'none'. Specifically, it is hard to see advertisements on mass media and promotional activities concerning SOEs and/or privatisation, except for those concerning the share issue partial privatisations of BCEL and EDL-GEN.

In line with the above statement, Interviewee 8 said:

Public consultations and discussions on the privatisation process are unlikely to be seen, but there might be some kind of indirect public participation and/or influence on this process. Public education and awareness concerning SOEs and/or privatisation are also missing.

Owing to the lack of public education and awareness, public participation in the process of buying either SOEs or shares of those SOEs has been minimal. Since the inception of privatisations in 1989, only the two privatisation cases of BCEL and EDL-GEN have attracted broad public attention and participation. For example, out of 370 domestic investors participating in a price auction of BCEL shares in 2010, around 80% of those first-time investors resided in the country capital (Personal communication 2015). In the case of EDL-GEN, through a 2010 share issue privatisation mechanism, domestic and foreign capital accounted for about 30% and 70% respectively of total privatisation values (Personal communication 2015). From these views, public education and awareness remained absent, and consequently participation of domestic investors in buying shares of previously privatised these two SOEs were low.

5.5.5 Firm-level privatisation strategy

Roughly 80% of interviewees agreed that a firm-level privatisation strategy was also one of the most influential factors in carrying out successful privatisations. As discussed in Sub-section 2.7.5, a firm-level privatisation strategy comprises four categories: preparatory privatisation activities, candidates for privatisation, corporate valuing and pricing, and post-privatisation ownership. Interviewee 12 observed:

The government's foreign investment promotion policies in the 1990s partly aimed at privatising (selling or leasing) SOEs to foreign investors. I understand that only profitable and efficient SOEs were sold out because we needed capital at that time. Certainly, the foreign buyers would only acquire the beautiful SOEs and they wouldn't buy the poorly-performed ones. I believed that domestic buyers or investors would share common views with their foreign counterparts. Therefore, selecting potential SOEs offered for privatisation is critically essential for privatisation success.

In line with the above observation, Interviewee 2 said:

Drawing lessons from two privatisation cases of BCEL and EDL-GEN, there are five main firm-level elements that made two privatisations

successful and these SOEs able to list their shares on the Lao stock exchange. First, these two enterprises are considered well-known and large SOEs in Laos. In particular, EDL-GEN is viewed to monopolise Laos' electricity generation market. Second, both SOEs have sound and effective corporate governance and are well-managed prior to being privatised. Third, their accounting and financial practices are considered to be more reliable and transparent since their accounting reports are normally audited by internationally-recognised auditing firms. Fourth, their management members and staff are also believed to be relatively qualified and competent to perform their tasks and duties. Ultimately, these SOEs seem reasonably profitable and efficient at the time of privatisation.

Sharing similar views, Interviewee 13 stated:

In addition to strong political support and commitment by the government, BCEL and EDL-GEN have had sound and healthy financial and operating performance, good management, good corporate governance mechanisms, and reliable accounting and financial practices, before privatisation. In particular, EDL-GEN used to be a revenue centre (an electricity generation division) of its parent SOE, EDL. Before privatisation, numerous preparatory activities had been undertaken, for example, a feasibility study of privatisation, corporate valuing and pricing exercises, and promotional activities such as advertisements and roadshows. Consequently, these two SOEs could be partially privatised in 2010.

In addition to good management, good corporate governance and reliable, transparent accounting practices, extensive preparatory and post-privatisation state ownership activities should be taken into account. In support for this view, Interviewee 9 remarked:

A question here is not state ownership but who should own what and in what proportion and what type of ownership is superior: private versus state ownership. The government should therefore determine a certain level of its

ownership in post-privatisation SOEs, this portion shall depend upon case-by-case considerations. I believe that the government should retain some portion of its ownership in large and/or strategic enterprises since this could not only indicate its future commitment and risk-sharing in privatised SOEs but also make the investors more confident in their investments.

In order to implement a firm-level privatisation strategy more effectively, some interviewees emphasised two important points associated with the preparation phase of privatisation: timeframe and employee-related issues. Out of 14 interviewees, seven pointed out that privatisation programs should be prepared in a reasonable and realistic timeframe. If a privatisation program is undertaken in a short period of time, it may not bring about the satisfactory outcomes expected and/or it may become questionable in terms of transparency. Interviewee 1 observed:

Preparatory timeframes for privatising some SOEs are considered extremely short and really quick. Information and data of these enterprises can be said to be reasonably unclear and lacking in detail. Consequently, outcomes from these privatisation transactions become relatively poor and do not meet our expectations and pre-determined goals.

Five interviewees believed that, in addition to limited timeframes, employee-related issues could impede privatisation processes, largely because privatisation tended to result in job losses. Partly for this reason, some management members and employees are unlikely to support the idea of privatising their SOEs. Without gaining labour support, privatisation efforts are likely to fail. The government should therefore establish a platform to communicate with employees of target SOEs about potential benefits and the negative effects of privatisation. From this, a mitigation plan can be formulated, ultimately leading to better privatisation outcomes. Interviewee 1 stated:

In 2014, we visited more than 20 SOEs and discussed with their directorship and/or management members potential privatisations of those SOEs. Only 30% of those members responded that they supported the idea of privatising their SOEs and would be willing and cooperative to work with a securities

firm in this regard. The majority of responding managers (70%) said that their SOEs had not been ready and needed some time to prepare themselves for privatisation.

These comments indicate that interviewees believed that a firm-level privatisation strategy significantly contributes to the effective implementation of privatisation programs.

5.5.6 Fairness and transparency

Around 80% of interviewees believed that a fair, transparent and credible privatisation process is also a decisive element of privatisation success. However, given the absence of specific rules on privatisation and no dedicated government agency for executing privatisation programs, these interviewees believed that such a process might be in doubt (see Sub-section 4.3.5). Without fairness and transparency, many privatisation transactions could become questionable in terms of procedures, decision-making mechanisms and preparation timeframe. As a consequence, public trust and confidence in the privatisation processes could be lacking. For example, Interviewee 8 remarked:

Some SOEs sold to domestic and/or foreign buyers, especially who had certain relationships with decision-makers in privatisation processes, might raise some questions concerning price determination, and decision-making and tendering processes.

In addition, Interviewee 9 stated:

The timeframes for preparing these two cases of BCEL and EDL-GEN were relatively short and I think that many preparation activities were not conducted according to the scheduled processes. As a consequence, the final outcomes could not be achieved as expected.

In overcoming the fairness and transparency issues, many interviewees argued that formality and predictability (e.g. rules and guidelines) were essential. This would

enhance public trust and confidence in the government's willingness and ability to handle a privatisation policy, as well as protect that policy from possible malpractice.

5.5.7 Privatisation objectives and methods

About 65% of interviewees agreed that objectives and methods for privatisation, as part of the firm-level privatisation strategy, are very critical for successful privatisation. Within the wider literature, scholars have argued that many privatisation programs have not been successful, possibly because of the lack of a clear set of objectives or due to conflicting objectives in a privatisation program (Kikeri, Nellis & Shirley 1992; Megyery & Sader 1997; Miller 2000; Vuylsteke 1988). It is suggested that privatisation objectives and methods should be defined according to the nature, type, industry and size of a candidate (SOE) for privatisation. Therefore, a case-by-case privatisation approach is of paramount importance. As Interviewee 5 stated:

We need to understand the SOE to be privatised and performing a SWOT analysis – strengths, weaknesses, opportunities, and treats – is necessary. This will help us to identify what we really need to achieve from privatising the SOE. Determining clear objective(s) for privatisation is fundamentally important.

If a main objective of privatisation is to attract know-how, expertise and/or technology, selling an SOE to strategic foreign partner(s) can be an option. But if its objective is to broaden ownership and promote a domestic stock market, share issue privatisations can be an appropriate choice. In many cases, a mixed sale method – a combination of two or more privatisation techniques – can be practical. Although clearly pre-defined privatisation objectives are considered essential, the interviewees were sceptical about how this factor could contribute to effectively implementing privatisations in Laos, since the objectives of previous privatisations have not been publicly disclosed.

5.5.8 Institutional arrangements

About 55% of interviewees believed that institutional arrangements are a critical factor in influencing the likelihood of privatisation success. Megyery and Sader (1997, p. 23) stated that “any privatisation body can function effectively only if it is sufficiently

empowered to execute its mandate [and sufficiently free] from political inference to implement privatisation”. Furthermore, an executing body should be sufficiently equipped with financial and human resources to effectively conduct privatisation. As previously discussed, however, institutional settings like this may not be evident in the case of privatisation in Laos. Interviewee 4 stated:

There is neither special law nor decree concerning privatisation nor specific government entity in charge of executing a whole privatisation process. Setting up a national committee for supervising SOEs and privatisation processes can be an alternative solution. In doing so, many privatisation-related issues (i.e. unclear and inconsistent processes and transparency issues) may be overcome.

5.5.9 Selection of potential buyer(s)

Around 50% of interviewees believed that selecting the right buyer(s), as part of a firm-level privatisation strategy, is another crucial factor influencing medium- and long-term privatisation outcomes. As discussed in Sub-section 5.5.4, understanding the ‘hidden’ objectives of buyers can increase the likelihood of favourable outcomes beyond the time of concluding privatisation transactions. Interviewees suggested that some privatised SOEs turned insolvent shortly after privatisation, such as a state-owned sugar factory, tannery factory, animal breeding factory and tobacco factory. In reference to partially selling state owned businesses to foreign strategic investor(s), Interviewee 10 said:

Foreign strategic partner(s) helps strengthen an enterprise in terms of intensive capital, management skills, know-how, technology and access to foreign markets. Besides clear privatisation objectives and proper privatisation process, some criteria for selecting potential buyers should be put in place, for example, potential buyers operating in a similar industry, financial capacity for financing a privatisation deal and business activities of the SOE, clearly pre-determined obligations and responsibilities of the buyer after privatisation. I acknowledge that two working cultures could put the enterprise at risk if both sides [seller and buyer(s)] cannot work

together. But if these cultural differences are solved, mutual benefits could then be realised.

These findings indicate that the selection of potential buyers, especially through direct sale privatisations, should be conducted more thoroughly, to ensure positive privatisation outcomes.

5.5.10 Summary

The interviewees perceived that seven critical factors can influence the likelihood of privatisation success in Laos. These are: government commitment; legal and regulatory frameworks; institutional arrangements; stakeholder involvement; public education and awareness; firm-level privatisation strategy; and fairness and transparency. Out of these seven factors, only one firm-level privatisation strategy was thought most likely to positively contribute to positive privatisation outcomes. Two other factors – government commitment and stakeholder involvement – were considered somewhat likely to positively contribute to positive privatisation outcomes; whereas the four remaining factors were thought unlikely to be important to privatisation efforts in Laos.

5.6 Collective perceptions of domestic sources of funds

This section analyses the collective perceptions of fourteen interviewees about domestic sources of funds relating to privatisation and competitive investment alternatives.

5.6.1 Domestic sources of funds for privatisation

In light of arguments about the limited domestic sources of funds and either weak or non-existent capital markets in developing countries, local participation in a privatisation process is expected to be low. Consequently, foreign share participation is inevitable since foreign sources of funds compensate for weak local financial markets (Megyery & Sader 1997; Mukherjee & Suetrong 2009; Pfeffermann 1988; Sader 1995; Savas 2000; Vuylsteke 1988; White & Bhatia 1998). Around 60% of interviewees agreed that foreign investors played a critical role in acquiring medium- and large-sized SOEs in Laos since privatisation was viewed as a policy tool to attract and promote foreign direct investments. But the picture was considered more complex than this.

It was acknowledged that, from 1989, a very limited number of local potential investors engaged either in buying SOEs or shares in BCEL and EDL-GEN. However, crucially, around 60% of interviewees believed that such low local participation had probably *not* been driven by low rates of domestic savings. These interviewees believed that domestic sources of potential funds could be sufficiently high to absorb the shares of privatisable SOEs. The challenging question was how those *hidden* funds could be mobilised through the privatisation of SOEs. Domestic demand for shares in privatised SOEs had been low, they argued, in part because of limited public education and awareness about privatisation programs and the SOEs offered for privatisation. Interviewee 2 observed:

Domestic demand for buying shares of privatised SOEs is relatively low, and consequently we have heavily relied on foreign investors to participate in buying processes. But I believe that domestic sources of hidden capital would be large enough to absorb medium and/or large privatisations. In addition to negative images of SOEs [in terms of low profitability and efficiency], public education and awareness activities are relatively limited due to the fact that we don't have enough financial and human resources, especially qualified staff, in carrying out these activities.

5.6.2 Competing investment alternatives

In addition to the lack of public education and awareness activities, low local participation in privatisation processes can be partly explained by a variety of competing investment alternatives. This includes formal deposits in commercial banks and micro-finance institutions, buying gold and hard currencies, and financial transactions in informal financial markets (including moneylenders and rotating savings and credit associations [ROSCA], known as *houay* in Laos).

Around 60% of interviewees agreed that there were a number of investment alternatives competing for scarce savings in small domestic financial markets. Many investment options appeared to provide more attractive returns than those offered by BCEL and EDL-GEN, taking account of risk-and-return mechanisms. For example, the interest rate on bank savings deposits went up to 16% per annum in 2015. On average,

micro-finance institutions paid around 12% to 16 % per year on savings deposits. In the case of moneylending and *houay* transactions, lending interest rates can be as high as 15% to 20% per month (NERI, BOL & GIZ 2013). Many interviewees suggested that if privatisable and/or privatised SOEs could not prove that they were able to offer higher returns than other investment options, potential domestic investors would shy away from buying or investing in the shares of those enterprises, resulting in low domestic participation.

Foreign investors were therefore generally the dominant buyers of medium- and large-sized SOEs and/or shares of privatised SOEs, despite the availability of domestic savings to absorb medium and large privatisation programs. The majority of interviewees argued that the availability of domestic savings, including hidden sources of funds available in informal financial markets, was large enough to absorb the shares of SOEs being privatised through share issue. The challenge remains how to mobilise such savings by using a privatisation policy in a competitive environment when a variety of investment alternatives offer more attractive returns than those provided by the partially-privatised BCEL and EDL-GEN.

5.7 Chapter conclusion

This chapter provided an analysis of the primary data collected through qualitative interviews with 14 well-informed stakeholders in Vientiane Capital. It also presented their perceptions of the business performance of remaining SOEs in Laos. Given that the majority of those enterprises were viewed poorly in terms of performance, the main issues causing their inefficiency were discussed. Perceptions about the implementation of privatisation programs were then analysed, as well as the critical factors considered important for influencing privatisation success or failure in the Lao context. Specifically, several essential findings were drawn from the analysis of this qualitative interview dataset. However, while these findings could lead to some possible sound conclusions and partly answer many of the research questions in this study, they required further investigation. Consequently, the next three chapters provide the analysis of a much larger dataset, collected from quantitative survey questionnaires using SEM. Chapter 6 outlines the data preparation and descriptive data analysis employed before conducting further analysis.

Chapter 6

Data Preparation and Descriptive Data Analysis

6.1 Introduction

In Chapter 5, the findings from the qualitative interviewees with 14 well-informed stakeholders were discussed. The main purposes of this chapter are to explain the evaluation and preparation of the primary data collected from quantitative survey questionnaires, before preliminary data analyses was performed using SEM techniques. Following this, a descriptive data analysis of the survey data is presented.

This chapter first describes the response rate of the distributed questionnaire forms. It then outlines data evaluation and preparation of the model analysis variables, including editing and coding, missing data, data imputation, descriptive analyses, correlation coefficients and normality of the fully observed variables. Following discussion of the respondents' opinions and perceptions of SOE business performance and associated challenges, this chapter then presents their perceptions of overall privatisation programs in Laos. It also discusses the respondents' thoughts on the possible availability of domestic funds and investment alternatives.

6.2 Response rate

As already discussed, in addition to the qualitative face-to-face interviews with well-informed stakeholders, a self-administered quantitative survey was conducted between 28 February and 12 April 2015 in Vientiane Capital, Laos. As part of the invitation process, 500 survey packages were randomly delivered to potential respondents in the pre-determined sampling frame. Out of 500 survey forms, 400 were returned to the researcher, equivalent to 80% of the total forms distributed. The majority of non-respondents were those who worked in private sector entities. As will be discussed in the following section, 41 forms were dropped from the dataset, partly due to nonresponse and 'don't know' response values. Consequently, 359 forms were retained for analysis. Because of the high response rate, it can be said that the respondents took the survey seriously and with enthusiasm, which was a positive for this study.

6.3 Data evaluation of model analysis variables

This section discusses three aspects of preparing the data file for analysis: data editing and coding, handling missing data, descriptive analysis and normality of fully observed variables as proposed in the hypothetical privatisation model. The main purposes of the preparation process are to minimise potential errors in data entry, handle missing data, and conduct descriptive analyses of model variables.

6.3.1 Data editing and coding

After collecting primary data, responses need to be assigned a numerical code before entering those responses into a statistical analysis package like SPSS (Field 2009; Pallant 2011). Coding not only involves a process of using numbers to label the responses, but also creating a classification system that imposes a particular order on the data for analysis purposes (de Vaus 2001). In this study, the data were coded by allocating specific numbers to responses (e.g. 1=strongly disagree, 5=strongly agree; -99=nonresponse, -88=don't know, -77=non-selected multiple response, and so on). Each question had a unique variable name (i.e. gov1 is referred to as the first question concerning government commitment). A coding sheet is shown in Appendix 1-3.

Data screening and cleaning procedures were also conducted in order to check the data file for errors, partly due to human errors in data entry, and correct them. Each variable was screened and checked, if the associated score was out of range, by performing descriptive analysis (e.g. case summaries, frequency, range, minimum and maximum estimates). When errors occurred, it was necessary to refer back to the questionnaires and confirm the data before correcting them. Specific statistical techniques could only be applied once the data file had been cleaned.

6.3.2 Handling missing data

In studies using a questionnaire-based survey, non-response data tends to be common. In addition to non-response values, 'don't know' response options in the questionnaire were treated as missing values in this study (see Sub-section 3.7.5). For this reason, missing values could not be avoided. Arbuckle (2014) and Enders (2006) argued that MLE is the best method for treating missing data because it produces the least bias in

the missing value. Byrne (2010) compared the output from an incomplete data model with outputs from a complete data model and found that MLE imputation yielded very similar chi-square and fit measures, despite 25% data loss in the incomplete data model. However, the presence of missing data in the raw data makes MLE unsuited to calculate model fit indices (i.e. chi-square and competitive fit index) and modification indices that can help improve model fitting (Arbuckle 2014). Afifi and Clark (1997) also claimed that most multivariate analyses require fully-observed variables since a case with even one missing value will not be used in the analysis. Consequently, in this study, it was necessary to have a set of fully observed data prior to submitting it to SPSS AMOS 22.

Missing data can result from two possible causes: researcher-related activities (e.g. data collection and/or data entry problems) and/or any actions on the part of the respondent (e.g. refusal to answer) (Hair et al. 2006). Importantly, missing data could impact research conclusions and the generalisation of results (Acock 2005; Allison 2002; Arbuckle 2014; Enders 2006, 2010; Hair et al. 2006; Little, RJA & Rubin 2002; Schafer 1997; Tabachnick & Fidell 2007; Wiggins & Sacker 2002). In order to obtain complete data, two possible strategies for handling missing data can be adopted: dropping the cases with missing values, which results in the reduction of the sample size for analysis; or applying remedies for accommodating missing values into multivariate analysis (Acock 2005; Allison 2002; Arbuckle 2014; Enders 2006, 2010; Hair et al. 2006; Little, RJA & Rubin 2002; Schafer 1997; Tabachnick & Fidell 2007; Wiggins & Sacker 2002).

To handle missing data, this study adopted a four-step process, as suggested by Hair et al. (2006): determining the type of missing data; identifying the extent of missing data; diagnosing the randomness of missing data processes; and selecting the imputation method.

1. Determining the type of missing data

Missing data are divided into two categories: ignorable and non-ignorable. Ignorable missing data are expected as part of the research design, meaning that specific remedies for missing information are not required since the allowance for missingness are inherent in the technique used (Afifi & Clark 1997; Hair et al. 2006; Little, RJA &

Rubin 2002; Schafer 1997). Such missing data includes: gathering information from sample observations rather than an entire population, specific designs of the data collection instruments (e.g. skip response options), and censored data (e.g. cause or time of death). Non-ignorable missing data fall into two groups: known versus unknown processes based on their source (Afifi & Clark 1997; Hair et al. 2006; Little, RJA & Rubin 2002; Schafer 1997). Known missing data processes can be identified as due to procedural factors (e.g. errors in data entry and failure to complete the entire questionnaire), whereas unknown missing data processes are unlikely to be identified (e.g. the refusal to answer certain questions due to their sensitive nature).

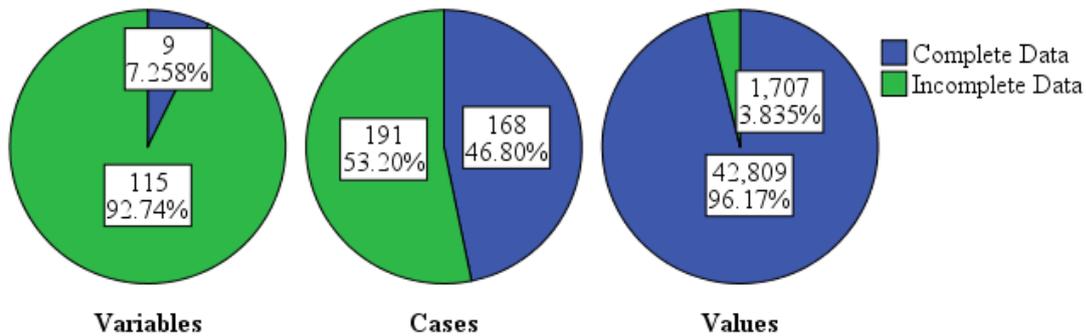
Based on this information, missing data gathered from the questionnaires for this study could not be classified as ignorable.

2. Identifying the extent of missing data

Given that the missing data had been classified as not ignorable, it was necessary to identify the extent or amount of missing data. From the initial analysis of missing data using SPSS, it was found that the percentage of total missing data was 7.73% of 49,600 cells (values), in which non-response and 'don't know' response values respectively accounted for 2.38% and 5.36%. Forty-one cases were found to accommodate missing data, ranging between 25% and 78% of 124 variables. As a general rule of thumb, variables or cases with 50% or more missing data should be deleted (Hair et al. 2006; Wiggins & Sacker 2002), but an individual case or observation with under 10% missing data can generally be ignored (Hair et al. 2006). Variables with as little as 15% missing data are candidates for deletion, but higher levels of missing data (20 to 30%) can often be remedied (Hair et al. 2006). Given these arguments, this study adopted a cut-off point of 25% missing data in order to omit variables and contain as much testable information as possible. As a consequence, 359 samples were retained for further investigation.

After removing 41 cases, the proportion of total missing data dropped to 3.84% of 44,516 cells (values), as identified in Figure 6.1 below. Non-response and 'don't know' response values now respectively accounted for 1.02% and 2.82%. Only three variables contained around 10% missing data. Even though there are no consistent definitions of

small in terms of the amount of missing data - ranging from 5% or less (Schafer 1999; Tabachnick & Fidell 2007) to 10% or less (Hair et al. 2006) - it can be concluded that the proportion of missing data (at 3.84%) used in this study was relatively small. As suggested, missing data of less than 10% for each case or observation can be ignored.



Source: Author's calculations

Figure 6.1 Overall summary of missing values

3. *Diagnosing the randomness of missing data processes*

Having determined that the overall extent of missing data was substantial enough to warrant action, the next step was to ascertain the level of randomness present in the missing data. This then determines the appropriate remedies available. According to Little, RJA and Rubin (2002) and Hair et al. (2006), missing data could be replaced (imputed) with unbiased estimates under two conditions: missing completely are random (MCAR) and missing at random (MAR). MCAR is defined as data missing on a variable Y such that the missingness is independent of any other variable and independent of the values of Y itself. On the other hand, MAR is defined as data missing on a variable Y such that the missingness may be dependent of another variable but is independent of the values of Y itself. These authors also suggest that the data process can fall into a third condition, known as a missing not at random (MNAR) condition, meaning that such a process depends on the actual value of the missing data. If a MNAR condition occurs, this is the most difficult condition to model for remedying missing data (Little, RJA & Rubin 2002).

Expectation Maximisation (EM) missing data analysis in SPSS is employed in this step to examine the randomness of missing data. The EM approach is an iterative (repetitive) trial-and-error process (the E and M stage) in which the E stage makes the best possible

estimates of the missing data and the M stage then makes estimates of the parameters (means, standard deviations, or correlations), assuming that the missing data are replaced (Afifi & Clark 1997; Cunningham 2008; Enders 2006; Hair et al. 2006). The test makes a comparison of the actual pattern of missing values with what would be expected if the missing data are MCAR. When significant differences (i.e. greater than 0.05) are found, it can be said that the observed missing mechanism does not differ from the random pattern (Afifi & Clark 1997; Cunningham 2008; Enders 2006; Hair et al. 2006).

In this study, Little's MCAR test showed chi-square (χ^2) = 18847.508, degrees of freedom (df) = 17796, and a significant level ($p < 0.05$). Thus, the missing data process could not be classified as MCAR and MNAR might be present. As a result, a limited range of potential remedies for missing data might be available.

4. Selecting the imputation method

In regard to the possibility of non-random missingness mechanisms, this study adopted a data filled-in or imputation method to remedy the missing data. Imputation is the process of calculating and replacing the missing score based on valid scores of other variables and/or cases in the sample (Afifi & Clark 1997; Hair et al. 2006; Schafer 1997; Scheffer 2002; Wiggins & Sacker 2002). This imputation method can be divided into two groups: single versus multiple imputation (model-based) methods. Single-imputation methods are techniques that use only valid data or estimate replacement values for the missing data (e.g. mean substitution, regression-based substitution, and single imputation using EM estimation); whereas multiple imputation methods generate more than one estimated value for each missing observation for multiple imputed datasets.

Although single imputation of 5% missing data is fairly reasonable and accurate, this technique underestimates the standard errors because it fails to incorporate the uncertainty inherent in the imputation process (Schafer 1997). However, Tabachnick and Fidell (2007, p. 69) argued that multiple imputation “makes no assumptions about whether data are randomly missing”. Hair et al. (2006, p. 63) also argued that multiple imputation methods can not only “accommodate both non-random and random missing

data mechanisms [but also] produce the best representation of original distribution of values with least bias". Wiggins and Sacker (2002) and Scheffer (2002) also believed that these methods work acceptably well with 5% missing and are fine with missing data up to 25%. Furthermore, five imputations are sufficient to achieve efficiency approximating 95% for missingness at 25% (Schafer 1997). Based on these arguments, a multiple imputation technique method with five imputations was used in this study.

Multiple imputation can produce the predicted values for missing data that do not fall in the valid ranges for variables; for example, a value of six may be predicted for a five-point scale. Such out-of-range problems may occur if variables are strictly categorical and/or lack normal distribution of data (Allison 2002; Hair et al. 2006; Schafer 1997). Allison (1987) suggested that specifying a maximum and/or a minimum value for a particular variable can help overcome such out-of-range problems. This technique discards all random draws outside that range and takes additional draws from their predictive distribution until it gets one within the valid range. Therefore, certain constraints (e.g. 0 – 1 for binary variables and 1 – 5 for 5-point variables) were imposed on all variables to be imputed to prevent the predicted values for missing data from falling out of valid ranges. In this study, 91 model analysis variables were selected for the five multiple imputations. As a result, five filled-in datasets were completed, free of missing data. The resulting data could now be used for further analysis.

6.3.3 Pooling statistical estimates derived from multiple imputation datasets

Out of the five datasets, only one (Dataset 1) was used for in-depth SEM analyses. The four other datasets were used for validation and confirmation of the findings derived from Dataset 1. According to Enders (2006), chi-square statistics can be analysed and combined into a single inference, but there are no guidelines for combining other fit indices from multiply imputed datasets when conducting SEM analysis. Consequently, this study adopted a simple mean (average) technique for key parameter estimates from the five datasets for validation and comparison purposes prior to making final conclusions. The *p*-value estimates for all path coefficients were pooled (combined) using the pooling steps recommended by Gelman et al. (2014).¹¹

¹¹ For detailed formulas, see Gelman et al. (2014, p. 453).

6.3.4 Descriptive analysis of model analysis variables

The 91 observed variables (see the coding sheet in Appendix 1-3) proposed for the hypothesised privatisation model (see Section 2.12) were classified into two groups of 87 five-point Likert variables and four binary observed variables. Table 6.1 presents a summary of the descriptive statistics of these analysis variables using Dataset 1 (see Appendix 2-1). For example, *government commitment* has six five-point observed variables, with the mean scores ranging from 3.37 to 3.98, and standard deviations ranging from 0.95 to 1.07. The mean scores of five observed variables measuring *the existence of a legal and regulatory framework* ranged from 3.68 to 3.83, with standard deviations ranging from 0.94 to 0.99. For binary *behavioural intentions*, there were four observed variables, with the mean scores ranging from 0.42 to 0.73, and standard deviations ranging from 0.44 to 0.49.

Table 6.1 Descriptive statistics of ninety-one model analysis variables

Hypothetical constructs	Items	Item scores		Standard deviations	
		Min	Max	Min	Max
Independent constructs					
Government commitment [†]	6	3.37	3.98	0.95	1.07
Legal and regulatory framework [†]	5	3.68	3.83	0.94	0.99
Institutional arrangements [†]	11	3.13	3.47	0.91	1.08
Stakeholder involvement [†]	6	3.42	3.83	0.83	0.96
Public awareness [†]	6	3.24	3.44	1.00	1.17
Firm-level privatisation strategy [†]	21	3.21	3.66	0.89	1.03
Fairness [†]	16	3.36	3.68	0.81	0.96
Dependent constructs					
Positive privatisation outcomes [†]	9	3.22	3.65	0.87	0.98
Impacts of privatisation on Laos' financial system [†]	7	3.31	3.80	0.80	1.00
Behavioural intentions ^{††}	4	0.42	0.73	.44	.49

Source: Author's calculations

Note: [†]5-point items: 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, and 5=strongly agree; and ^{††}Binary variables: 0 = yes and 1 = no

The above findings, derived from the descriptive estimates of the model analysis variables, provided an overall understanding and explanation of observed variables and hypothetical constructs. However, at this stage it was not known whether the given variables could measure their pre-determined constructs and how these constructs would behave in the hypothesised privatisation model. Before performing EFA, tests for correlation coefficients and normality were necessary pre-conditions.

6.3.5 Tests for correlation coefficients of model analysis variables

Correlation analysis using Dataset 1 was employed to assess the strength and direction of the linear relationship between variables. A correlation value of 0.30 or more suggests a reasonable relationship between two variables and is a pre-condition for performing factor analysis (Abu-Bader 2010; Acock 2014; Bollen 1989; Hair et al. 2006; Pallant 2011; Stevens 2009; Tabachnick & Fidell 2007). Tabachnick and Fidell (2007, p. 614) recommended that “if no correlation exceeds 0.30, use of [factor analysis] is questionable because there is probably nothing to factor analyse”. Inspection of the correlation matrix using Pearson product-moment correlation coefficients revealed that there were 45.30% of 4,095 pairs of data whose correlation coefficients were greater than 0.30 at the 0.01 significant level. It could therefore be said that the relationships among the observed variables were reasonably strong and the application of principal factor analysis was feasible.

Multicollinearity exists when the independent variables are highly correlated and essentially measure the same thing ($r = 0.90$ and above). If this is the case, one of the highly inter-correlating variables should be dropped from the scale since it is difficult to identify how important each of them is as an indicator (Acock 2014; Bollen 1989; Hair et al. 2006; Pallant 2011; Tabachnick & Fidell 2007). From the correlation matrix, there was only one pair of correlating coefficients (greater than 0.80): public2 and public3 ($r = 0.82$) (see the coding sheet in Appendix 1-3), but this value was lower than the cut-off point of 0.90. It can be thus concluded that multicollinearity was unlikely in this dataset.

6.3.6 Assessing normality of model analysis variables

This study employed Kolmogorov-Smirnov statistics to assess normality of the distribution of scores using Dataset 1. A non-significant result (i.e. greater than 0.05)

reflects normality, but a significant value (i.e. less than 0.05) suggests violation of the assumption of normality. The Kolmogorov-Smirnov statistics revealed the presence of statistically significant values ($p < 0.001$), indicative of the non-normal distributions of data (see Appendix 2-2). Specifically, nearly all univariate skewness and kurtosis values fell into a range of $|1|$ and only a couple of these statistical values were slightly above $|1|$ (see Appendix 2-1). Skewness statistics of all 91 observed variables (see the coding sheet in Appendix 1-3) ranged from -1.034 to 0.311. Out of 91 variables, 89 had negatively skewed distributions and 2 had positively skewed. Specifically, only five observed variables had absolute kurtosis statistics greater than 1.00, namely stake1 (1.067), impact2 (1.045), intent1 (-1.599), intent2 (-1.914), and intent3 (-1.021). The kurtosis values of the remaining 86 variables fell between -0.987 and 0.744. There were 69 variables with kurtosis values below 0, indicating that their distributions were relatively flat. It could therefore be said that the data was not normally distributed.

As discussed in Sub-section 3.7.6, MLE is a significantly robust method when applied to a situation where most variables have univariate skewness and kurtosis values (range: -1.0 – +1.0), and fairly robust with moderately non-normal data (i.e. skewness ≤ 2.0 , kurtosis ≤ 7.0). Since almost all model analysis variables had skewness and kurtosis values in the range -1.0 to +1.0, the MLE method was used to perform SEM techniques in this study.

6.4 Characters of the respondents

6.4.1 Gender

Table 6.2 illustrates the gender distribution for study participants who completed the questionnaire. Nearly 65% of the respondents were male, giving a ratio of male versus female respondents of about 1.8:1.

Table 6.2 Gender

	Frequency	Percent
Female	126	35.1
Male	233	64.9
Total	359	100.0

Source: Author's calculations

6.4.2 Age

Table 6.3 highlights the age distribution of respondents. The largest group of respondents (28%) fell into the 30-34 year age group, followed by the 35-39 year age group (18%), the 25-29 year age group (14%), the 40-44 year age group (13%), and the 45-49 year age group (around 10%). Generally speaking, the respondents could be categorised into two age groups: 34 years old and younger (164 respondents) and 35 years old and older (195 respondents).

Table 6.3 Age

	Frequency	Percent
Valid Under 25 years	11	3.1
25-29 years	51	14.2
30-34 years	102	28.4
35-39 years	65	18.1
40-44 years	47	13.1
45-49 years	34	9.5
50-54 years	31	8.6
55 years or more	18	5.0
Total	359	100.0

Source: Author's calculations

6.4.3 Educational level

Table 6.4 illustrates the educational level distribution of the respondents. Those holding master degrees represented 51%, while those holding bachelor degrees accounted for 40% of total sample. Eighteen respondents held a diploma or fewer qualifications, while 13 held a PhD. Generally speaking, the respondents could be categorised into two groups: tertiary educated (162 respondents) and postgraduate educated (197 respondents), and can be said to be well-educated. Andrews (1984) suggested that specific respondent characteristics, such as high educational levels, can produce higher data validity.

Table 6.4 Educational level

	Frequency	Percent
Diploma degree or fewer qualifications	18	5.0
Bachelor degree	144	40.1
Master degree	184	51.3
Doctorate degree	13	3.6
Total	359	100.0

Source: Author's calculations

6.4.4 Education areas

Table 6.5 reveals the distribution of respondents' educational backgrounds. Around 60% of the total sample had educational backgrounds in business-related fields, namely business administration (29%), banking and finance (17%), and economics (14%). The respondents who had social science backgrounds accounted for about 20%, consisting of: law (12%), education (4%) and public administration (4%). Those with backgrounds in other fields of education, such as civil engineering, agriculture, health, and information technology, represented about 20% of the entire sample.

Table 6.5 Education areas

	Frequency	Percent
Business administration	105	29.2
Banking and finance	61	17.0
Economics	50	13.9
Law	43	12.0
Education	15	4.2
Public administration	13	3.6
Others	72	20.1
Total	259	100.0

Source: Author's calculations

6.4.5 Workplaces

Table 6.6 indicates the distribution of respondents across a variety of workplaces. Respondents working for government-related agencies accounted for about 51%, while

those working for SOEs represented 20% of total sample. The respondents who worked for other organisations, such as joint-venture companies, privately-owned companies and international organisations, accounted for about 29%. Generally speaking, respondents could be divided into two groups: those working for the state, including 185 government-related agencies and 71 SOEs (256); and those working for private-sector entities and others (103).

Table 6.6 Workplaces

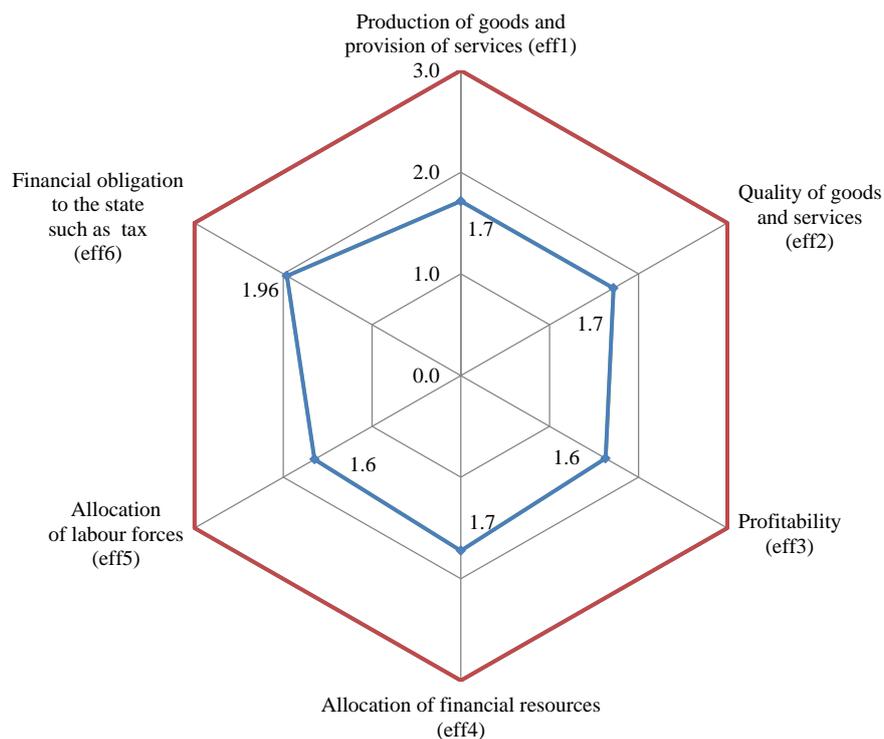
	Frequency	Percent
Government-related agencies	185	51.5
SOEs	71	19.8
Domestic and foreign private companies	24	6.7
Public-private joint-venture companies	21	5.8
Domestic wholly-owned companies	19	5.3
Foreign wholly-owned companies	17	4.7
Others	22	6.1
Total	359	100.0

Source: Author's calculations

6.5 Perceptions of SOE business performance and associated challenges

6.5.1 The business performance of remaining SOEs

Respondents were asked to rate their perceptions of SOE business performance and efficiency when compared with their private sector counterparts according to three scores: lower efficiency (1), equivalent efficiency (2), or higher efficiency (3). Figure 6.2 presents the mean scores of six performance dimensions: profitability (1.6); utilisation and allocation of labour forces – employment performance (1.6); utilisation and allocation of financial resources (1.7); quality of goods and services (1.7); production of goods and provision of services (1.7); and financial obligations to the state, such as tax (1.96). Figure 6.2 also shows that the mean scores of all performance dimensions were below the score 2 (equivalent efficiency). Generally speaking, respondents viewed the SOE sector as underperforming, in terms of profitability and efficiency, when compared to private sector companies.



Source: Author's calculations

Figure 6.2 Business dimensions: SOEs versus private companies (mean scores)

6.5.2 Challenges and difficulties faced by SOEs

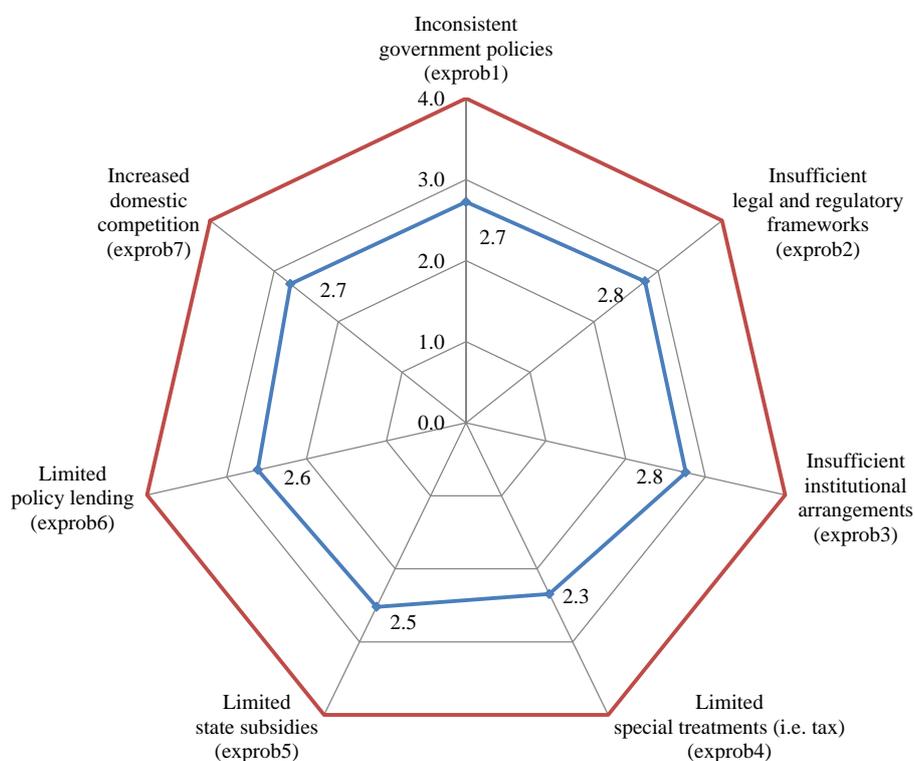
State ownership, the wide range of literature argue, leads to underperformance when compared to other forms of ownership. Respondents were asked to rate their opinions about the internal and external challenges and difficulties that could lead to weak business outcomes. Respondents were asked to rate against a five-point scale of external and internal challenges and difficulties: no problem (0), small (1), medium (2), big (3), and very big (4).

External challenges and difficulties

Respondents were first asked to rate their views about major *external* challenges and difficulties that produced weak business performance. In order to group seven variables based on the characteristics they possessed, a cluster analysis technique was employed in this study. The results of cluster analysis estimates revealed that external challenges and difficulties appeared to fall into three groups, as follows:

1. Group 1 – *institutionalism supports* – consisting of inconsistent government policies (mean = 2.7), insufficient legal and regulatory frameworks (mean = 2.8), and insufficient institutional arrangements (mean = 2.8).

2. Group 2 – *finance-related supports* – consisting of limited special treatments, such as tax (mean = 2.3), limited state subsidies to the SOEs (mean = 2.5), and limited policy lending to the SOEs (mean = 2.6).
3. Group 3 - *increased market competition* (mean = 2.7).



Source: Author's calculations

Figure 6.3 External challenges and difficulties faced by SOEs (mean scores)

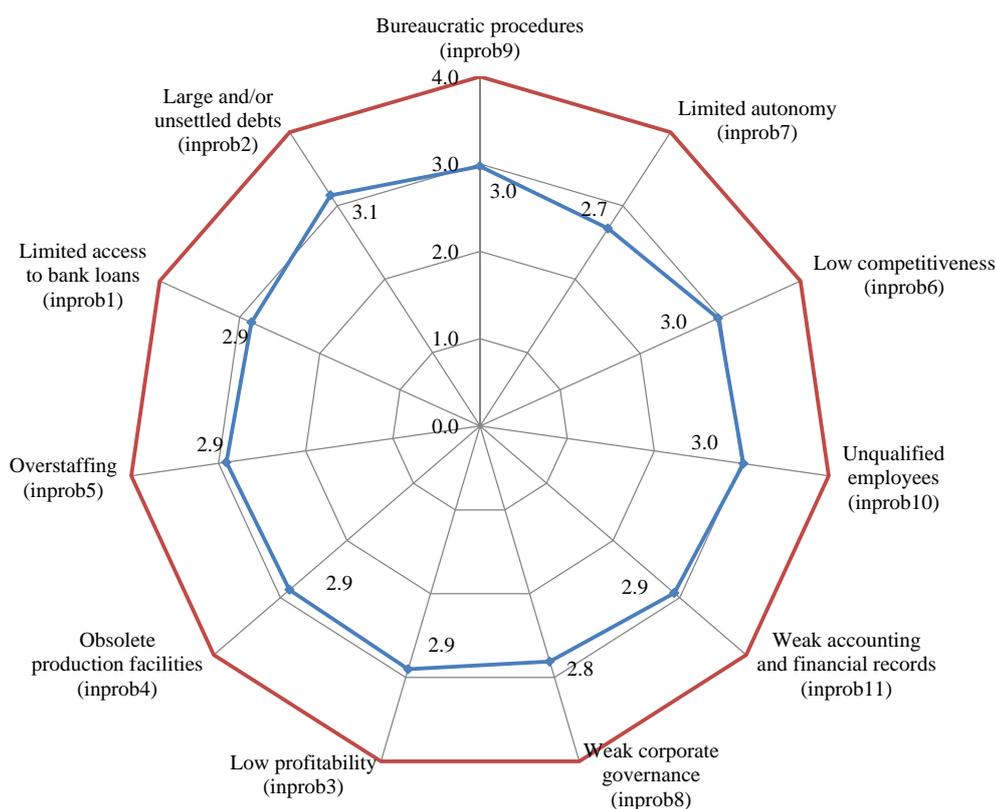
As shown in Figure 6.3, the mean scores of these seven aspects in the three groups were between 2 and 3, meaning that respondents believed that the SOE sector's problems ranged from medium to big. Besides the increased market competition resulting from the implementation of the NEM of 1986, the first group (institutionalism supports) appeared to remain a big challenge for SOEs. However, the second group (finance-related supports) was considered less problematic.

Internal challenges and difficulties

Respondents were also asked to rate their views about major *internal* challenges and difficulties that produced weak business performance. In order to group 11 variables based on the characteristics they possessed, a cluster analysis technique was employed

in this study. The results of cluster analysis estimates revealed that these internal challenges and difficulties appeared to fall into six groups, as follows:

1. Group 1 – *state intervention* – consisting of bureaucratic procedures (mean = 3.0) and limited autonomy (mean = 2.7).
2. Group 2 – *weak management and corporate governance* – consisting of low competitiveness (mean = 3.0), unqualified employees (mean = 3.0), weak accounting and financial records (mean = 2.9), and weak corporate governance (mean = 2.8).
3. Group 3 – *weak profitability and productivity* – consisting of low profitability (mean = 2.9) and obsolete production facilities (mean = 2.9)
4. Group 4 - *overstaffing* (mean = 3.0)
5. Group 5 - *limited access to bank loans* (mean = 2.9).
6. Group 6 - *large and/or unsettled debts* (mean = 3.1)



Source: Author's calculations

Figure 6.4 Internal challenges and difficulties faced by SOEs (mean scores)

As shown in Figure 6.4, the mean scores of these 11 aspects in the six groups were very close to 3 (big problems). Consequently, it can be said that internal challenges and

difficulties were viewed as likely to be significant contributing factors to poor SOE business performance.

The respondents' perceptions and views about SOE poor business performance and the major challenges that resulted in weak outcomes were consistent with findings from the qualitative interviews.

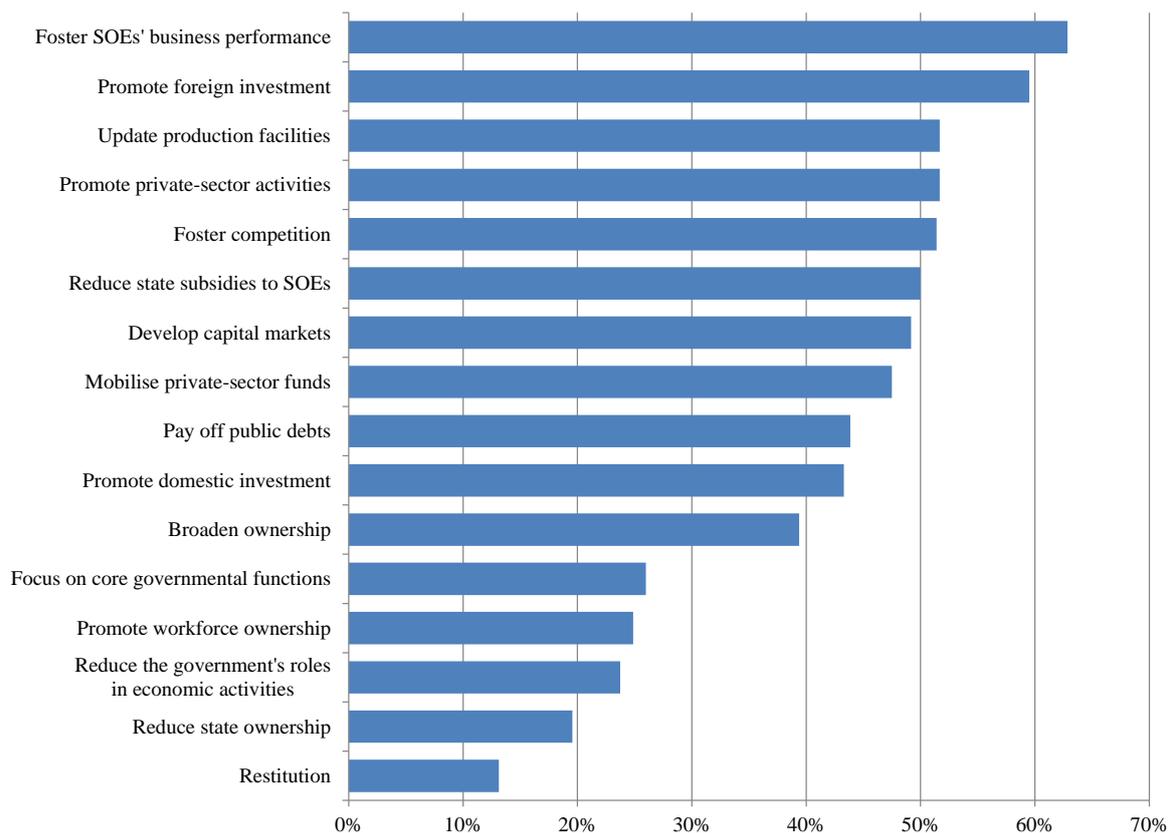
6.6 Perceptions about overall privatisation policy in Laos

The Lao government initiated its privatisation policy in 1989 but, as has been discussed, privatisation objectives and methods remained unclear. Within this context, this section examines the collective views and perceptions of different stakeholders about privatisation methods.

6.6.1 Objectives of privatisation

Respondents were asked to select one or more possible privatisation objectives that they believed were relevant in the Lao context. Their responses are presented in Figure 6.5. Around 63% of respondents believed that privatisation was aimed at fostering SOE financial and operating performance, while 60% felt that privatisation was used to promote foreign investment. The objectives of privatisation, as discussed in Section 2.4, could be classified into four groups:

1. Group 1 - *efficiency/economic development* – consisting of fostering SOEs' business performance (63%), promoting foreign investment (60%), updating production facilities (52%), promoting private sector activities (52%), fostering competition (51%), developing domestic capital markets (49%), and promoting domestic investment (43%).
2. Group 2 - *financial objectives* – consisting of reducing state subsidies to SOEs (50%), mobilising private sector funds (48%), and repaying public debts (44%).
3. Group 3 - *distributional objectives* – consisting of broadening ownership (40%), promoting workforce ownership (25%), and restitution (13%).
4. Group 4 - *political objectives* – consisting of focusing on core governmental functions and responsibilities (26%), reducing the government's role in economic activities (24%), and reduce state ownership (20%).



Source: Author's calculations

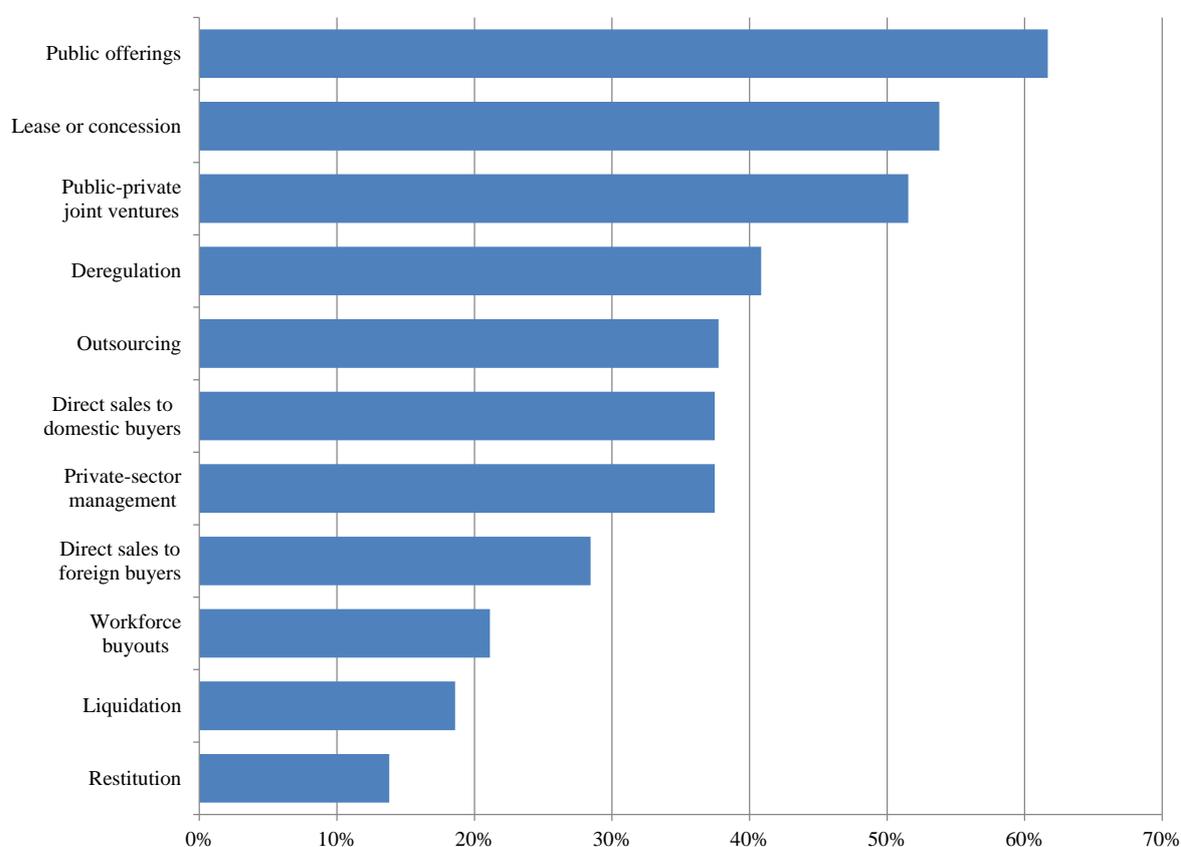
Figure 6.5 Objectives of privatisation

From the above discussion, it can be concluded that the respondents believed that privatisation was used mainly to serve three broad objectives: efficiency, economic development, and financial objectives (rather than political objectives).

6.6.2 Methods of privatisation

In light of the multiplicity of privatisation objectives, respondents were asked what techniques were normally employed to achieve pre-determined privatisation objectives. Their responses are shown in Figure 6.6. Out of 11 options, three were believed to be the major privatisation methods employed in Laos: public share offerings (62%), lease or concession (54%), and public-private joint-ventures (52%). It is perhaps not surprising that 62% of respondents thought that SOEs were normally privatised through public share offerings and listed on the LSX, given the government's recent privatisation efforts in relation to the establishment and development of the Lao capital (stock) market, and campaign activities in this regard. Other privatisation techniques identified by respondents included regulation, outsourcing, and direct sales to domestic

and foreign buyers. Only 14% of the respondents felt that restitution was used for privatisation purposes.



Source: Author's calculations

Figure 6.6 Methods of privatisation

6.7 Perceptions about domestic sources of funds and investment alternatives

The findings from the interviews (see Section 5.6) suggested that potentially available domestic capital would be high enough to absorb the privatisation of medium and large SOEs. However, privatised SOEs would need to prove that they could produce more competitive rates of return than other investment opportunities in formal and/or informal capital markets. This section presents the respondents' views and perceptions about the possible availability of domestic capital and competing investment options in Laos.

6.7.1 Domestic capital availability

The respondents were asked to rate their perceptions about the availability of domestic capital (savings) to absorb privatisable SOEs in both formal and informal financial markets. As seen in Table 6.7, the majority of respondents (40%) believed that the

domestic source of funds potentially available to absorb privatisable SOEs was either high or very high; 31% believed it was low or very low. The remaining portion (26%) could not decide whether the levels of domestic funds would be sufficient to support privatisation programs. The overall score gave an average of 3.12 according to the following five-point scale: very low (1), low (2), neutral (3), high (4), and very high (5). It can therefore be concluded that, generally speaking, respondents believed domestic savings would be large enough to absorb the privatisation of medium and large SOEs.

Table 6.7 Opinions on the availability of domestic savings

	Frequency	Percent	Valid percent	Cumulative percent
Very high	21	6	6	6
High	123	34	35	41
Neutral	95	26	27	68
Low	98	27	28	96
Very low	13	4	4	100
Total	350	98	100	
Missing value	9	3		
Total	359	100		

Source: Author's calculations

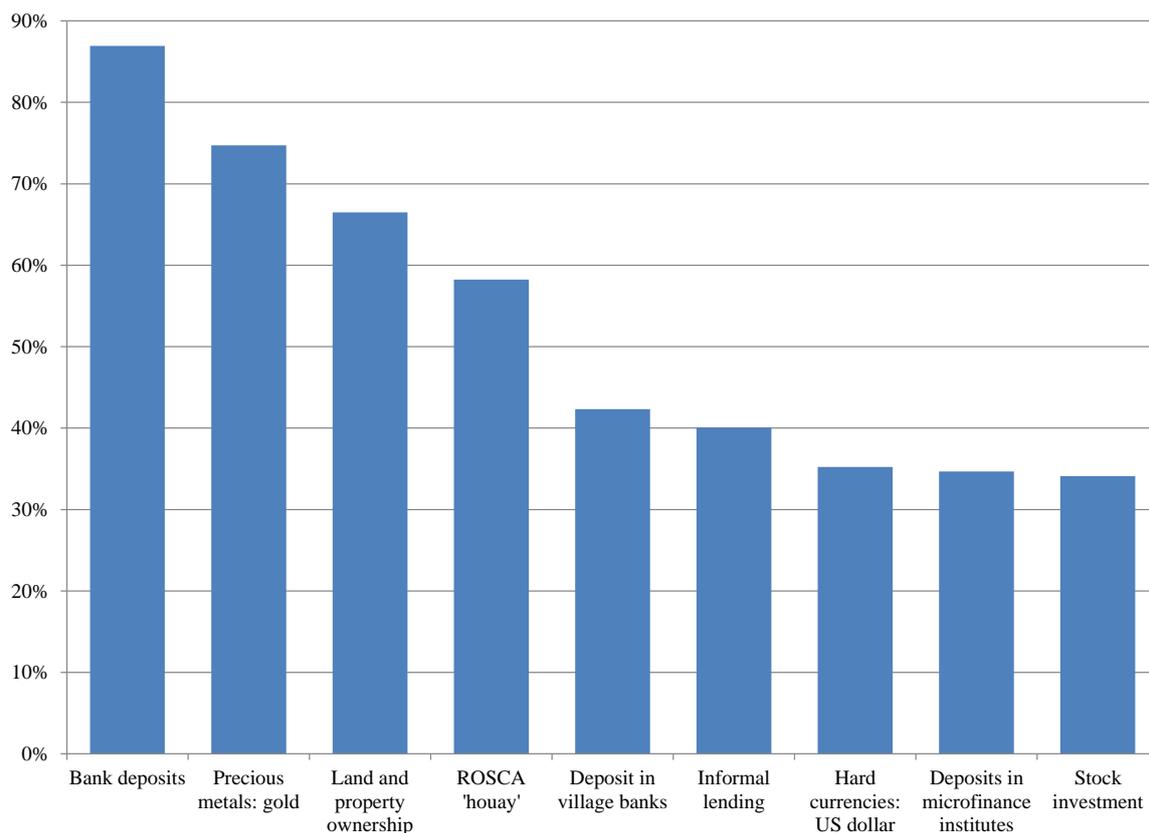
6.7.2 Competing investment opportunities

Respondents were asked about 11 investment alternatives that Lao people generally chose. As shown in Figure 6.7, these alternatives could be categorised into five groups, according to the percentage of responses:

1. Group 1 (bank deposits).
2. Group 2 (holdings of assets, including gold, hard currencies and land ownership).
3. Group 3 (informal money markets including moneylending and ROSCA 'houay').
4. Group 4 (deposits in micro-finance institutes and village banks).
5. Group 5 (stock investment).

About 87% of respondents believed that Lao people generally deposited their savings in commercial banks, whereas about 75% felt that people normally invested in gold and 66% believed that people opted for land ownership. About 58% of respondents thought

people also engaged in the informal credit markets of ROSCA and 40% believed in the choice of moneylending. Among the 11 investment opportunities, stock investments were believed to be the least likely (34%). From these findings, it can be concluded that investment opportunities in Laos are perceived to be highly competitive, with formal, semi-formal and informal financial markets competing for limited financial resources in a small market.



Source: Author's calculations

Figure 6.7 Perceptions about competing investment alternatives

6.8 Chapter conclusion

This chapter presented survey questionnaire response rates and the general characteristics of survey respondents. Their views and perceptions about SOE business performance were also examined, as well as the external and internal challenges faced by SOEs during their normal business operations. The findings suggest that state intervention in the internal affairs of remaining SOEs was considered a dominant factor causing poor SOE performance and inefficiency. This chapter also discussed the possible availability of domestic savings in both formal and informal financial markets,

plus competing investment options in Laos. Domestic capital could potentially be large enough to absorb the privatisation of medium and large SOEs, but other investment opportunities might be viewed as more attractive. As a consequence, SOEs need to become more competitive in this regard.

To prepare the primary quantitative data before conducting SEM, a series of data evaluation processes were performed: data editing and coding, missing data, data imputation, descriptive analyses, correlation coefficients and normality of the fully observed variables. Missing data in the model analysis variables were addressed using five multiple imputations. However, this study only used one dataset for in-depth analyses (Dataset 1), with the four other datasets used for validation and comparison to validate research findings. The next chapter focuses on the preliminary data analysis.

Chapter 7

Preliminary Data Analysis

7.1 Introduction

The main purpose of this chapter is to analyse the primary data (Dataset 1) in order to assess unidimensionality, construct reliability and discriminant validity. Specifically, the chapter presents general guidelines for performing SEM techniques. Exploratory principal factor analysis used to assess whether pre-specified indicator variables were responsive to their pre-defined latent constructs is also outlined. Ten single-factor congeneric measurement models were conducted to further examine unidimensionality of the given variables and construct reliability, these too are discussed. In order to test construct discriminant validity, this chapter analyses a full confirmatory factor analysis measurement model. The penultimate section presents key findings derived from the preliminary data analysis.

7.2 General guidelines for performing structural equation modelling

This study followed the general guidelines commonly used in performing SEM techniques: a two-step modelling approach, parameter estimation criteria, construct reliability, and model fit indices.

7.2.1 Two-step model-building approach

This study adopted the two-step model-building approach recommended by Anderson and Gerbing (1988). This approach can deal with the problem of how to isolate the source of poor fit more precisely than a one-step modelling approach. In the one-step procedure, the measurement and structural components of the structural regression model are simultaneously analysed in a single analysis (Kline 2011). Conversely, the two-step approach first involves the assessment of confirmatory factor analysis (CFA) measurement models to ensure that observed variables are empirically unidimensional and reliable to measure each construct in a given model (Anderson & Gerbing 1988). Before performing the CFA, it is recommended that EFA be used in situations where links between the observed and latent variables are unknown or uncertain (Byrne 2010; Kline 2011; Mulaik 2009; Mulaik & Millsap 2000). The exploratory mode also helps identify the minimal number of underlying factors or dimensions that reflect what the

measured items share in common, based upon empirical and/or theoretical perspectives (de Vaus 2002; Hair et al. 2006; Pallant 2011; Stevens 2009). The second step involves the evaluation of a full given model, which depicts structural relationships (links) among latent constructs (Anderson & Gerbing 1988). It also specifies which latent variables, directly or indirectly, influence changes in other latent variables in a complete given model (Bollen 1989; Mulaik & Millsap 2000; Schumacker & Lomax 2010).

7.2.2 Parameter estimation criteria

In order to decide which observed variable should be retained or deleted in the underlying construct, this study adopted four aspects of parameter estimates: unstandardised and standardised factor loadings, squared multiple correlations, and standardised residuals: These are explained as follows:

1. Unstandardised factor loadings: The test statistic known as the critical ratio (CR) or *t*-test represents the parameter estimate divided by the standard error. It operates as a z-statistic in testing that the estimate is statistically different from zero. Parameters are considered statistically significant when their CR values need to be greater than ± 1.96 and below a probability level of $\alpha \leq 0.05$. Non-significant parameters, however, should be deleted from the model (Byrne 2010; Ho 2006; Kline 2011; Schumacker & Lomax 2010).
2. Standardised factor loadings: These loadings are used to compare the relative relationship amongst indicator variables in the given construct. Acock (2013) and Cunningham (2008) suggested that standardised item loadings of at least $|0.40|$ are considered *strong*, and any item with loadings of less than $|0.40|$ should be deleted.
3. Squared multiple correlations (SMC - R^2): This measure is equivalent to item reliability and is obtained by squaring the standardised factor loadings. Specifically, it represents the extent to which an observed variable's variance is explained by a latent variable and how well the variable measures a given construct (Hair et al. 2006; Ho 2006; Jöreskog & Sörbom 1993). There are no recommended cut-off points for R^2 , but the literature suggests that the higher R^2 , the better the prediction of the measured variable (Hair et al. 2006; Ho 2006; Jöreskog & Sörbom 1993).
4. Standardised residuals: A standardised residual which is used to assess the size of a residual is a residual divided by its estimated standard error and is independent

of the units of measurement of the observed variable. Larger values exceeding $|2.00|$ (Hill 1987; Raykov & Marcoulides 2006; Stevens 2009) and/or $|2.58|$ (Byrne 2010; Jöreskog & Sörbom 1988; Steenkamp & van Trijp 1991) are usually suggestive of model misfit, meaning that significant amounts of variance remain unexplained and that a specification error is likely to be present. The model fit can therefore be improved by allowing the error terms of these two associated variables to co-vary (if a large positive standardised residual covariance) or dropping these two variables (if a large negative one). Nevertheless, Hair et al. (2006, p. 797) argued that “standardised residuals between $|2.5|$ and $|4.0|$ deserve some attention, but may not suggest any changes to the model if no other problems are associated with those two items”.

7.2.3 Construct reliability

Reliability is an assessment of the degree to which the measured variables that make up the scale are all measuring the same underlying construct with internal consistency (Acock 2014; Bollen 1989; Hair et al. 2006; Kline 2011; Pallant 2011). As generally recommended, an alpha value of 0.70 and above is considered adequate reliability, however, a lower limit for a reliability coefficient can be 0.60 in the case of exploratory research. According to Hair et al. (2006), Cronbach’s alpha is commonly used as an estimate of reliability, although it tends to underestimate reliability. In performing SEM techniques, the construct reliability however is highly recommended (Acock 2013; Hair et al. 2006; Raykov 2004). Consequently, this estimate was used to measure the internal consistency of each construct in this study.

7.2.4 Model fit indices and their acceptable thresholds

The assessment of goodness-of-fit indices in a given model is critical to determining whether the model fits the data well. This study therefore adopted three types of model fit measures: absolute, incremental and parsimonious.

Absolute fit measures

These measures directly determine the degree to which the proposed model reproduced the observed sample data and/or predicts (fits) the observed covariance matrix (Byrne 2010; Hair et al. 2006; Ho 2006; Hu & Bentler 1998, 1999; Schumacker & Lomax

2010; Stevens 2009; Tabachnick & Fidell 2007). The most fundamental index is the chi-square (χ^2) test, the only statistic test in SEM. If the discrepancy (expressed as a χ^2 statistic) between the model implied covariances and the observed sample covariances is larger than the expected distribution value by a probability usually adjudged at a 0.05 threshold, then the model is rejected as *not-fitting*. Conversely, a non-significant chi-square value ($p > 0.05$) indicates that the hypothesised model fits the sample data well. The chi-square statistic is sensitive to a large number of samples and/or model complexity determined by a large number of observed variables and constructs in a given model (Byrne 2010; Hair et al. 2006; Ho 2006; Hu & Bentler 1998, 1999; Schumacker & Lomax 2010; Stevens 2009; Tabachnick & Fidell 2007). Hair et al. (2006) suggested that if a sample size is 250 or more, and observed variables are 30 or more, significant χ^2 p -values can generally be expected. With a large sample size (generally above 200), the χ^2 statistic tends to indicate a significant probability level (Stevens 2009). For these reasons, the χ^2 tests should be used in combination with other model fit indices.

In order to reduce the sensitivity of the model chi-square to sample size, some researchers (Hair et al. 2006; Hu & Bentler 1999; Tabachnick & Fidell 2007) have recommended the normed chi-square (χ^2/df), which is the minimum discrepancy divided by its degrees of freedom. It is not clear how far from 1 the ratio (χ^2/df) should be before concluding that a model cannot be accepted. A ratio of about 5:1 or less is considered “as beginning to be reasonable” (Wheaton et al. 1977, p. 99), whereas ratios of 2:1 or 3:1 are indicative of an acceptable fit between the hypothetical model and the sample data (Arbuckle 2014; Hair et al. 2006; Kline 2011; Tabachnick & Fidell 2007). The Bollen-Stine bootstrap p -value is recommended in conjunction with the χ^2 tests in order to reduce the sensitivity of the model chi-square to non-normality of the data. The Bollen-Stine p -value should be greater than 0.05 (see Sub-section 3.7.7).

The goodness-of-fit index (GFI) is roughly similar to the multiple R^2 in a multiple regression. This index indicates the relative amount of sample variance and covariance explained by the model. Specifically, it ranges from 0 (poor fit) to 1 (perfect fit), with the value exceeding 0.90 indicating a good fit model (Byrne 2010; Hair et al. 2006; Schumacker & Lomax 2010; Skrandal & Rabe-Hesketh 2004; Stevens 2009).

The standardised root mean residual (SRMR) is the square root of the standardised mean squared residuals between the elements of the observed covariance matrix of measured variables and those of the estimated covariance matrix of measured variables. The SRMR value is not dependent on the scaling of the measured items, since that value is based on standardised residuals. A value of 0 indicates perfect fit and higher values represent poorer fit. Some authors (Byrne 2010; Schumacker & Lomax 2010) have suggested 0.05 or less as a cut-off point, whereas others (Hair et al. 2006; Hu & Bentler 1998, 1999; Stevens 2009) have suggested that a value of 0.08 or less can be indicative of a good model fit.

Root mean square error of approximation (RMSEA) represents the error of approximation in the population, correcting for both model complexity and sample size by including each in its computation (Browne & Cudeck 1992). RMSEA values of less than or equal to 0.05 can be considered as good fit, values between 0.05 and 0.08 as adequate fit, and values between 0.08 and 0.10 as mediocre fit. Values of more than 0.10 are not acceptable (Browne & Cudeck 1992). The p -value for the closeness of fit should be statistically non-significant (i.e. > 0.05). Specifically, RMSEA values are also presented in the lower and upper bounds of its confidence interval.

Hoelter's (1983) Critical N (CN) is also used in this study. The CN 0.01 and 0.05 indices differ significantly from the above indices in that they estimate an adequate sample size for accepting the fit of a given model for a χ^2 test, rather than model fit. A CN 0.05 and 0.01 value exceeding 200 indicate that a given model is an adequate representation of the sample data (Bollen 1989; Byrne 2010; Hoyle 1995).

Incremental (comparative) fit measures

These measures, including the Tucker-Lewis Index (TLI) and comparative fit index (CFI), differ from absolute fit measures in that they assess how well a proposed model fits relative to some alternative baseline models. Unlike the CFI, the TLI values can fall below 0 or above 1. Their values range from 0 (poor fit) to 1 (perfect fit), with the value exceeding 0.90 indicating a good fit model (Hair et al. 2006; Ho 2006; Hu & Bentler 1999; Kline 2011; Stevens 2009).

Parsimonious fit measures

These measures are designed particularly to provide information about which model among a set of competing models is the best, considering fit relative to model complexity (Byrne 2010; Hair et al. 2006; Ho 2006; Kline 2011; Schumacker & Lomax 2010; Stevens 2009). These measures are related to the value of degrees of freedom; that is, more parsimonious models have higher degrees of freedom. In this context, the simpler the model, the more parsimony fit the model has. This study adopted Akaike Information Criterion (AIC) statistics. The AIC value is also used to select from among competing non-hierarchical models estimated with the same data. Specifically, AIC values closer to 0 indicate better fit and greater model parsimony. Therefore, the model with the smallest AIC value is chosen since it is most likely to replicate (Byrne 2010; Hair et al. 2006; Ho 2006; Kline 2011; Schumacker & Lomax 2010; Stevens 2009).

Given the above arguments, this study adopted a number of guidelines in order to assess the acceptability of GFI. This is summarised in Table 7.1.

Table 7.1 Model fit measures and their acceptable thresholds

Fit measures	Acceptable thresholds
Absolute fit measures	
Chi-square statistic (χ^2)	p -value > 0.05
Bollen-Stine χ^2 statistic	p -value > 0.05
Normed chi-square (χ^2/df)	≤ 3:1 (a good fit) ≤ 5:1 (a moderate fit)
Goodness-of-fit index (GFI)	> 0.90
Root mean square error of approximation (RMSEA)	> 0.08 P_{close} > 0.05
Standardised RMR (SRMR)	> 0.08
Critical N 0.01 and 0.05	≥ 200 (an adequate sample size)
Incremental fit measures	
Tucker-Lewis Index (TLI)	> 0.90
Comparative Fit Index (CFI)	> 0.90

Source: Compilation from various sources

7.3 Exploratory principal factor analysis

Apart from being a variable-reduction technique, exploratory principal factor analysis can be critically important when the links between the observed and unobserved variables are uncertain. Consequently, this technique was employed to assess whether observed variables fall into their pre-determined factors. In doing so, 91 observed variables (see the coding sheet in Appendix 1-3) using Dataset 1 were subjected to principal component analysis using SPSS version 22. Prior to performing this analysis, the suitability of data for factor analysis was assessed. It was found that the observed variables were reasonably unidimensional and correlated (see Sub-section 6.3.4), and the Kaiser-Meyer-Olkin value of sampling adequacy was 0.928, exceeding the recommended value of 0.60 for a good factor analysis (de Vaus 2002; Hair et al. 2006; Tabachnick & Fidell 2007). Barlett's test of sphericity reached statistical significance ($p = 0.000$), supporting the factorability of the correlation matrix.

Numerous authors (de Vaus 2002; Hair et al. 2006; Pallant 2011; Stevens 2009) have suggested that an eigenvalue greater than 1 (Kaiser's criterion) needs to be held in order to retain the most important factors for further investigation. Furthermore, *varimax* rotation was performed to assist in the interpretation of these factors since this rotation technique "has proved successful as an analytic approach to obtain an orthogonal rotation of the factors" (Hair et al. 2006, p. 126). Specifically, "the goal of *varimax* rotation is to maximise the variance of factor loading by making high loadings higher and low ones lower for each factor" (Tabachnick & Fidell 2007, p. 620). According to Stevens (2009) and Tabachnick and Fidell (2007), a minimal factor loading of 0.35 should be used, translating over 10% of the variance by a common factor. To retain only the most reliable and valid variables in the factor, it is recommended that the communalities, which indicate how much of the variance in each measured variable is explained, need to be taken into consideration. Low communality values (e.g. less than 0.50) could indicate that the item does not fit well with other items. Consequently, removing that item appears to improve the total variance explained (Hair et al. 2006; Stevens 2009; Tabachnick & Fidell 2007).

The rotated solution revealed the presence of fifteen factors in this study with eigenvalues exceeding 1, explaining from 1.24% to 28.16% of total variance. In other words, the 16-factor solution explained a total of 64.88% of total variance. Out of 91 observed variables falling into 16 factors, 12 items were removed from the dataset partly because of no factor loadings ($> \pm 0.35$), cross-factor loadings (i.e. a variable has two or more factor loadings exceeding 0.35), and low communality values (< 0.05) (see Appendix 2-3). Consequently, 79 measured variables, with factor loadings ranging from 0.36 and 0.83, were retained for further investigation.

7.4 Single-factor congeneric measurement models

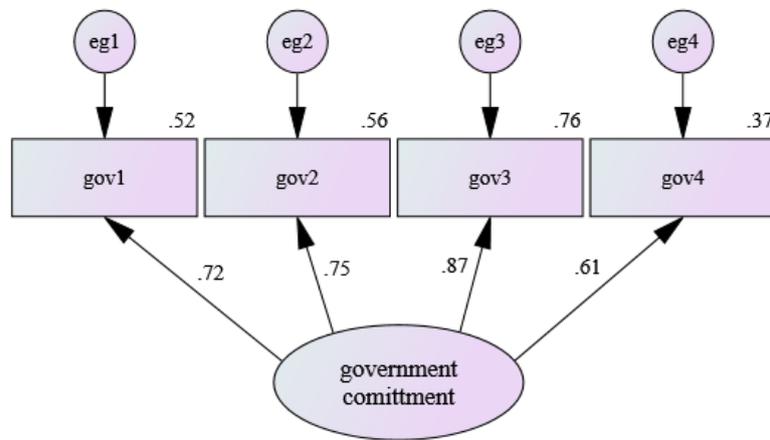
Single-factor congeneric measurement models are viewed as the simplest form of CFA measurement models and represent the regression of a set of indicator variables on a single latent construct with all cross-loading assumed to be 0 (Anderson & Gerbing 1988; Hair et al. 2006; Mulaik & Millsap 2000). Bollen (1989, p. 184) stated that “explicit measurement models are needed to better understand the relation between the latent variables, which stand for concepts, and the other observed variables that measure them”. From this perspective, ten single-factor congeneric models of latent constructs using Dataset 1 were assessed. These are discussed below.

As recommended by numerous researchers (Acock 2013; Bollen 1989; Byrne 2010; Ho 2006; Jöreskog & Sörbom 1993; Kline 2011), the most common method of performing CFA measurement models is to select a *reference variable* for each latent construct and fix this reference variable to unity (1). Specifically, the largest item loading should be assigned as the reference variable but such a preference is not essential. This study also adopted the MLE technique, since nearly all univariate skewness and kurtosis values fell into a range of $|1|$ and only a couple of these statistical values were slightly above $|1|$ (see Sub-section 6.3.6). The Bollen-Stine bootstrapping approach ($N = 250$) (see Sub-section 3.7.7) was also used to assess all congeneric measurement models.

7.4.1 Single-factor congeneric model of ‘government commitment’

Four measured variables were used to capture the respondents’ perceptions of government commitment in relation to the likelihood of privatisation success. The results revealed that all individual correlation coefficients were strongly positive (range:

0.415 - 0.648). Figure 7.1 shows the standardised estimates and model fit indices for the single-factor congeneric model of government commitment. It can be said that the model fit the data well, as indicated by all model fit measures: $\chi^2 (2) = 2.338$; $\chi^2/df = 1.169$; $\chi^2 p$ -value = 0.311; Bollen-Stine p -value = 0.450; GFI = 0.997; TLI = 0.998; CFI = 0.999; SRMR = 0.0121; and RMSEA = 0.022 (0.000 - 0.110). In addition, Hoelter's 0.05 and 0.01 CN values for the hypothesised model were greater than 200 (918 and 1,411, respectively), indicating that the model adequately represented the sample data.



$\chi^2 (2) = 2.338$; $\chi^2/df = 1.169$; $\chi^2 p$ -value = 0.311; Bollen-Stine p -value = 0.450;
 GFI = 0.997; TLI = 0.998; CFI = 0.999;
 SRMR = 0.0121; RMSEA = 0.022 (0.000 - 0.110), $p_{close} = 0.579$;
 Hoelter's 0.05/0.01 Critical N = 918/1411

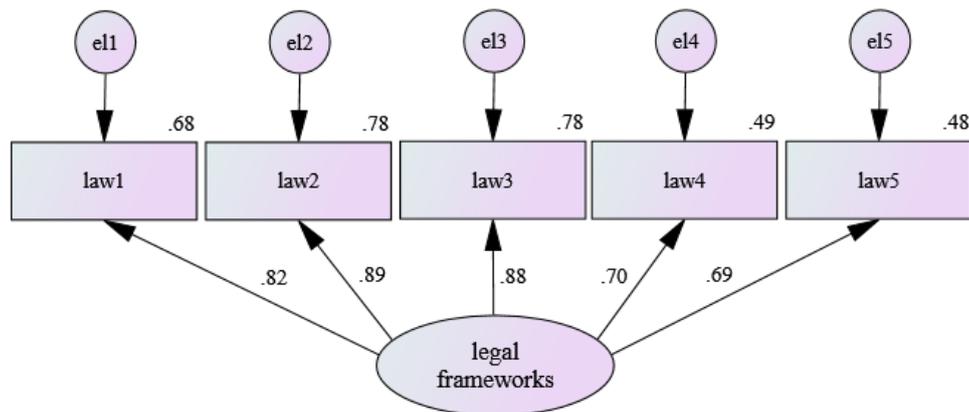
Figure 7.1 Hypothesised congeneric model for 'government commitment'

In addition to the strong model fit indices, the standardised factor coefficients (range: 0.61 – 0.87) suggest reasonable magnitudes (i.e. greater than a cut-off point of 0.40). Statistical significance (i.e. t -value or $CR > \pm 1.96$ and p -value < 0.05) for each unstandardised factor coefficient measured items were also satisfied. It can be concluded that all coefficients were significantly different from 0 and therefore should be retained in this model. Generally speaking, all four measured items were highly responsive to this construct to allow for further investigation.

7.4.2 Single-factor congeneric model of 'legal framework'

Five indicator items were used to measure the respondents' perceptions of legal and regulatory frameworks in relation to the likelihood of privatisation success. All the

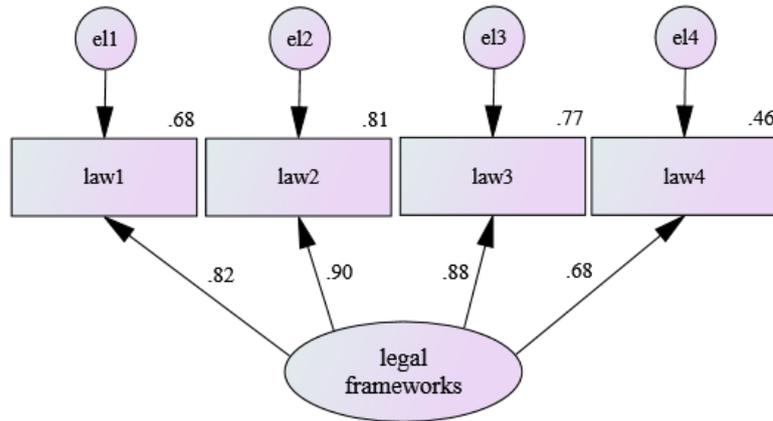
individual correlation coefficients were strongly positive (range: 0.556 - 0.787). Figure 7.2 shows the standardised estimates and model fit indices for the single-factor congeneric model of legal and regulatory frameworks. Although some fit indices (i.e. GFI = 0.971; TLI = 0.962; CFI = 0.981; and SRMR = 0.0313) indicate that the model fit the data well, other measures reveal the opposite, as indicated by the following model fit measures: $\chi^2(5) = 25.645$; $\chi^2/df = 5.129$; $\chi^2 p\text{-value} = 0.000$; Bollen-Stine $p\text{-value} = 0.012$; and RMSEA = 0.107 (0.069 - 0.150). Hoelter's 0.05 CN value for the hypothesised model was less than 200 (i.e. 155), indicating that the model inadequately represented the sample data. Generally speaking, this model appeared not to fit the data well and needed to be re-specified.



$\chi^2(5) = 25.645$; $\chi^2/df = 5.129$; $\chi^2 p\text{-value} = 0.000$; Bollen-Stine $p\text{-value} = 0.012$;
 GFI = 0.971; TLI = 0.962; CFI = 0.981;
 SRMR = 0.0313; RMSEA = 0.107 (0.069 - 0.150), $p_{close} = 0.009$;
 Hoelter's 0.05/0.01 Critical N = 155/211

Figure 7.2 Hypothesised congeneric model for 'legal and regulatory frameworks'

The results suggest reasonable magnitudes of the standardised factor coefficients (range: 0.69 – 0.89). From the AMOS outputs, it was found that there was a large standardised residual covariance between law4 and law5 (1.832). Even though such a covariance is less than the cut-off point of |2.00|, it may indicate that this particular covariance is not well reproduced by the model. Therefore, it was considered necessary to drop either law4 or law5 from the model.



$\chi^2 (2) = 5.179$; $\chi^2/df = 2.589$; $\chi^2 p\text{-value} = 0.075$; Bollen-Stine $p\text{-value} = 0.191$;
 GFI = 0.995; TLI = 0.989; CFI = 0.996;
 SRMR = .0122; RMSEA = 0.067 (0.000 - 0.140), $p_{close} = 0.262$;
 Hoelter's 0.05/0.01 Critical N = 415/637

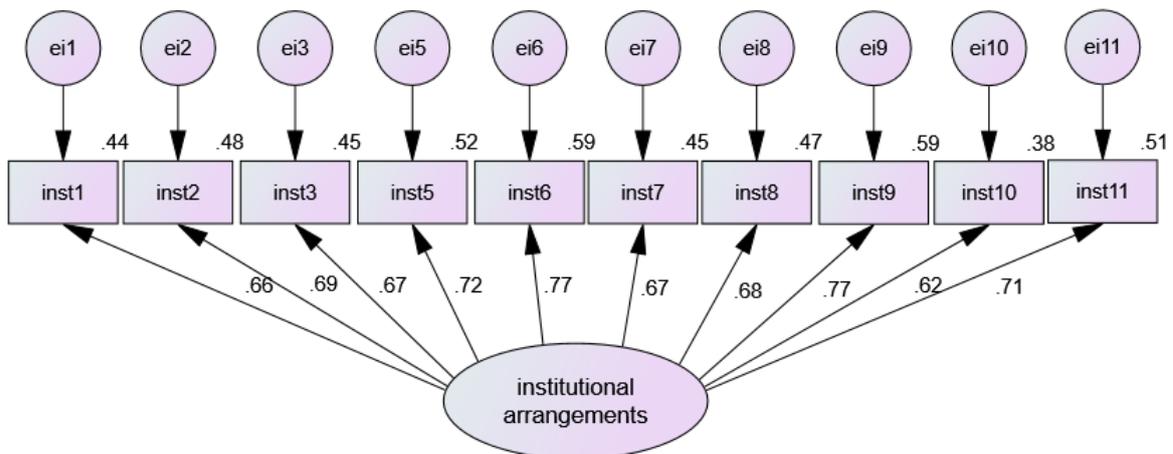
Figure 7.3 Re-specified congeneric model for ‘legal and regulatory frameworks’

Dropping law5 and retaining law4 appeared to result in better model fit indices than derived from deleting law4 and retaining law5. Therefore, law5 was dropped from the model. The results show that the model fit the data well, as illustrated in Figure 7.3, with $\chi^2 (2) = 5.179$; $\chi^2/df = 2.589$; $\chi^2 p\text{-value} = 0.075$; Bollen-Stine $p\text{-value} = 0.191$; GFI = 0.995; TLI = 0.989; CFI = 0.996; SRMR = 0.0122; and RMSEA = 0.067 (0.000 - 0.140). In addition, Hoelter's 0.05 and 0.01 CN values for the hypothesised model were greater than 200 (415 and 637, respectively), indicating that the model adequately represented the sample data. Generally speaking, all four measured variables were highly responsive to this construct to allow for further investigation.

7.4.3 Single-factor congeneric model of ‘institutional arrangements’

Ten indicator items were used to measure the respondents' perceptions of institutional arrangements in relation to the likelihood of privatisation success. All the individual correlation coefficients were strongly positive (range: 0.372 - 0.681). Figure 7.4 shows the standardised estimates and model fit indices for the single-factor congeneric model of institutional arrangements. However, the results suggest that the model did not fit the data well, as indicated by: $\chi^2 (35) = 180.919$; $\chi^2/df = 5.169$; $\chi^2 p\text{-value} = 0.000$; Bollen-Stine $p\text{-value} = 0.004$; and RMSEA = 0.108 (0.093 - 0.124). In addition, Hoelter's 0.05 and 0.01 CN values for the hypothesised model were less than 200 (99

and 114, respectively), indicating that the model inadequately represented the sample data. Consequently, the model did not fit the data well and needed to be re-specified.



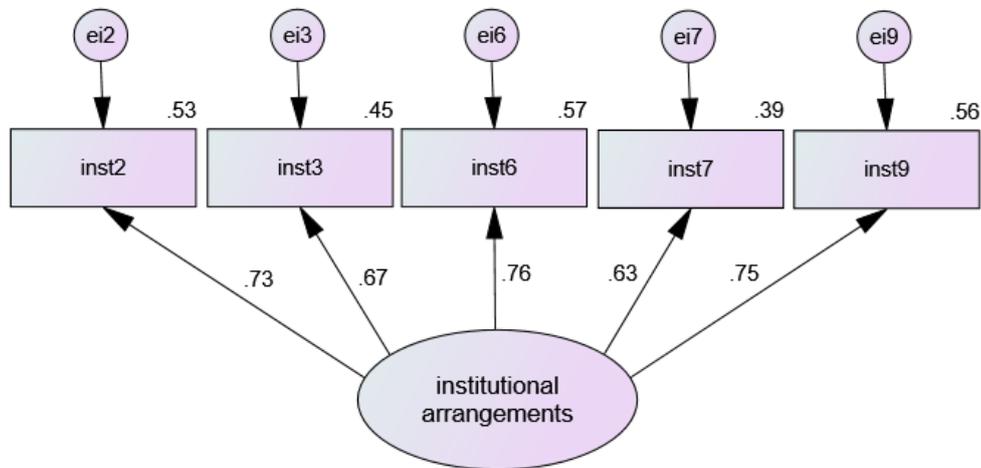
$\chi^2 (35) = 180.919$; $\chi^2/df = 5.169$; $\chi^2 p\text{-value} = 0.000$; Bollen-Stine $p\text{-value} = 0.004$;
 GFI = 0.907; TLI = 0.890; CFI = 0.914;
 SRMR = .0496; RMSEA = 0.108 (0.093 - 0.124), $p_{close} = 0.000$;
 Hoelter's 0.05/0.01 Critical N = 99/114

Figure 7.4 Hypothesised congeneric model for 'institutional arrangements'

The results suggest reasonable magnitudes of the standardised factor coefficients (range: 0.62 – 0.77). From the AMOS outputs, it was found that there were several large standardised residual covariance values between inst7 and inst8 (2.777), between inst5 and inst6 (2.141), between inst1 and inst2 (2.077), and between inst10 and inst11 (1.701). Almost all these covariance values were greater than the suggested cut-off point of |2.00|, indicating that these particular covariances were not well reproduced by the hypothesised model. Therefore, one or both of the associated variables needed to be dropped from the model.

In order to improve the model fit estimates, it seemed reasonable to drop five variables (inst1, inst5, inst8, inst10 and inst11). After removing these variables, the model fit the data well with $\chi^2 (5) = 10.018$; $\chi^2/df = 2.004$; GFI = 0.988; TLI = 0.984; CFI = 0.992; SRMR = 0.0230; and RMSEA = 0.053 (0.000 - 0.101), as shown in Figure 7.5 below. The non-significant $\chi^2 p\text{-value}$ (i.e. 0.075) and Bollen-Stine $p\text{-value}$ (i.e. 0.116) reaffirm that the model fit the data well. Hoelter's 0.05 and 0.01 CN values for the hypothesised model were also greater than 200 (396 and 540, respectively), indicating that the model

adequately represented the sample data. Generally speaking, all five measured items were highly responsive to this construct to allow for further investigation.

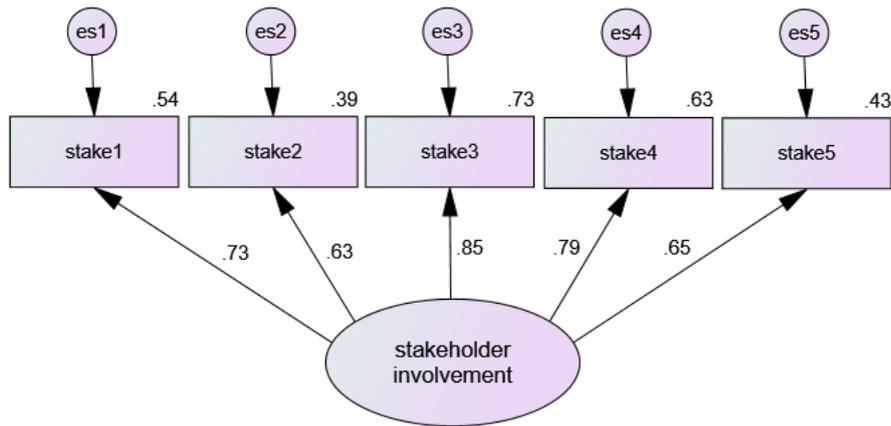


$\chi^2 (5) = 10.018$; $\chi^2/df = 2.004$; $\chi^2 p\text{-value} = 0.075$; Bollen-Stine $p\text{-value} = 0.116$;
 GFI = 0.988; TLI = 0.984; CFI = 0.992;
 SRMR = .0230; RMSEA = 0.053 (0.000 - 0.101), $p_{close} = 0.394$;
 Hoelter's 0.05/0.01 Critical N = 396/540

Figure 7.5 Re-specified congeneric model for 'institutional arrangements'

7.4.4 Single-factor congeneric model of 'stakeholder involvement'

Five indicator items were used to measure the respondents' perceptions of stakeholder involvement in relation to the likelihood of privatisation success. All the individual correlation coefficients were strongly positive (range: 0.437 - 0.696). Figure 7.6 shows the standardised estimates and model fit indices for the single-factor congeneric model of stakeholder involvement. It can be said that the model fit the data well as indicated by all model fit measures: $\chi^2 (5) = 12.898$; $\chi^2/df = 2.580$; GFI = 0.986; TLI = 0.978; CFI = 0.989; SRMR = 0.0228; and RMSEA = 0.066 (0.022 - 0.112). Taking the chi-square statistic into consideration, the chi-square $p\text{-value}$ (i.e. 0.024) should be statistically significant a 0.05 level in order to accept the hypothesised model. However, the Bollen-Stine $p\text{-value}$ was employed in this study due to the multivariate non-normality of the data. In light of the non-significant Bollen-Stine $p\text{-value}$ (i.e. 0.10), it was confirmed that the model fit the given data well. In addition, Hoelter's 0.05 and 0.01 CN values for the hypothesised model were greater than 200 (308 and 419, respectively), indicating that the model adequately represented the sample data.



$\chi^2 (5) = 12.898$; $\chi^2/df = 2.580$; $\chi^2 p\text{-value} = 0.024$; Bollen-Stine $p\text{-value} = 0.100$;
 GFI = 0.986; TLI = 0.978; CFI = 0.989;
 SRMR = 0.0228; RMSEA = 0.066 (0.022 - 0.112), $p_{close} = 0.227$;
 Hoelter's 0.05/0.01 Critical N = 308/419

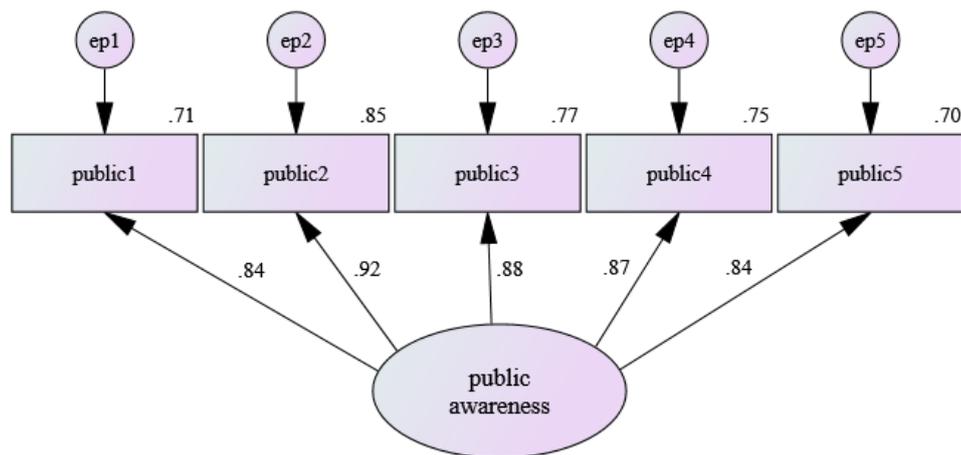
Figure 7.6 Hypothesised congeneric model for 'stakeholder involvement'

In addition to the strong model fit indices, the standardised factor coefficients (range: 0.63 – 0.85) suggest strong magnitudes (i.e. much greater than a cut-off point of 0.40). Statistical significance (i.e. $t\text{-value} > \pm 1.96$ and $p\text{-value} < 0.05$) for each unstandardised factor coefficient measured item were also satisfied. It was concluded that all coefficients were significantly different from 0 and therefore these five indicator variables should be retained in the model. Generally speaking, all five measured variables were highly responsive to this construct to allow for further investigation.

7.4.5 Single-factor congeneric model of 'public education and awareness'

Five measured variables were used to capture the respondents' perceptions of 'public education and awareness' in relation to the likelihood of privatisation success. All the individual correlation coefficients were strongly positive (range: 0.702 - 0.819). Figure 7.7 shows the standardised estimates and model fit indices for the single-factor congeneric model of public education and awareness. It can be concluded that the model fit the data well as indicated by all model fit measures: $\chi^2 (5) = 21.040$; $\chi^2/df = 4.208$; GFI = 0.977; TLI = 0.979; CFI = 0.990; SRMR = 0.0149; and RMSEA = 0.095 (0.055 - 0.138). Taking the chi-square statistic into consideration, the chi-square $p\text{-value}$ (i.e. .001) should be statistically significant a 0.05 level in order to accept the hypothesised model. However, the Bollen-Stine $p\text{-value}$ was employed in this study due to the

multivariate non-normality of the data. In light of the non-significant Bollen-Stine p -value (i.e. 0.052), it was confirmed that the model fit the given data well. Hoelter's 0.05 CN value for the hypothesised model was less than 200 (i.e. 189), indicating that the model inadequately represented the sample data. Consequently, this model appeared not to fit the data well and needed to be re-specified.



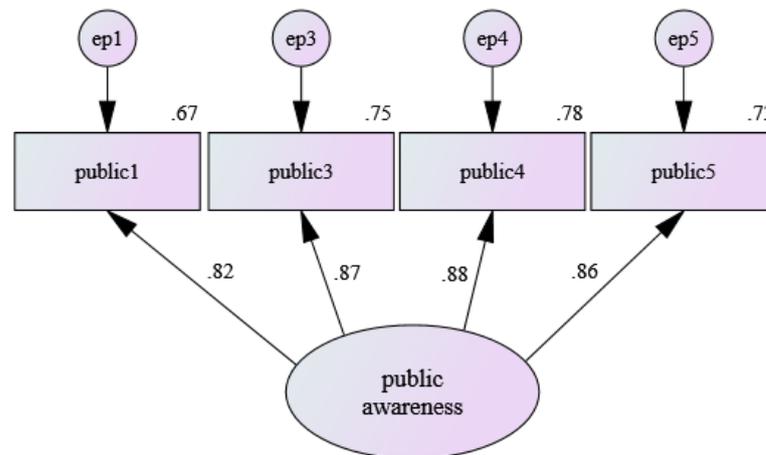
$\chi^2 (5) = 21.040$; $\chi^2/df = 4.208$; $\chi^2 p$ -value = 0.001; Bollen-Stine p -value = 0.052;
 GFI = 0.977; TLI = 0.979; CFI = 0.990;
 SRMR = 0.0149; RMSEA = 0.095 (0.055 - 0.138), $p_{close} = 0.033$;
 Hoelter's 0.05/0.01 Critical N = 189/257

Figure 7.7 Hypothesised congeneric model for 'public education and awareness'

In addition to the strong model fit indices, the standardised factor coefficients shown in Figure 7.7, ranging from 0.84 to 0.92, suggest that these coefficients had strong magnitudes (i.e. much greater than a cut-off point of 0.40). Statistical significance (i.e. t -value $> \pm 1.96$ and p -value < 0.05) for each unstandardised factor coefficient measured item were also satisfied. However, it was found that the bivariate correlation coefficient between public2 and public3 was 0.82, which was lower than the cut-off point of 0.90 (see Sub-section 6.3.5), suggesting virtually identical content. Therefore, either public2 or public3 needed to be dropped from the model.

Dropping public2 and retaining public1 appeared to result in better model fit indices than those derived from deleting public1 and retaining public2. Therefore, public2 was dropped from the model. The results show that the model fit the data well with $\chi^2 (2) = 0.345$; $\chi^2/df = 0.173$; GFI = 1.000; TLI = 1.005; CFI = 1.000; SRMR = 0.0026; and

RMSEA = 0.000 (0.000 - 0.059), as illustrated in Figure 7.8 below. The non-significant χ^2 *p*-value (i.e. 0.841) and Bollen-Stine *p*-value (i.e. 0.936) re-affirmed that the model fit the data well. In addition, Hoelter's 0.05 and 0.01 CN values for the hypothesised model were greater than 200 (6,211 and 9,547, respectively), indicating that the model adequately represented the sample data. Generally speaking, all four measured variables were highly responsive to this construct to allow for further investigation.



$\chi^2 (2) = .345$; $\chi^2/df = 0.173$; χ^2 *p*-value = 0.841; Bollen-Stine *p*-value = 0.936;
 GFI = 1.000; TLI = 1.005; CFI = 1.000;
 SRMR = .0026; RMSEA = 0.000 (0.000 - 0.059), $p_{close} = 0.930$;
 Hoelter's 0.05/0.01 Critical N = 6211/9547

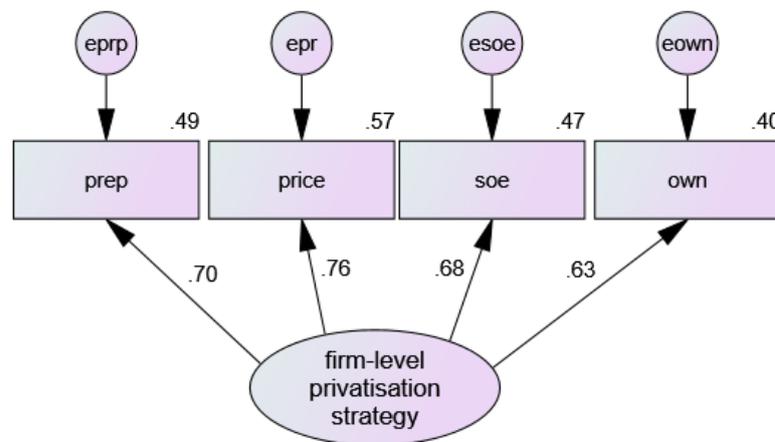
Figure 7.8 Re-specified congeneric model for 'public education and awareness'

7.4.6 Single-factor congeneric model of 'firm-level privatisation strategy'

The results derived from the assessment of EFA suggest that 17 out of 21 measured variables, falling into 'firm-level privatisation strategy', were retained for further examination (see Section 7.3). This factor was divided into four sub-groups: pre-privatisation activities (6 items), enterprise pricing and valuation (3 items), candidates for privatisation (privatisable SOEs) (4 items), and post-privatisation ownership structure (4 items). In order to simplify the hypothesised congeneric measurement model of firm-level privatisation strategy, an item parcelling technique was employed in this study (see Sub-section 3.7.4). Through this process, a set (score) of related variables in each construct was averaged and the average score then treated as a single variable for the purpose of analysis. As a result, six variables representing pre-privatisation activities were averaged into an indicator item (*prep*), three variables

of enterprise pricing and valuation averaged into an indicator item (*price*), four variables of privatisable SOEs averaged into an indicator item (*soe*), and four variables of post-privatisation ownership structure averaged into an indicator item (*own*).

These four averaged variables were then used to capture the respondents' perceptions of firm-level privatisation strategy in relation to the likelihood of privatisation success. All the individual correlation coefficients were strongly positive (range: 0.426 - 0.556). Figure 7.9 shows the standardised estimates and model fit indices for the single-factor congeneric model of firm-level strategy privatisation. It was found that the model fit the data well, as indicated by all model fit measures: $\chi^2 (2) = 5.728$; $\chi^2/df = 2.864$; GFI = 0.992; TLI = 0.971; CFI = 0.990; SRMR = 0.0216; and RMSEA = 0.072 (0.000 - 0.145). The non-significant chi-square *p*-value (i.e. 0.057) and Bollen-Stine *p*-value (i.e. 0.207) confirm that the model fit the given data well. In addition, Hoelter's 0.05 and 0.01 CN values for the hypothesised model were greater than 200 (375 and 576, respectively), indicating that the model adequately represented the sample data.



$\chi^2 (2) = 5.728$; $\chi^2/df = 2.864$; $\chi^2 p$ -value = 0.057; Bollen-Stine *p*-value = 0.207;
 GFI = 0.992; TLI = 0.971; CFI = 0.990;
 SRMR = .0216; RMSEA = 0.072 (0.000 - 0.145), $p_{close} = 0.223$;
 Hoelter's 0.05/0.01 Critical N = 375/576

Figure 7.9 Hypothesised congeneric model for 'firm-level privatisation strategy'

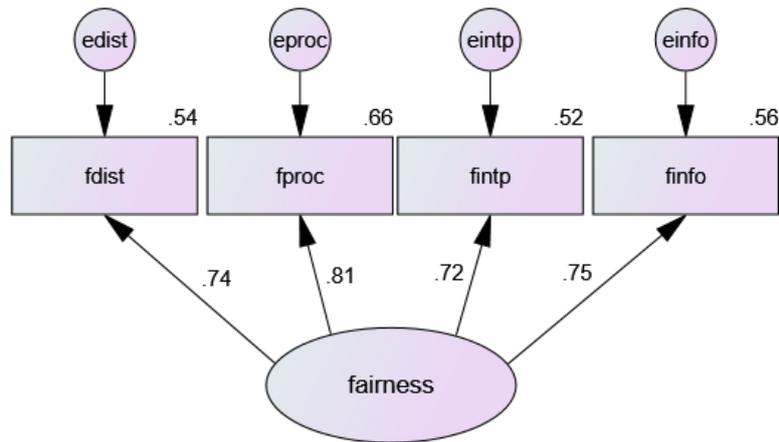
In addition to the strong model fit indices, the standardised factor coefficients shown in Figure 7.9, ranging from 0.63 to 0.76, suggest reasonable magnitudes (i.e. greater than a cut-off point of 0.40). Statistical significance (i.e. *t*-value > ±1.96 and *p*-value < 0.05)

for unstandardised factor coefficients of each measured item was also satisfied. It was concluded that all coefficients were significantly different from 0 and thus should be retained in the model. Generally speaking, all four variables were highly responsive to this construct to allow for further investigation.

7.4.7 Single-factor congeneric model of 'fairness'

The results derived from the assessment of EFA suggest that 14 out of 16 measured variables, falling into 'fairness', were retained for further examinations (see Section 7.3). This factor was divided into four sub-groups: distributive fairness (4 items), procedural fairness (3 items), interpersonal fairness (3 items), and informational fairness (4 items). In order to simplify the hypothesised congeneric measurement model of fairness, an item parcelling technique was employed in this study (see Sub-section 3.7.4). Through this process, a set (score) of related variables in each construct was averaged and the average score then treated as a single variable for the purpose of analysis. Consequently, four variables representing distributive fairness were averaged into an indicator item (*fdist*), three variables of procedural fairness averaged into an item (*fdist*), three variables of interpersonal fairness averaged into an item (*fintp*), and four variables of informational fairness averaged into an item (*finfo*).

These four averaged variables were then used to capture the respondents' perceptions of 'fairness' in relation to the likelihood of privatisation success. All the individual correlation coefficients were strongly positive (range: 0.516 - 0.625). Figure 7.10 shows the standardised estimates and model fit indices for the single-factor congeneric model of fairness. It was found that the model fit the data well, as indicated by all model fit measures $\chi^2(2) = 6.613$; $\chi^2/df = 3.306$; GFI = 0.991; TLI = 0.975; CFI = 0.992; SRMR = 0.0182; and RMSEA = 0.080 (0.017 - 0.152). The chi-square *p*-value (i.e. 0.037) should be statistically significant at 0.05 in order to accept the hypothesised model. However, the Bollen-Stine *p*-value was employed in this study due to the multivariate non-normality of the data. In light of the non-significant Bollen-Stine *p*-value (i.e. 0.163), it was confirmed that the model fit the given data well. In addition, Hoelter's 0.05 and 0.01 CN values for the hypothesised model were greater than 200 (325 and 499, respectively), indicating that the model adequately represented the sample data.



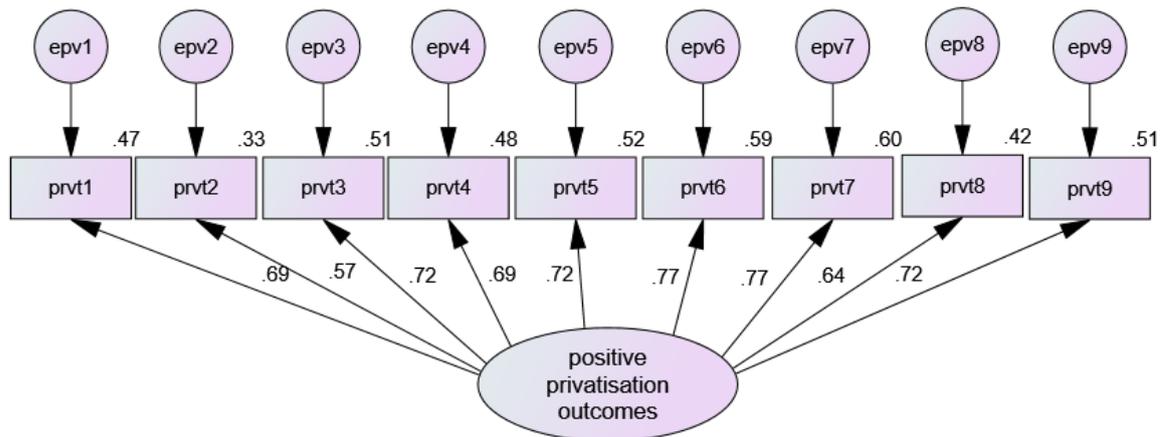
$\chi^2 (2) = 6.613$; $\chi^2/df = 3.306$; $\chi^2 p\text{-value} = 0.037$; Bollen-Stine $p\text{-value} = 0.163$;
 GFI = 0.991; TLI = 0.975; CFI = 0.992;
 SRMR = 0.0182; RMSEA = 0.080 (0.017 - 0.152), $p_{close} = 0.170$;
 Hoelter's 0.05/0.01 Critical N = 325/499

Figure 7.10 Hypothesised congeneric model for 'fairness'

In additions to the strong model fit indices, the standardised factor coefficients shown in Figure 7.10, ranging from 0.72 to 0.81, suggest highly reasonable magnitudes (i.e. greater than a cut-off point of 0.40). Statistical significance (*i.e. t-value* $> \pm 1.96$ and *p-value* < 0.05) for each unstandardised factor coefficient measured variable was also satisfied. It was concluded that all coefficients were significantly different from 0 and thus should be retained in the model. Generally speaking, all four variables were highly responsive to this construct to allow for further investigation.

7.4.8 Single-factor congeneric model of 'positive privatisation outcomes'

Nine indicator items were used to measure the respondents' perceptions of expected privatisation outcomes. All the individual correlation coefficients were strongly positive (range: 0.290 - 0.692). Figure 7.11 shows the standardised estimates and model fit indices for the single-factor congeneric model of positive privatisation outcomes. However, the results suggest that the model did not fit the data well, as indicated by: $\chi^2 (27) = 205.502$; $\chi^2/df = 7.611$; $\chi^2 p\text{-value} = 0.000$; Bollen-Stine $p\text{-value} = 0.004$; and RMSEA = 0.136 (0.119 - 0.154). In addition, Hoelter's 0.05 and 0.01 CN values for the hypothesised model were less than 200 (70 and 82, respectively), indicating that the model inadequately represented the sample data. Consequently, it is found that the model, as shown in Figure 7.11, did not fit the data well and needed to be re-specified.

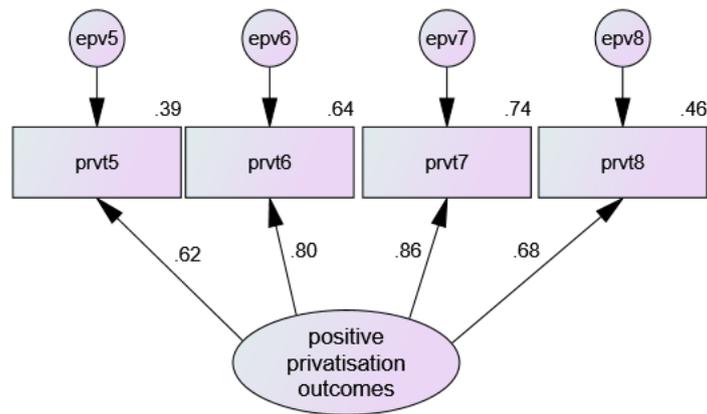


$\chi^2 (27) = 205.502$; $\chi^2/df = 7.611$; $\chi^2 p\text{-value} = 0.000$; Bollen-Stine $p\text{-value} = 0.004$;
 GFI = 0.876; TLI = 0.847; CFI = 0.884;
 SRMR = 0.0619; RMSEA = 0.136 (0.119 - 0.154), $p_{close} = 0.000$;
 Hoelter's 0.05/0.01 Critical N = 70/82

Figure 7.11 Hypothesised congeneric model for 'positive privatisation outcomes'

The results shown in Figure 7.11 suggest reasonable magnitudes of standardised factor coefficients, ranging from 0.57 to 0.77. From the AMOS outputs, it was found that there were several large standardised residual covariances between prvt1 and prvt2 (3.423), prvt2 and prvt3 (2.259), prvt4 and prvt5 (2.355), and prvt2 and prvt9 (-2.082). All these covariance values were greater than the suggested cut-off point of $|2.00|$, indicating that these particular covariances were not well reproduced by the hypothesised model. Therefore, one or both of the associated variables needed to be dropped from the model.

In order to improve the model fit indices, five measured variables (prvt1, prvt2, prvt3, prvt4 and prvt9) were considered the most appropriate candidates for deletion from the model. After removing these variables, the model fit the data well, with $\chi^2 (2) = 2.931$; $\chi^2/df = 1.465$; GFI = 0.996; TLI = 0.995; CFI = 0.998; SRMR = 0.0133; and RMSEA = 0.036 (0.000 - 0.117), as illustrated in Figure 7.12 above. The non-significant chi-square $p\text{-value}$ (0.231) and Bollen-Stine $p\text{-value}$ (0.319) also confirmed that the model fit the data well. In addition, Hoelter's 0.05 and 0.01 CN values for the hypothesised model were greater than 200 (732 and 1,126, respectively), indicating that the model adequately represented the sample data. Generally speaking, all four measured variables were highly responsive to this construct to allow for further investigation.



$\chi^2 (2) = 2.931$; $\chi^2/df = 1.465$; $\chi^2 p\text{-value} = 0.231$; Bollen-Stine $p\text{-value} = 0.319$;
 GFI = 0.996; TLI = 0.995; CFI = 0.998;
 SRMR = 0.0133; RMSEA = 0.036 (0.000 - 0.117), $p_{close} = 0.495$;
 Hoelter's 0.05/0.01 Critical N = 732/1126

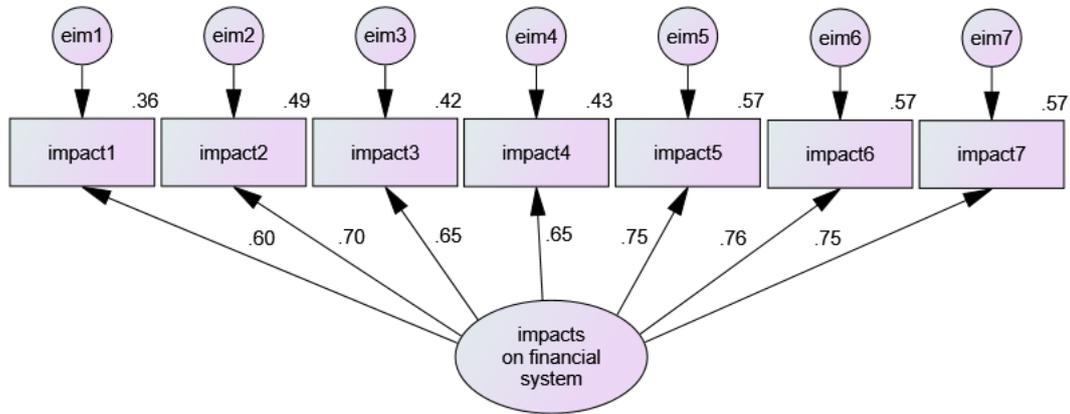
Figure 7.12 Re-specified congeneric model for ‘positive privatisation outcomes’

7.4.9 Single-factor congeneric model of ‘privatisation impacts’

Six indicator items were used to measure the respondents’ perceptions of the impact of privatisation on Laos’ financial system. All the individual correlation coefficients were strongly positive (range: 0.325 - 0.671). Figure 7.13 below shows the standardised estimates and model fit indices for the single-factor congeneric model of privatisation impacts. Overall, the results suggest that the model did not fit the data well, as indicated by: $\chi^2 (14) = 113.802$; $\chi^2/df = 8.129$; $\chi^2 p\text{-value} = 0.000$; Bollen-Stine $p\text{-value} = 0.004$; and RMSEA = 0.141 (0.118 - 0.166). Hoelter’s 0.05 and 0.01 CN values for the hypothesised model were less than 200 (75 and 92, respectively), indicating that the model inadequately represented the sample data. It was concluded that the model shown in Figure 7.13 did not fit the data well and needed to be re-specified.

The results shown in Figure 7.13 suggest reasonable magnitudes in the standardised factor coefficients, ranging from 0.62 to 0.74, which were higher than the cut-off point of 0.40 and more. From the AMOS outputs, it was found that there were several large standardised residual covariances between impact1 and impact2 (2.955), impact5 and impact6 (1.665), impact2 and impact4 (1.372), and impact4 and impact5 (1.322). The covariance value for one pair was greater and for three pairs was lower than the

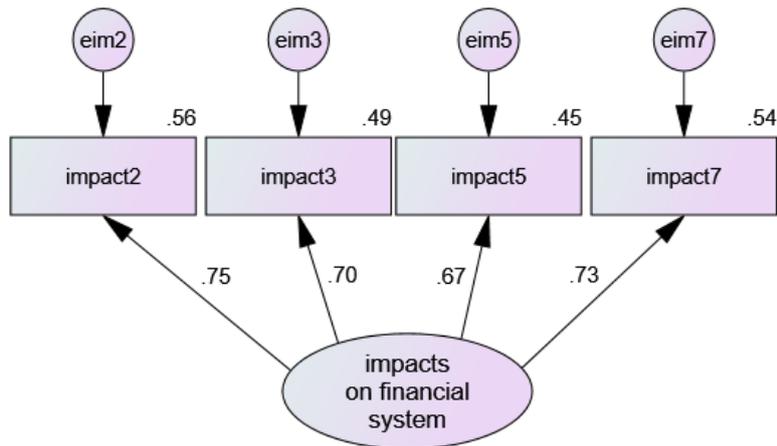
suggested cut-off point of $|2.00|$, indicating that these particular covariances were not well reproduced by the hypothesised model. One or both of the associated variables therefore needed to be dropped from the model to improve the model fit estimates.



$\chi^2 (14) = 113.802$; $\chi^2/df = 8.129$; $\chi^2 p\text{-value} = 0.000$; Bollen-Stine $p\text{-value} = 0.004$;
 GFI = 0.913; TLI = 0.858; CFI = 0.905;
 SRMR = .0563; RMSEA = 0.141 (0.118 - 0.166), $p_{close} = 0.000$;
 Hoelter's 0.05/0.01 Critical N = 75/92

Figure 7.13 Hypothesised congeneric model for 'privatisation impacts'

In order to improve the model fit indices, three measured variables (impact1, impact4 and impact6) were considered the most appropriate candidates for deletion from the model. After removing these three variables, the model fit the data well, with $\chi^2 (2) = 0.661$; $\chi^2/df = 0.331$; GFI = 0.999, TLI = 1.009; CFI = 1.000; SRMR = 0.0067, and RMSEA = 0.000 (0.000 - 0.075), as shown in Figure 7.14 below. The non-significant chi-square $p\text{-value}$ (0.718) and Bollen-Stine $p\text{-value}$ (0.868) also confirmed that the model fit the data well. In addition, Hoelter's 0.05 and 0.01 CN values for the hypothesised model were greater than 200 (3,244 and 4,987, respectively), indicating that the model adequately represented the sample data. Generally speaking, all four measured variables were highly responsive to this latent construct to allow for further investigation.

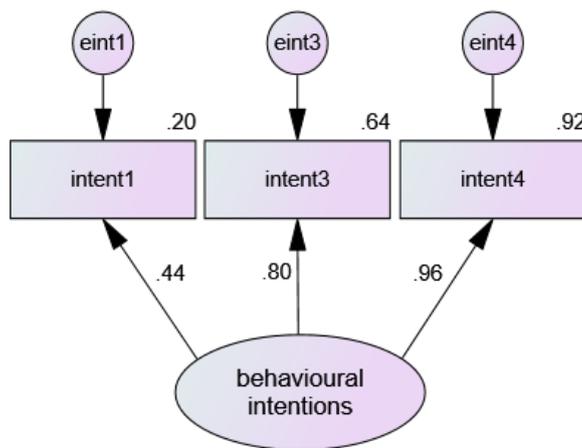


$\chi^2 (2) = .661$; $\chi^2/df = 0.331$; $\chi^2 p\text{-value} = 0.718$; Bollen-Stine $p\text{-value} = 0.825$;
 GFI = 0.999; TLI = 1.009; CFI = 1.000;
 SRMR = .0067; RMSEA = 0.000 (.000 - .075), $p_{close} = 0.868$;
 Hoelter's 0.05/0.01 Critical N = 3244/4987

Figure 7.14 Re-specified congeneric model for 'privatisation impacts'

7.4.10 Single-factor congeneric model of 'behavioural intentions'

Three indicator items were used to measure the respondents' views about their willingness and intention to invest in privatisable SOE shares. All the individual correlation coefficients were strongly positive (range: 0.355 - 0.769). As discussed in Sub-section 3.7.2, a three-item model was just-identified, meaning that a fit assessment was not meaningful.



Note: Just-identified model

Figure 7.15 Hypothesised congeneric model for 'behavioural intentions'

Figure 7.15 shows the standardised estimates for the single-factor congeneric model of behavioural intentions (range: 0.44 - 0.96), suggesting reasonable magnitudes for the standardised factor coefficients and greater estimates than the cut of point of 0.40. Generally speaking, all three measured variables appeared to be highly reliable and responsive to this construct to allow for further investigation.

7.4.11 Summary of the tests for single-factor congeneric models

To perform single-factor congeneric measurement models, an item parcelling technique was employed in order to minimise a large number of observed variables (31 items in total) to capture two factors: firm-level privatisation strategy (17 items) and fairness (14 items). This technique created mean scores of eight new variables for these two factors: firm-level privatisation strategy (4 items) and fairness (4 items). As a result, 56 observed variables were used (instead of 79) to assess ten single-factor congeneric measurement models. The main purpose of this was to further examine construct unidimensionality, locate the source of possible specification errors, and search for possible model re-specifications prior to testing a full CFA measurement model. Through this procedure, 15 out of 56 observed variables were dropped from the models, with 41 indicator items retained for further investigation, as shown in Table 7.2.

Table 7.2 The selected 41 indicator variables retained for further investigation

Construct definition	Coding	Items	Item codes
Government commitment	GOVT	4	gov1, 2, 3, 4
Legal & regulatory frameworks	LAW	4	law1, 2, 3, 4
Institutional arrangements	INST	5	inst2, 3, 6, 7, 9
Stakeholder involvement	STAKE	5	stake1, 2, 3, 4, 5
Public education & awareness	PUB	4	public1, 3, 4, 5
Firm-level privatisation strategy	FIRM	4	prep, price, soe, own
Fairness	FAIR	4	fdist, fproc, fintp, finfo
Positive privatisation outcomes	PRVT	4	prvt5, 6, 7, 8
Impacts of privatisation on the domestic financial system	IMP	4	impact2, 3, 5, 7
Behavioural intentions	INTENT	3	intent1, 3, 4

Source: Author's calculations

A summary of analytical estimates for these ten single-factor congeneric measurement models is presented in Appendix 3-1. The results confirmed that the set of given observed variables were highly unidimensional to their latent constructs, as indicated by all aspects of reported model fit statistics. The ten latent constructs were also highly valid and reliable, with the construct reliability ranging from 0.785 to 0.916, exceeding a recommended cut-off point of 0.70 (see Sub-section 7.2.3). Therefore, these ten perception-based constructs with 41 items could be further analysed in a full CFA measurement model.

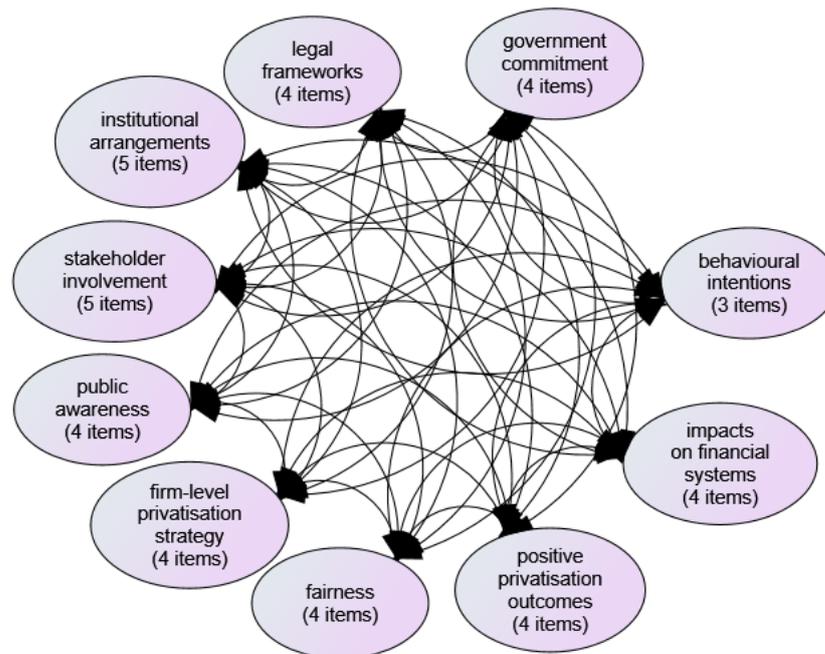
7.5 Full confirmatory factor analysis measurement model

In order to further specify the multidimensional measurements and factorial validity of the given hypothetical constructs, a full CFA measurement model was analysed. All constructs or latent variables were allowed to correlate with other constructs and all measured variables were also allowed to load on only one construct each (Byrne 2010; Hair et al. 2006; Ho 2006; Kline 2011; Mulaik & Millsap 2000; Schumacker & Lomax 2010). A snapshot diagram of a CFA measurement model, showing only ten constructs with 41 measured indicators, is shown in Figure 7.16. A visual working diagram depicting the full model is presented in Appendix 4-1A. Specifically, one construct was indicated by three measured items, two constructs were indicated by five items, and seven constructs were indicated by four items.

Examining the statistical estimates from the AMOS outputs of observed variables (see Appendix 3-3 for unstandardised and standardised regression weights and squared multiple correlations), the assessment results of this model show that all unstandardised regression weights of the 41 observed variables were significant in a critical ratio (C.R.) test (e.g. *t-value* > ±1.96, *p-value* < 0.05). Their standardised item loadings (range: 0.453 - 0.927) indicate highly reasonable magnitudes (greater than 0.40) and SMC (range: 0.205 – 0.859) are reflective of high item reliability.

Chi-square statistics, yielding $\chi^2(734) = 1285.167$; $\chi^2 p\text{-value} = 0.000$; and Bollen-Stine *p-value* = 0.004, suggest that the model did not fit the data well. As discussed in Sub-section 7.2.4, significant chi-square statistics are sensitive to sample size and model complexity, so other fit indices need to be taken into consideration. Specifically, other

fit indices confirmed that the model fit the data well, as indicated by: $\chi^2/df = 1.751$; TLI = 0.925; CFI = 0.933; SRMR = 0.0470; RMSEA = 0.046 (0.042 - 0.050). In addition, Hoelter's 0.05 and 0.01 CN values for the hypothesised model were greater than 200 (223 and 213, respectively), indicating that the model adequately represented the sample data. It was therefore concluded that the model fit the data well.



$\chi^2 (734) = 1285.167$; $\chi^2/df = 1.751$; $\chi^2 p\text{-value} = 0.000$; Bollen-Stine $p\text{-value} = 0.004$;
 GFI = 0.858; TLI = 0.925; CFI = 0.933;
 SRMR = .0470; RMSEA = 0.046 (0.042 - 0.050), $p_{close} = 0.953$;
 Hoelter's 0.05/0.01 Critical N = 223/231

Figure 7.16 Hypothesised confirmatory factor analytic model for privatisation

The standardised residual covariance matrix from the AMOS output revealed that there were 21 pairs of standardised residual covariance values greater than $|2.00|$ (range: $|2.57| - |3.11|$) or equivalent to 2.56% of the total standardised residual covariances. This indicates that these particular values were not well reproduced by the hypothesised model. Observing the normal q-q plot and histogram of these covariance values (see Appendix 4-1B), however, the shape of the distribution appeared to approach the shape of a normal curve (not severely skewed) and almost all standardised residual covariance scores were clustered on a 45-degree reference line with minor deviations. It was concluded, therefore, that the data were normally distributed. As suggested by Hair et

al. (2006, p. 797), “standardised residuals between |2.5| and |4.0| deserve some attention, but may not suggest any changes to the model if no other problems are associated with those two items”. Therefore, it was concluded that the model fit the data well.

In order to determine the discriminant validity of these latent given constructs, the factor correlation matrix was examined, as shown in Appendix 3-2. The results derived from AMOS outputs revealed correlation estimates among the ten constructs, ranging from 0.13 to 0.88. When correlation estimates between constructs are 0.90 or higher, this suggests a lack of discriminant validity (Byrne 2010; Cunningham 2008; Kline 2011). Therefore, since correlation estimates between the latent constructs were less than 0.90, these constructs could be said to be different and good candidates for use in the hypothesised privatisation model.

In order to further test the extent to which the constructs in the model were different, this study also adopted a nested model method, as suggested by Bagozzi, Yi and Phillips (1991). Through this process, two competing models were set in order to ensure that discriminant validity was upheld. The first SEM measurement model (an unconstrained model) allowed all correlations among constructs to be freely estimated; the second model constrained all correlations among the constructs in the same model to 1.00 (a constrained model). If a difference χ^2 test shows that constraining the correlations among all constructs does not significantly worsen the model fit, then it can be concluded that the constructs do not differ. The AMOS results showed that the unconstrained model had a χ^2 of 1285.167 with 734 degrees of freedom, while the constrained model had a χ^2 of 4073.576 with 779 degrees of freedom. The difference gives a χ^2 of 2788.409 with 45 degrees of freedom and a *p-value* of 0.000. Therefore, constraining the correlations to 1.00 significantly worsened the model and it was concluded that the ten constructs were empirically distinguishable (i.e. discriminant validity holds).

7.6 Chapter conclusion

This chapter analysed the primary data collected from 359 questionnaire surveys (using Dataset 1). It also examined tests for unidimensionality, construct reliability and discriminant validity by employing three data analysis techniques: EFA, single-factor

congeneric measurement models, and a full CFA measurement model. From a broad range of required statistical analyses, the number of measured variables dropped from 91 to 41, partly due to the assessment of factor analyses and the application of item parcelling. The 41 variables fell into the ten latent constructs and each measurement model fit the given data well, according to goodness-of-fit requirements. Therefore, the construct reliability and discriminant validity of these ten constructs was established. Although the measurement models do not assess casual relationships among latent variables, they provide a profound foundation for further theory testing. In other words, casual relationships among the latent constructs could not be identified through these analysis processes. Consequently, a full hypothetical structural model needed to be tested. This is discussed in Chapter 8.

Chapter 8

A Perception-based Privatisation Model in Laos

8.1 Introduction

This chapter analyses the proposed perception-based privatisation model, as specified in Section 2.12, using imputed primary data (Dataset 1) to figure out a well-fitting SEM model and assess testable hypotheses. Specifically, the main purposes of this chapter are: to investigate the effects of perception-based factors on positive privatisation outcomes; and how these outcomes help develop and strengthen the domestic financial system and encourage people to invest in privatisable SOE shares in Laos. Discussion is focused on the attempt to generalise and validate the research findings through investigation of the finalised hypothetical model, conducted using four other imputed datasets. The chapter also outlines the conduct of multiple group analyses to assess and identify moderating effects in the hypothesised privatisation model. The penultimate section presents five stepwise multiple regressions. These were conducted to explore which privatisation outcome(s) is likely to be a significant contributing factor in developing domestic capital (stock) markets and encouraging people to buy shares in privatisable SOEs.

8.2 A Perception-based privatisation model

This section presents two aspects of the full structural perception-based model of privatisation in Laos. Recapping on previous discussion, it presents a number of observed and unobserved constructs used in this hypothetical model. Prior to conducting in-depth structural path models, it then reviews the proposed research model together with testable hypotheses.

8.2.1 Constructs of the research model

Latent constructs (normally referred to as unobserved factors or variables) cannot be measured directly but can be captured by one or more observed (indicator) variables (Bollen 1989; Byrne 2010; Cunningham 2008; Hair et al. 2006; Kline 2011; Schumacker & Lomax 2010). These observed variables can be specific items or responses obtained either from the questions or questionnaires. Performing a SEM approach requires two types of latent variables: exogenous and endogenous. An

exogenous latent variable (known as an independent variable) is not affected by other variables in a given model; an endogenous variable (known as a dependent variable) is, either directly or indirectly, influenced by the exogenous variables (Bollen 1989; Byrne 2010; Cunningham 2008; Hair et al. 2006; Kline 2011; Schumacker & Lomax 2010). Given this, ten constructs with 41 measured variables were employed to assess the hypothetical research model in this study (see Section 7.5). One construct was indicated by three measured items, one indicated by five items, and eight indicated by four items. A summary of 41 observed variables and ten latent variables is presented in Table 8.1.

Table 8.1 Ten constructs in the research model

Construct	Items	Item codes	Construct code	Construct definition
1*	4	gov1, 2, 3, 4	GOVT	Government commitment
2*	4	law1, 2, 3, 4	LAW	Legal & regulatory frameworks
3*	5	inst2, 3, 6, 7, 9	INST	Institutional arrangements
4*	5	stake1, 2, 3, 4,5	STAKE	Stakeholder involvement
5*	4	public1, 3, 4, 5	PUB	Public education & awareness
6*	4	prep, price, soe, own	FIRM	Firm-level privatisation strategy
7*	4	fdist, fproc, fintp, finfo	FAIR	Fairness
8**	4	prvt5, 6, 7, 8	PRVT	Positive privatisation outcomes
9**	4	impact2, 3, 5, 7	IMP	Impacts of privatisation on the domestic financial system
10**	3	intent1, 3, 4	INTENT	Behavioural intentions

*Note: *Exogenous latent construct; and **Endogenous latent construct*

8.2.2 Perception-based privatisation model

This study adapted and incorporated many theoretical and practical aspects of privatisation success in order to formulate the proposed research framework, known as the perception-based privatisation model (see Section 2.12). The proposed research framework is re-presented in Figure 8.1 below. The model presents the possible influences of seven latent constructs or exogenous variables (GOVT, LAW, INST, STAKE, PUB, FIRM and FAIR) toward an endogenous variable (PRVT – *favourable*

or *positive* privatisation outcomes), and the possible influence of PRVT toward two other endogenous variables (IMP – possible impacts on Laos’ financial system and INTENT – behavioural intentions). As discussed above, endogenous or dependent variables depend on other variables. Figure 8.1 depicts the structural links among both types of latent variables. Endogenous variables have single-headed arrows pointing to them, exogenous or independent variables do not (Byrne 2010; Ho 2006; Schumacker & Lomax 2010).

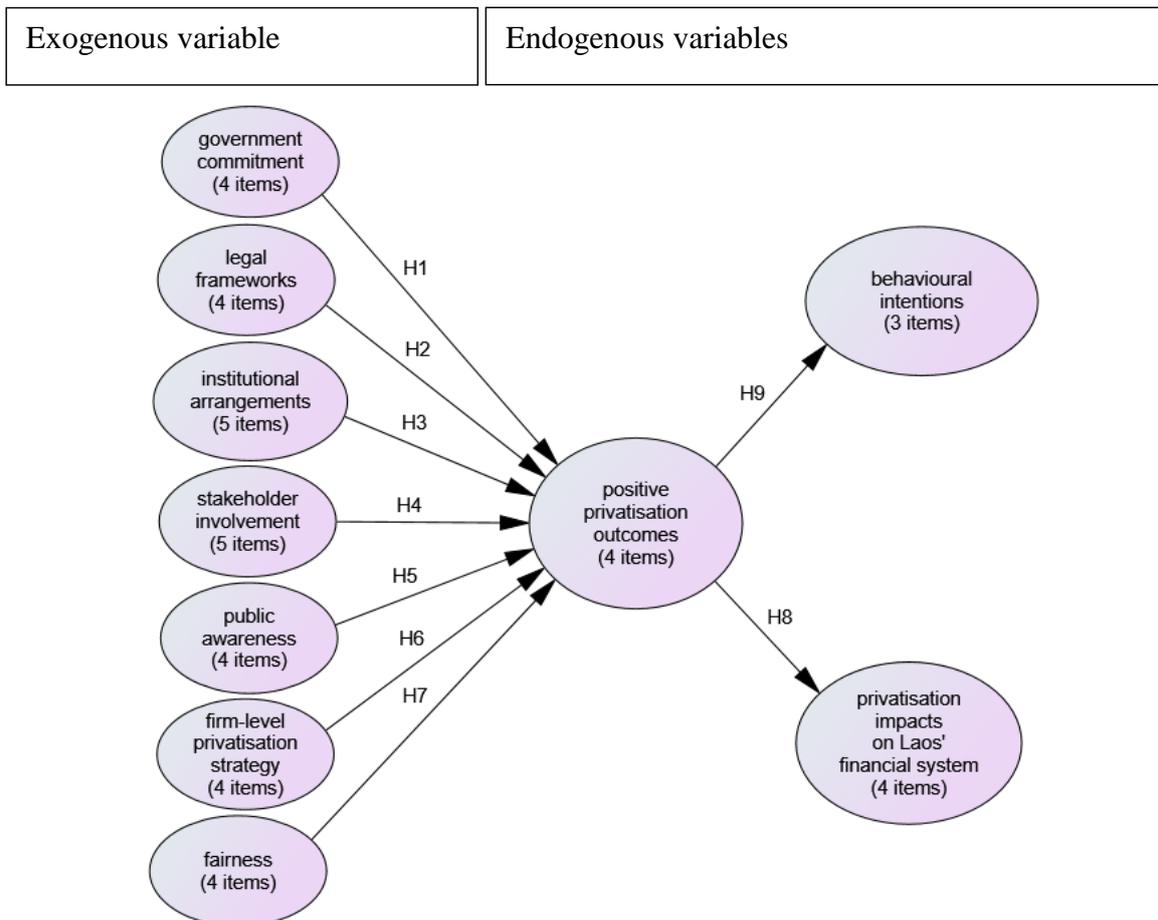


Figure 8.1 Proposed research model with testable hypotheses

In order to answer research questions 1-4, the nine hypotheses, as specified in Sub-section 2.12.1, were tested in the proposed research model. These nine hypotheses can be divided into two groups: critical factors that can help influence the likelihood of privatisation success, and positive privatisation outcomes that are perceived to positively contribute to developing and strengthening Laos’ financial system and influence behavioural intentions to invest.

1. Critical factors for privatisation success or favourable privatisation outcomes

H1: Government commitment will be positively associated with favourable or positive privatisation outcomes 'or privatisation success'.

H2: The existence of a legal and regulatory framework will be positively associated with positive privatisation outcomes.

H3: The existence of institutional arrangements will be positively associated with positive privatisation outcomes.

H4: The existence of stakeholder involvement will be positively associated with positive privatisation outcomes.

H5: Public awareness will be positively associated with positive privatisation outcomes.

H6: Firm-level privatisation strategy will be positively associated with positive privatisation outcomes.

H7: Fairness will be positively associated with positive privatisation outcomes.

2. Possible influences of perceived privatisation outcomes

H8: Positive privatisation outcomes will be positively associated with the development of Laos' financial system, not limited to capital (stock) markets.

H9: Positive privatisation outcomes will be positively associated with behavioural intentions and the willingness of investors to invest in SOE shares.

8.3 Tests for the hypothesised privatisation models

In order to perform a complete SEM model involving both exogenous and endogenous latent variables, the exogenous need to be correlated or co-varied in order to accommodate some common latent variables in a given model (Byrne 2010; Hair et al. 2006; Kline 2011; Schumacker & Lomax 2010). For this reason, the variance terms (i.e.

a double-headed arrow) of these exogenous latent variables, as specified in the hypothesised privatisation model, were correlated.

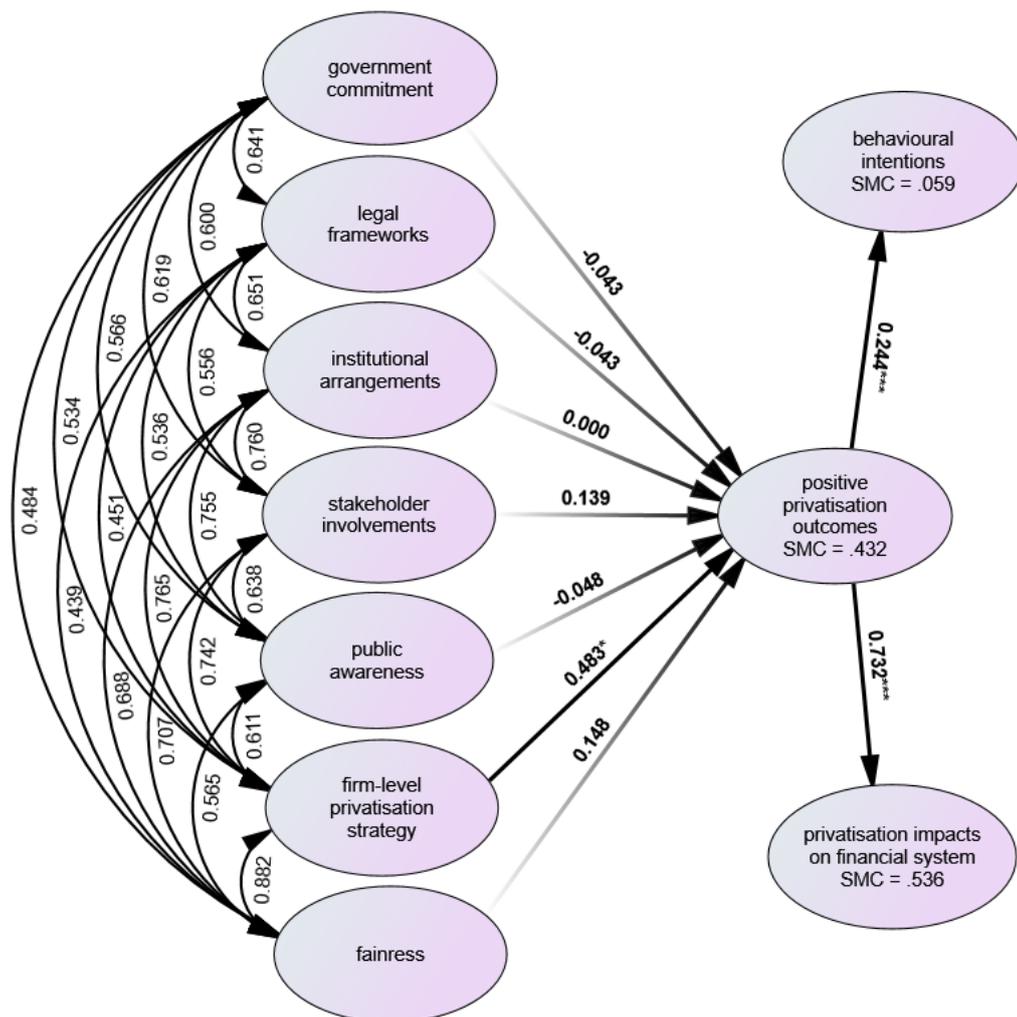
8.3.1 Hypothesised Model 1 with a 3-item factor of behavioural intentions

This sub-section examines the assessment of the hypothesised privatisation model with a 3-item factor of behavioural intentions. This is known as Model 1. A behind-the-scene working diagram in SPSS AMOS 22 for this model is presented in Appendix 4-2A. Examining the statistical estimates from the AMOS outputs of structural paths (see Appendix 3-4 for unstandardised and standardised regression weights and squared multiple correlations), only one (firm-level privatisation strategy) out of seven coefficients associated with the structural paths linking the model's exogenous and endogenous latent construct (positive privatisation outcomes), was significant by the critical ratio test ($t\text{-value} > \pm 1.96$, $p\text{-value} < 0.05$); the six other constructs were insignificant. Furthermore, two coefficients with the paths linking the model's endogenous latent construct (positive privatisation outcomes) and two other endogenous latent constructs (impacts of privatisation and behavioural intentions) were significant by the critical ratio test ($t\text{-value} > \pm 1.96$, $p\text{-value} < 0.05$). The standardised coefficients and path correlations were incorporated in the model. This is presented in Figure 8.2. The bolder lines represent significant path relationships, describing pathways to favourable privatisation outcomes, and impacts of privatisation on Laos' financial system and people's behavioural intentions.

Whereas the chi-square and Bollen-Stine p -values were significant: χ^2 (749) = 1352.664, $p < 0.05$) and Bollen-Stine p -value < 0.05 , the baseline comparison fit indices of TLI and CFI were above 0.90 (range: 0.919 - 0.926) and other fit measures like χ^2/df (1.806), SRMR (0.0612) and RMSEA (0.047, $p_{\text{close}} = 0.849$) were below their cut-off points. Given this, it was concluded that the model fit the data well. Hoelter's 0.05 and 0.01 CN values for the proposed model were also greater than 200 (216 and 223, respectively), which was indicative of an adequate sample size, according to Hoelter's benchmark that the CN value should exceed 200.

The SMC showed that 0.432 or 43.2% of the variance of support for positive privatisation outcomes was accounted for by the joint influence of the seven exogenous

variables. The remaining 0.568 or 56.8% of the variance of support for positive privatisation outcomes could not be explained by the model and was thus attributed to the unique factor (residual). Furthermore, 0.536 or 53.6% for privatisation impacts on Lao's financial system and 0.059 or 5.9% for behavioural intentions were respectively accounted for by positive privatisation outcomes, meaning that, respectively, 46.4% and 94.1% of the variance of support for privatisation impacts on Laos' financial system and behavioural intentions could not be captured by the model.



χ^2 (749) = 1352.664; χ^2/df = 1.806; χ^2 p -value = 0.000; Bollen-Stine p -value = 0.004;
 GFI = 0.851; TLI = 0.919; CFI = 0.926;
 SRMR = 0.0612; RMSEA = 0.047 (0.043 - 0.051), p_{close} = 0.849;
 Hoelter's 0.05/0.01 Critical N = 216/223

Note: *, ** and *** denotes significance at 0.05, 0.01 and 0.001

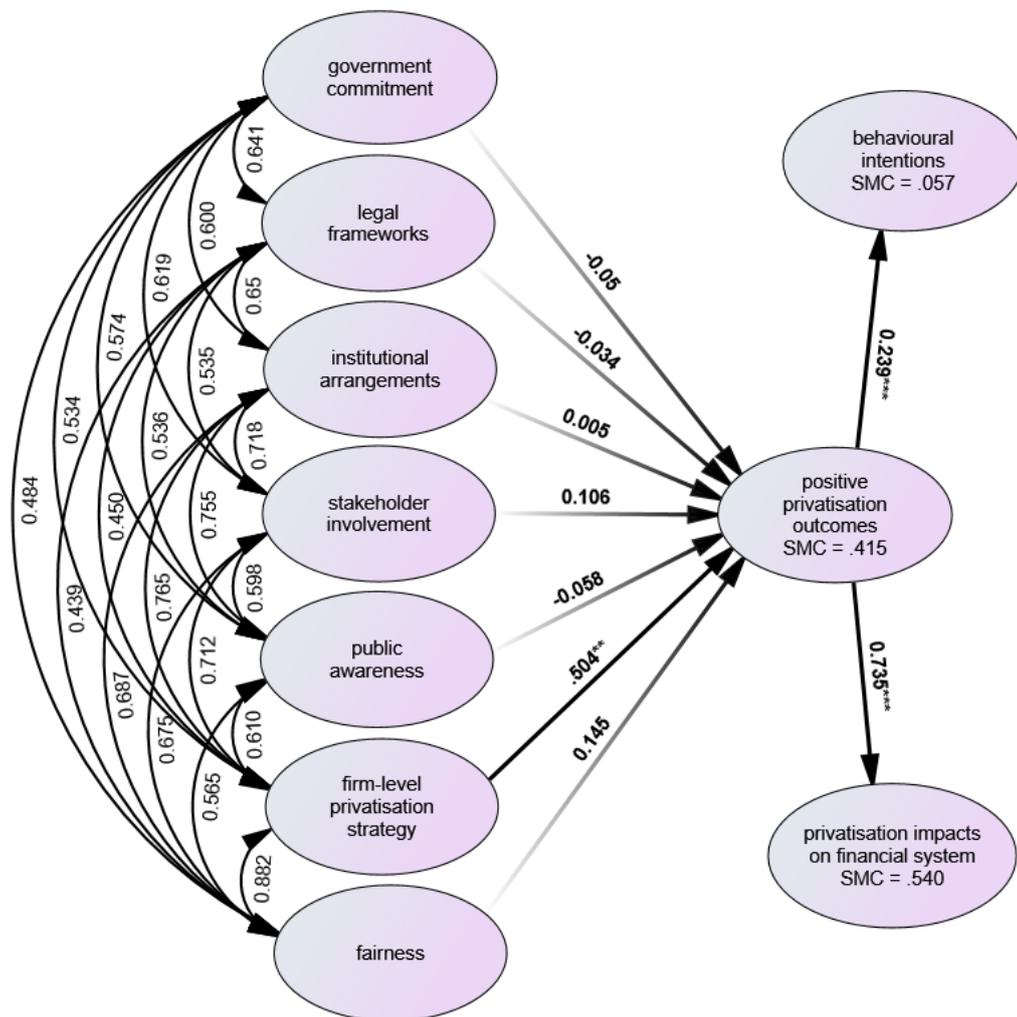
Figure 8.2 Hypothesised Model 1 with a 3-item factor of behavioural intentions

In the standardised residual covariance matrix, 83 pairs of measured variables contained an absolute value of standardised residual covariance greater than $|2.00|$ (range: $|2.58| - |3.90|$) or equivalent to 10.12% out of 820 pairs. This was considered to be quite large. Observing the normal q-q plot and histogram of these covariance values (see Appendix 4-2B), the shape of the distribution appeared to approach that of a normal curve (not severely skewed) and almost all standardised residual covariance scores were clustered on a 45-degree reference line with minor deviations. Therefore, the data seemed to be normally distributed. Specifically, 43 pairs of these covariance values were strongly associated with three measured variables: stake5 (7 pairs), impact5 (15 pairs) and impact7 (21 pairs). These could not be well reproduced in the hypothesised model. Consequently, Model 1 needed to be re-specified by removing the three measured variables. The model was re-named Model 2.

8.3.2 Hypothesised Model 2 with a three-item factor of behavioural intentions

This sub-section examines the assessment of Model 2 with a three-item factor of behavioural intentions, containing the remaining 38 observed variables. A behind-the-scene working diagram in SPSS AMOS 22 for this model is presented in Appendix 4-3A. After examining the statistical estimates from the AMOS outputs of structural paths (see Appendix 3-5 for unstandardised and standardised regression weights and squared multiple correlations), it was found that the results were almost identical to those derived from Model 1. Specifically, only one (firm-level privatisation strategy) out of seven coefficients associated with the structural paths linking the model's exogenous and endogenous latent construct (positive privatisation outcomes) was significant by the critical ratio test ($t\text{-value} > \pm 1.96$, $p\text{-value} < 0.05$); the six other constructs were insignificant. In addition, two coefficients with the paths linking the model's endogenous latent construct (positive privatisation outcomes) and two other endogenous latent constructs (i.e. impacts of privatisation and behavioural intentions) were significant by the critical ratio test ($t\text{-value} > \pm 1.96$, $p\text{-value} < 0.05$). The standardised coefficients and path correlations were incorporated in the model, as presented in Figure 8.3. The bolder lines represent significant path relationships, describing pathways to favourable or positive privatisation outcomes, and impacts of privatisation on Laos' financial system and behavioural intentions.

Even though significant chi-square and Bollen-Stine p -values indicate that the model did not fit the data well, other model fit indices of χ^2/df (1.743), TLI (0.931), CFI (0.937), SRMR (0.0540) and RSMEA (0.046, $p_{close} = 0.951$) were all above their threshold values. Given the model complexity and large sample size, significant chi-square values were expected. In addition, 0.05 and 0.01 Hoelter's CN values for the proposed model were greater than 200 (225 and 234, respectively), indicating an adequate sample size, according to Hoelter's benchmark that the CN value should exceed 200. It was concluded that Model 2 fit the data well.



χ^2 (635) = 1106.545; χ^2/df = 1.743; χ^2 p -value = 0.000; Bollen-Stine p -value = 0.004;
 GFI = 0.867; TLI = 0.931; CFI = 0.937;
 SRMR = 0.0540; RMSEA = .046 (0.041 - 0.050), $p_{close} = 0.951$;
 Hoelter's 0.05/0.01 Critical N = 225/234

*Note: *, ** and *** denotes significance at 0.05, 0.01 and 0.001*

Figure 8.3 Hypothesised Model 2 with a 3-item factor of behavioural intentions

The SMC shows that 0.415 or 41.5% of the variance of support for positive privatisation outcomes was accounted for by joint influence of the seven exogenous variables. The remaining 0.585 or 58.5% of the variance of support for positive privatisation outcomes could not be explained by the model, and was thus attributed to the unique factor (residual). Furthermore, 0.540 or 54.0% for privatisation impacts on Lao's financial system and 0.057 or 5.7% for behavioural intentions were accounted for by positive privatisation outcomes. This meant that 46.0% and 94.3% of the variance of support for privatisation impacts on Laos' financial system and behavioural intentions could not be captured by the model.

In the standardised residual covariance matrix, 41 pairs of measured variables contained an absolute value of standardised residual covariance greater than |2.00| (range: |2.45| – |3.93|) or equivalent to 6.26% out of 703 pairs. This is now considered to be generally small. Examining the normal q-q plot and histogram of these covariance values (see Appendix 4-3B), the shape of the distribution appeared to approach that of a normal curve (not severely skewed) and almost all standardised residual covariance scores fell close to the line, with minor deviations. The data could thus be said to be normally distributed. Specifically, 25 pairs of these covariance values were strongly associated with three binary variables: intent1 (8 pairs), intent3 (8 pairs) and intent4 (9 pairs). These could not be well reproduced by the hypothesised model, partly due to the violation of the normal distribution assumption. In order to overcome the non-normal distribution, an item parcelling technique was used by summing these three binary variables to formulate a single-item factor – intent. Model 2 was re-specified and named Model 3.

8.3.3 Hypothesised Model 3 with a single-item factor of behavioural intentions

This sub-section examines the assessment of Model 3 with a single-item factor of behavioural intentions. In order to create a single-item factor, an item parcelling technique was used for this study (see Sub-section 3.7.4). The main purpose of this was to handle the violation of the normality assumption, caused by the three binary variables that were designed to measure behavioural intentions. It was also used to adjust these binary variables from a certain distribution that was probably relatively close to a

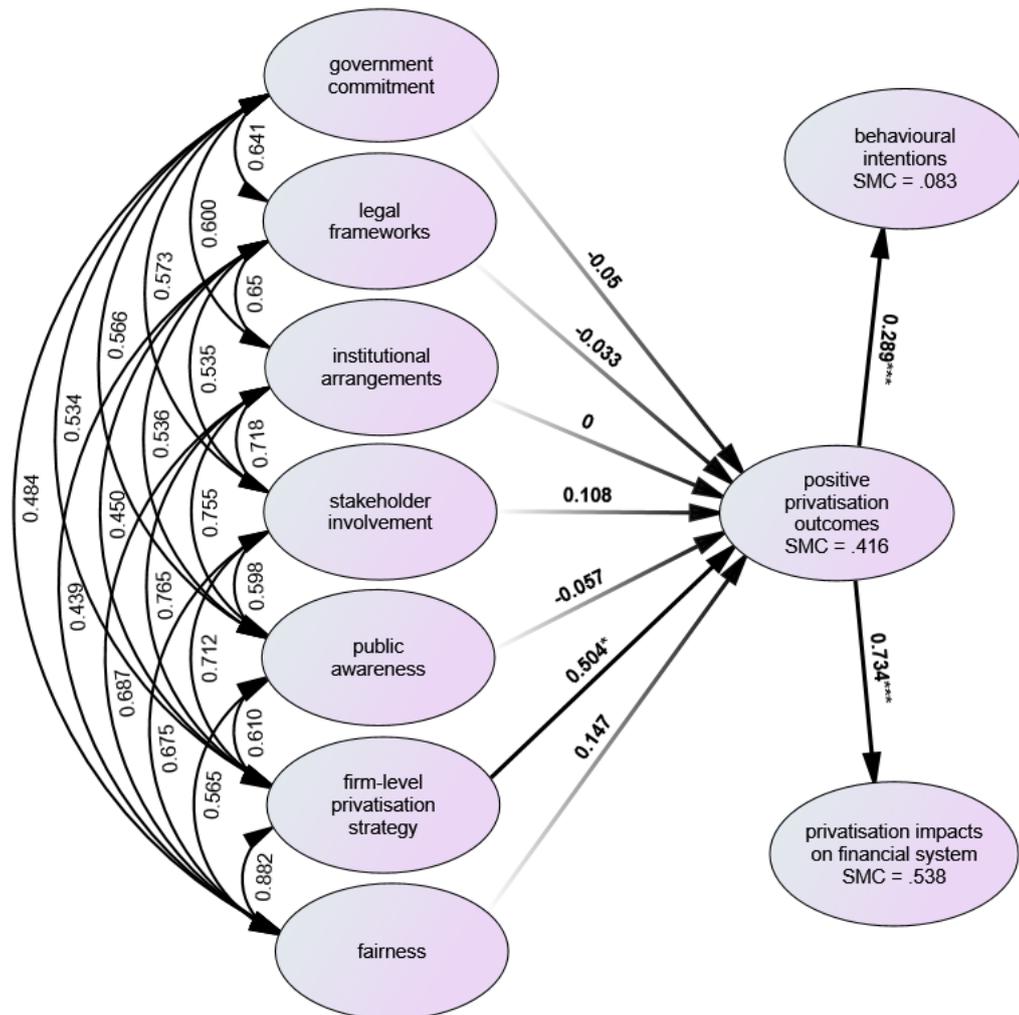
normality assumption. As a result, a single-item factor - behavioural intentions - was created by aggregating the three binary variables: intent1, intent3 and intent4. This single item was then used in Model 3.

In handling this single-item factor, this study adopted Jöreskog and Sörbom's (1982) single-item measurement technique (see Sub-section 3.9.3). Through this process, a standard error for intent was set at $(1 - 0.85) \times \text{intent's variance}$. The standard error for intent was therefore fixed at 0.1899 ($1.266 \times (1 - 0.85)$). Since this variable of intent resulted from the combination of three binary items, it should be interpreted as '*whether the respondents would buy or invest in shares of privatisable SOEs and/or recommend friends and/or relatives to buy or invest in shares of privatisable SOEs*'.

This sub-section then examines the assessment of Model 3 with this single-item factor of behavioural intentions, containing the remaining 36 observed variables. A behind-the-scene working diagram in SPSS AMOS 22 for this model is presented in Appendix 4-4A. After examining the statistical estimates from the AMOS outputs of structural paths (see Appendix 3-6 for unstandardised and standardised regression weights and squared multiple correlations), the results were almost identical to those derived from Model 1 and Model 2. Specifically, only one (firm-level privatisation strategy) out of seven coefficients associated with the structural paths linking the model's exogenous and endogenous latent construct (positive privatisation outcomes), was significant by the critical ratio test ($t\text{-value} > \pm 1.96$, $p\text{-value} < 0.05$); the six other constructs were insignificant. In addition, two coefficients with the paths linking the model's endogenous latent construct (positive privatisation outcomes) and two other endogenous latent constructs (i.e. impacts of privatisation and behavioural intentions) were significant by the critical ratio ($> \pm 1.96$, $p < 0.05$). The standardised coefficients and path correlations were incorporated in the model, as shown in Figure 8.4 below. The bolder lines represent significant path relationships, describing pathways to favourable or positive privatisation outcomes, and impacts of privatisation on Laos' financial system and people's behavioural intentions.

Even though significant chi-square and Bollen-Stine p -values indicate that the model did not fit the data well, other model fit indices of χ^2/df (1.764), TLI (0.932), CFI (0.93),

SRMR (0.0498) and RSMEA (0.046, $p_{close} = 0.908$) were further enhanced and above their threshold values. Given the model complexity and large sample size, significant chi-square values were expected. Hoelter's 0.05 and 0.01 CN values for the proposed model were greater than 200 (224 and 233, respectively), indicating an adequate sample size, according to Hoelter's benchmark that the CN should exceed 200. It was concluded that Model 3 fit the data well.



χ^2 (565) = 996.887; $\chi^2/df = 1.764$; χ^2 p-value = 0.000; Bollen-Stine p-value = 0.004;
 GFI = 0.872; TLI = 0.932; CFI = 0.939;
 SRMR = 0.0498; RMSEA = 0.046 (0.041 - 0.051), $p_{close} = 0.908$;
 Hoelter's 0.05/0.01 Critical N = 224/233

*Note: *, ** and *** denotes significance at 0.05, 0.01 and 0.001*

Figure 8.4 Model 3 with a single-item factor of behavioural intentions

The SMC shows that 0.416 or 41.6% of the variance of support for positive privatisation outcomes was accounted for by joint influence of the seven exogenous variables. The remaining 0.584 or 58.4% of the variance of support for positive privatisation outcomes could not be explained by the model and was thus attributed to the unique factor (residual). Furthermore, 0.538 or 53.8% for privatisation impacts on Lao's financial system and 0.083 or 8.3% for behavioural intentions were accounted for by positive privatisation outcomes, meaning that 46.2% and 91.7% of the variance of support for privatisation impacts on Laos' financial system and behavioural intentions could not be captured by the model.

However, the standardised residual covariance matrix indicated that there were still 27 pairs of measured variables that contained an absolute value of standardised residual covariance greater than $|2.00|$ (range: $|2.45 - |2.77|$ or equivalent to 4.29% out of 630 pairs). This is now considered to be generally small. Observing the normal q-q plot and histogram of these covariance values (see Appendix 4-4B), the shape of the distribution appeared to approach that of a normal curve (not severely skewed) and almost all standardised residual covariance scores were clustered on a 45-degree reference line, with minor deviations. The data could thus be said to have a normal distribution. As suggested by Hair et al. (2006, p. 797), "standardised residuals between $|2.5|$ and $|4.0|$ deserve some attention, but may not suggest any changes to the model if no other problems are associated with those two items". Given this, no further model modification was needed and Model 3 was treated as a final hypothesised model for this study.

8.3.4 Tests for hypothesised Model 3 using 5 imputed datasets

Out of five imputed datasets (see Sub-section 6.3.2), the first dataset (Dataset 1) was used to perform preliminary analyses and structural equation models. When the level of missing data is low (below 5%), any imputed dataset can produce similar results. For this reason, the final best-fitting model (Model 3) was tested on four other imputed datasets, in order to draw possible conclusions from the survey data. In doing so, almost all findings derived from five datasets were found to be almost identical in all aspects of path coefficients and model fit statistics. As discussed in Sub-section 6.3.2, prior to making final conclusions, this study adopted a simple mean technique for key parameter

estimates from these five datasets for validation and comparison purposes. The *p*-value estimates for all unstandardised path coefficients (see Appendix 3-7A) were pooled using the pooling steps recommended by Gelman et al. (2014). A summary of standardised path coefficients with statistical significance (*p*-values in brackets), and selected model fit indices based on five datasets, is presented in Appendix 3-7B.

The chi-square values and Bollen-Stine *p*-values for all five datasets were statistically significant at 0.05 and less. As noted in the literature, the chi-square statistics are highly sensitive to large samples and model complexity, and consequently, significant *p*-values could be expected (Byrne 2010; Hair et al. 2006; Kline 2011; Schumacker & Lomax 2010; Stevens 2009). Although these two *p*-values suggest an ill-fitting model, the baseline comparison indices of TLI (range: 0.927 - 0.933), CFI (range: 0.934 - 0.939), χ^2/df (range: 1.764 – 1.833), and SRMR (range: 0.0482 - 0.0498) are suggestive of a well-fitting model. Furthermore, values of RMSEA ranging from 0.046 to 0.048 suggest that the fit of Model 3 was highly acceptable. Specifically, the upper bound of the 90% confidence interval for all RSMEA values were 0.053 or less, so that close-fit hypotheses could not be rejected at insignificant *p*-values (range: 0.825 - 0.909). Hoelter's 0.05 and 0.01 CN values for this proposed model were all greater than 200 across these datasets, suggesting that a minimum sample size requirement was satisfied in order to assess the SEM analysis.

Examining the statistical estimates from the AMOS outputs derived from the five datasets, all unstandardised regression weights of 36 observed variables were significant in a critical ratio test ($> \pm 1.96$, $p < 0.05$). The standardised regression weights on average ranged from 0.606 to 0.922, indicating that the 36 variables were significantly represented by their latent constructs. Of seven coefficients associated with structural paths linking the model's exogenous and endogenous latent constructs (positive privatisation outcomes), only one construct (firm-level privatisation strategy) was significant at the average probability level of 0.038; the six other exogenous constructs were insignificant. In addition, two coefficients with the structural paths linking the model's endogenous latent variable (positive privatisation outcomes) and perceived impacts of privatisation on Laos' financial system and behavioural intentions were significant at the average level of 0.000. Therefore, it can be concluded that in the final

proposed model (Model 3), the five different imputed datasets did not differ in their causal path coefficients, critical ratios (t -values) and model fit indices.

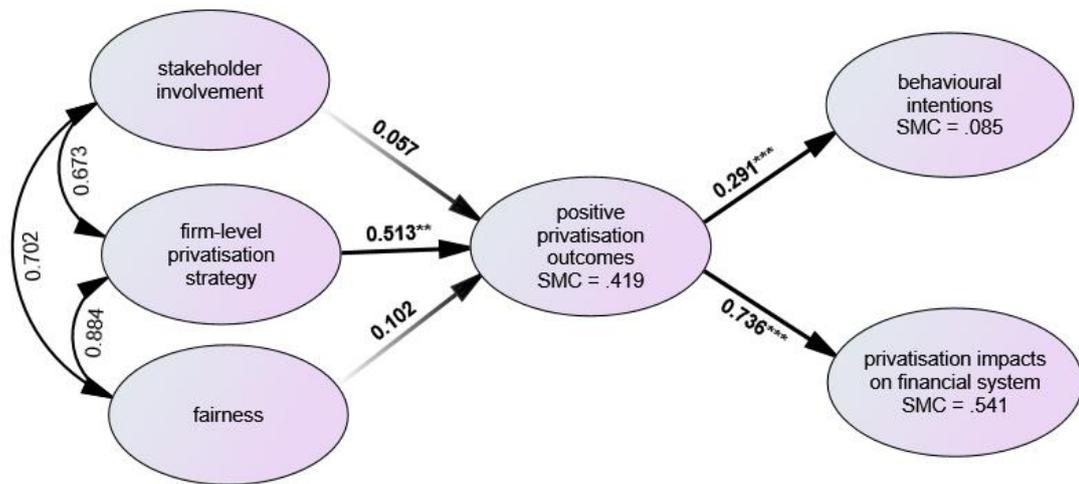
8.3.5 Tests for hypothesised Model 4 without negative path coefficients

This section analyses the re-specified Model 3 using Dataset 1. Four exogenous latent constructs that were likely to have negative path coefficients towards the endogenous latent construct of positive privatisation outcomes at the non-significance level (i.e. greater than 0.05) were dropped from Model 3. These four constructs contained 17 measured variables: government commitment (4 items), legal and regulatory framework (4 items), institutional arrangements (5 items), and public awareness (4 items). This re-specified model was named Model 4.

Examining the statistical estimates from the AMOS outputs of structural paths, it was found that the results were almost identical to those derived from Model 3. Specifically, only one (firm-level privatisation strategy) out of three coefficients associated with the structural paths linking the model's exogenous and endogenous latent construct (positive privatisation outcomes), was significant by the critical ratio test (t -value $> \pm 1.96$, p -value < 0.05), whereas, the other two constructs were insignificant. In addition, two coefficients with the paths linking the model's endogenous latent construct (positive privatisation outcomes) and the other two endogenous latent constructs (i.e. impacts of privatisation and behavioural intentions) were significant by the critical ratio ($> \pm 1.96$, $p < 0.05$). The standardised coefficients and path correlations were incorporated in the model, as shown in Figure 8.5. The bolder lines represent significant path relationships, describing pathways to favourable privatisation outcomes, and impacts of privatisation on Laos' financial system and behavioural intentions.

Even though significant chi-square and Bollen-Stine p -values indicated that the model did not fit the data well, other model fit indices of χ^2/df (2.013), GFI (0.923), TLI (0.942), CFI (0.951), SRMR (0.0538) and RSMEA (.053, $p_{close} = 0.268$) were further enhanced and all above their threshold values. With model complexity and large samples, significant chi-square values could be expected. Hoelter's 0.05 and 0.01 CN values for the proposed model were greater than 200 (214 and 231, respectively),

indicative of an adequate sample size, according to Hoelter's benchmark that the CN value should exceed 200. Given this, it was concluded that Model 4 fit the data well.



$\chi^2 (145) = 291.823$; $\chi^2/df = 2.013$; $\chi^2 p\text{-value} = 0.000$; Bollen-Stine $p\text{-value} = 0.004$;
 GFI = 0.923; TLI = 0.942; CFI = 0.951;
 SRMR = 0.0538; RMSEA = 0.053 (0.044 - 0.062), $p_{close} = 0.268$;
 Hoelter's 0.05/0.01 Critical N = 214/231

*Note: *, ** and *** denotes significance at 0.05, 0.01 and 0.001*

Figure 8.5 Hypothesised Model 4 with three exogenous latent constructs

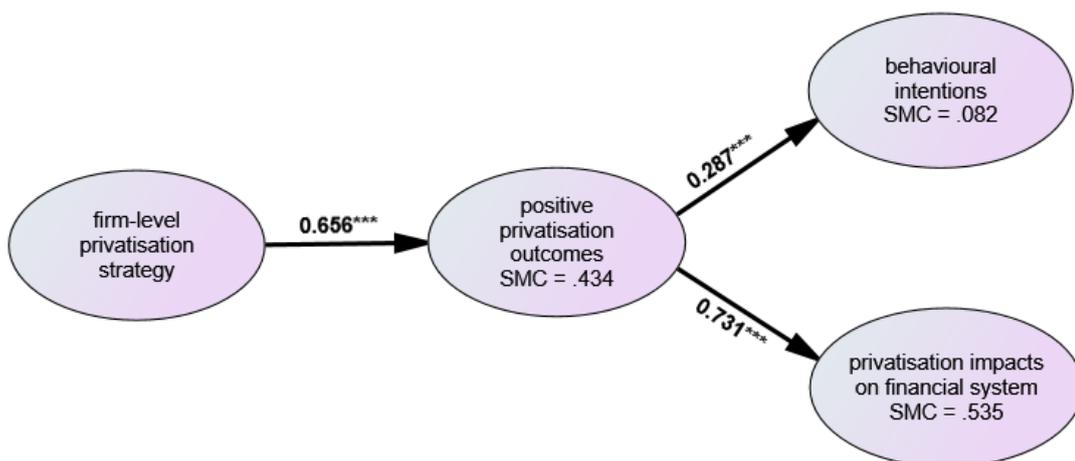
The SMC showed that 0.419 or 41.9% of the variance of support for positive privatisation outcomes was accounted for by the joint influence of the seven exogenous variables. The remaining 0.581 or 58.1% of the variance of support for positive privatisation outcomes could not be explained by the model, and was thus attributed to the unique factor (residual). Furthermore, 0.541 or 54.1% for privatisation impacts on Lao's financial system and 0.085 or 8.5% for behavioural intentions were accounted for by positive privatisation outcomes, meaning that 45.9% and 91.5% of the variance of support for privatisation impacts on Laos' financial system and behavioural intentions could not be captured by the model.

8.3.6 Tests for hypothesised Model 5 without non-significant path coefficients

This section analyses the re-specified Model 4 using Dataset 1. Two exogenous latent constructs that were likely to have non-significant path coefficients towards the endogenous latent construct of positive privatisation outcomes were dropped from Model 4. These two constructs contained eight measured variables: stakeholder

involvement (4 items) and fairness (4 items). This re-specified model was named Model 5.

Examining the statistical estimates from the AMOS outputs of structural paths, it was found that the results were almost identical to those derived from Model 5. Specifically, only one (firm-level privatisation strategy) associated with the structural paths linking the model's exogenous and endogenous latent construct (positive privatisation outcomes), was significant by the critical ratio test ($t\text{-value} > \pm 1.96$, $p\text{-value} < 0.05$). The standardised coefficients and path correlations were incorporated into the model, as shown in Figure 8.6. The bolder lines represent significant path relationships, describing pathways to positive privatisation outcomes, and impacts of privatisation on Laos' financial system and behavioural intentions.



$\chi^2 (42) = 84.322$; $\chi^2/df = 2.008$; $\chi^2 p\text{-value} = 0.000$; Bollen-Stine $p\text{-value} = 0.016$;

GFI = 0.957; TLI = 0.959; CFI = 0.968;

SRMR = .0488; RMSEA = 0.053 (0.036 - 0.069), $p_{close} = 0.359$;

Hoelter's .05/.01 Critical N = 247/282

*Note: * , ** and *** denotes significance at 0.05, 0.01 and 0.001*

Figure 8.6 Hypothesised Model 5 with one exogenous latent construct

Even though significant chi-square and Bollen-Stine p -values indicated that the model did not fit the data well, other model fit indices of χ^2/df (2.008), GFI (0.957), TLI (0.959), CFI (0.968), SRMR (0.0488) and RSMEA (0.053, $p_{close} = 0.268$) were further enhanced and all above their threshold values. With model complexity and large samples, significant chi-square values could be expected. Hoelter's 0.05 and 0.01 CN

values for the proposed model were also greater than 200 (247 and 282, respectively), indicating an adequate sample size, according to Hoelter's benchmark that the CN value should exceed 200. Given this, it was concluded that Model 5 fit the data well.

8.3.7 Summary of model hypotheses using a whole sample

Using Model 3 with five different imputed datasets, and Model 4 and Model 5 with Dataset 1, findings could be generalised. Only one (firm-level privatisation strategy) out of seven coefficients associated with the structural paths linking the model's exogenous and endogenous latent construct (positive privatisation outcomes), were significant by the critical ratio ($> \pm 1.96$, $p < 0.05$); the six other constructs were insignificant. In addition, two coefficients with paths linking the model's endogenous latent construct (positive privatisation outcomes) and the other two endogenous latent constructs (i.e. impacts of privatisation and behavioural intentions) were significant by the critical ratio test ($t\text{-value} > \pm 1.96$, $p\text{-value} < 0.05$). Consequently, the three hypotheses (H6, H8 and H9) were accepted, while six hypotheses associated with exogenous latent variables (H1, H2, H3, H4, H5 and H7) were rejected. A summary of testable hypotheses for the proposed privatisation model is presented in Table 8.2 (page 226).

While assuming that all seven exogenous latent factors are of critical importance in the privatisation process in Laos; only firm-level privatisation strategy (Hypothesis 6) was perceived to significantly contribute to *favourable* or positive privatisation outcomes. The views and perceptions of local stakeholders thus appeared to contrast with those of foreign experts across a wide range of literature.

Table 8.2 A summary of testable hypotheses for the hypothetical privatisation model

Hypotheses	Latent variables		Results	Explanations
	Exogenous	Endogenous		
<i>H1: Government commitment will be positively associated with favourable or positive privatisation outcomes</i>	Government commitment	Positive privatisation outcomes	Rejected	Government commitment did not significantly influence positive privatisation outcomes
<i>H2: The existence of a legal and regulatory framework will be positively associated with positive privatisation outcomes</i>	Legal framework	Positive privatisation outcomes	Rejected	The existence of a legal and regulatory framework did not significantly influence positive privatisation outcomes
<i>H3: The existence of institutional arrangements will be positively associated with positive privatisation outcomes</i>	Institutional arrangements	Positive privatisation outcomes	Rejected	The existence of institutional arrangements did not significantly influence positive privatisation outcomes
<i>H4: The existence of stakeholder involvement will be positively associated with positive privatisation outcomes</i>	Stakeholder involvement	Positive privatisation outcomes	Rejected	The existence of stakeholder involvement did not significantly influence positive privatisation outcomes
<i>H5: Public education and awareness will be positively associated with positive privatisation outcomes</i>	Public awareness	Positive privatisation outcomes	Rejected	Public education and awareness did not significantly influence positive privatisation outcomes

<i>H6: Firm-level privatisation strategy will be positively associated with positive privatisation outcomes</i>	Firm-level privatisation strategy	Positive privatisation outcomes	Accepted	Firm-level privatisation strategy significantly influenced positive privatisation outcomes
<i>H7: Fairness will be positively associated with positive privatisation outcomes</i>	Fairness	Positive privatisation outcomes	Rejected	Fairness did not significantly influence positive privatisation outcomes
<i>H8: Positive privatisation outcomes will be positively associated with the development of Laos' financial system, not limited to capital (stock) markets.</i>	Positive privatisation outcomes	Impacts of privatisation on Laos' financial system	Accepted	Positive privatisation outcomes significantly influence the development and strengthening of Laos' domestic financial system
<i>H9: Positive privatisation outcomes will be positively associated with behavioural intentions and willingness of investors to invest in shares of privatisable SOEs.</i>	Positive privatisation outcomes	Behavioural intentions	Accepted	Positive privatisation outcomes significantly influence people's willingness and behavioural intentions to buy or not to buy shares in SOEs being privatised

Note: The seven exogenous constructs were: government commitment, legal and regulatory frameworks, institutional arrangements, stakeholder involvement, public education and awareness, firm-level privatisation strategy, and fairness. The endogenous latent constructs were: positive privatisation outcomes, impacts of privatisation on Laos' financial system, and behavioural intentions.

8.4 Tests for moderating effects in hypothesised Model 3

In order to answer research question 5 (*in what ways would moderator(s) of gender, educational level and workplaces affect the privatisation process in Laos?*), this section discusses a multiple-group SEM analysis – by gender, educational level and workplaces – using Model 3 and Dataset 1. The main purpose of this analysis was to examine whether components of the measurement and structural models were equivalent (i.e. invariant) across particular groups of interest, and if they followed the same dynamics for those groups. If the two sub-groups of gender (e.g. female versus male) were not significantly different, it could be concluded that the gender moderator did not influence the predictors specified in a given model. In performing a multiple-group analysis – CFA measurement and structural models – Byrne (2010) and Ho (2006) suggested four steps:

- Step 1:** No equality constraints are imposed on any parameters in a given model; and therefore, all parameters are separately estimated for both groups, known as a group-variant measurement model.
- Step 2:** All regression weights for a sub-group (i.e. female versus male) are fixed as equal to those corresponding regression weights for another sub-group (i.e. males). The resulting model is referred to as the constrained model since all parameter estimates across both sub-groups are specified as invariant, meaning that the two sub-groups share the same regression weights. Such a model is called group-invariant measurement model.
- Step 3:** Structural paths in the model for both groups are estimated simultaneously. The resulting model is considered as the baseline or unconstrained model, since the assessment of direct paths are allowed to differ across the two sub-groups. This is known as a group-variant path model.
- Step 4:** All structural path coefficients for a sub-group (i.e. females) are fixed as equal (invariant) to those corresponding path coefficients for another sub-group (i.e. males), known as a group-invariant path model.

Before performing multiple-group analyses, some statistical requirements needed to be taken into account, as follows:

1. An examining of the critical ratios for differences between parameters was needed. If there were no significant differences in pairwise regression weights and path coefficients between the two sub-groups ($CR > \pm 1.96$, $p < .05$), the same regression weights and path coefficients could be used for both sub-groups. If this was not the case, the regression weights and path coefficients of that associated variable and path between both sub-groups was allowed to vary, since they might not be equivalent (Byrne 2010; Ho 2006; Raykov & Marcoulides 2006).
2. When the χ^2 difference value is statistically significant ($p < 0.05$), non-invariance can be concluded (Byrne 2010; Ho 2006; Raykov & Marcoulides 2006). Cheung and Rensvold (2002), however, suggested that evidence of non-invariance should be based upon a difference in CFI value ($\Delta CFI \leq 0.01$) rather than a χ^2 difference value, since the χ^2 difference test is affected by sample size and model complexity. This study thus adopted χ^2 and CFI difference values.
3. An AIC measure is employed in order to evaluate and compare the model of interest and two or more models. A given model with a lower AIC value is preferable (see Sub-section 7.2.4).
4. The *Emulisrel6* correction option in AMOS is needed prior to testing for the multiple-group analysis. This option gives the same parameter estimates of the simultaneous analysis of the two groups as those produced by two separate analyses (Arbuckle 2014; Byrne 2010).

8.4.1 Moderating effects by gender

In an attempt to assess whether the pattern of structural relationships hypothesised in path models followed the same dynamics for females and males, the multiple-group analysis by gender (359 respondents: 126 females and 233 males) associated with Model 3 using Dataset 1 was performed.

CFA measurement model by gender

In performing the CFA measurement model for multiple-group analyses (see Appendices 4-5A ‘female samples’ and 4-5B ‘male samples’ for behind-the-scene working diagrams), two competing measurement models of group-variant and group-invariant models were assessed

using these female and male samples. Appendix 3-8A presents the chi-square goodness-of-fit statistics, baseline comparisons fit indices, and model comparison statistics for the group-variant and group-invariant measurement models.

Although the chi-square values for both models were statistically significant at a 0.05 level (i.e. both models yielded poor fit by the chi-square goodness-of-fit test), the baseline fit indices of TLI and CFI for both models were all above 0.90 (range: 0.912 - 0.925). These values show the improvement in fit of both models relative to the null model. Indeed, the only possible improvement in fit of both models ranges from 0.075 and 0.088. In addition, the RMSEA values for the group-variant and group-invariant models were 0.038 and 0.037, respectively. Therefore, it could be concluded that the fit of these two models was adequate.

The fit of the two competing models could be directly compared. Using the nested model comparison statistics, the chi-square difference value for the two models was 17.955 (1673.220 - 1655.265). With 26 degrees of freedom (232 - 206), this value was not significant at the 0.05 level ($p > 0.05$). The difference in CFI was also less than a cut-off point of 0.01. Thus, the two models did not differ significantly in their goodness-of-fit.

The fit of the two models could also be compared using the AIC measure. In evaluating the hypothesised model, this measure takes into account both model parsimony and model fit. Simple models that fit the data well receive low scores, whereas poorly fitting models get high scores. The AIC measure for the group-invariant model (2085.220) was slightly lower than that for the group-variant model (2119.265), indicating that the group-invariant model was both more parsimonious and better fitting than the group-variant model. On the basis of the model comparison findings, and assuming that the group-invariant model was correct, the group-invariant model's estimates were preferable to the group-variant model's estimates.

Examining the critical ratio test for gender differences among the regression weights, it was found that one of the pairwise comparisons (females versus males) for regression weights (f6 – m6) were significant in a critical ratio test of 2.163 ($CR > \pm 1.96$, $p < 0.05$). Therefore, this gender difference in regression weights (associated with the measurement variable of law1) was allowed to vary in the multiple-group analysis of the structural path model.

Structural path model by gender

In performing the structural model for multiple-group analyses (see Appendices 4-6A 'female samples' and 4-6B 'male samples' for behind-the-scene working diagrams), two competing measurement models of group-variant and group-invariant models were assessed using female and male subjects. Appendix 3-8B presents the chi-square goodness-of-fit statistics, baseline comparisons fit indices, and model comparison statistics for the group-variant and group-invariant measurement models.

Although the chi-square values for both models were statistically significant at a 0.05 level (i.e. both models yielded poor fit by the chi-square goodness-of-fit test), the baseline fit indices of TLI and CFI for both models were above 0.90 (range: 0.912 - 0.920). These values show the improvement in fit of both models relative to the null model. Indeed, the only possible improvement in fit of both models ranges from 0.080 and 0.088. Also, both RMSEA values for the group-variant and group-invariant models were 0.038. It could therefore be concluded that the fit of these two models was adequate.

The fit of the two competing models could be compared directly. From the nested model comparison statistics, it could be said that the chi-square difference value for the two models was 15.874 (1752.193 - 1736.319). With 9 degrees of freedom (177 - 168), this values was not significant at the 0.05 level ($p > 0.05$). The difference in CFI was also less than a cut-off point of 0.01. Thus, the two models did not differ significantly in their goodness-of-fit.

The fit of the two models could also be compared using the AIC measure. In evaluating the hypothesised model, this measure takes into account both model parsimony and model fit. Simple models that fit the data well receive low scores, whereas poorly fitting models get high scores. The AIC measure for the group-invariant model (2090.319) was slightly lower than that for the group-variant model (2119.265), indicating that the group-invariant model was both more parsimonious and better fitting than the group-variant model. On the basis of the model comparison findings, and assuming that the group-invariant model was correct, the group-invariant model's estimates were preferable to the group-variant model's estimates.

Examining the critical ratio test for gender differences among the path coefficients, it was found that none of the pairwise comparisons between path coefficients for females and males was significant ($CR > \pm 1.96, p < 0.05$). Thus, the hypothesised structural relationships among seven exogenous and three endogenous constructs operated similarly (in magnitude and/or direction) for both female and male samples. The findings were also in line with those derived from a single sample of 359 subjects. A summary of unstandardised path coefficients is presented in Table 8.3.

Table 8.3 Unstandardised coefficients in the group-invariant model by gender

		Estimate	CR	p-value
Privatisation outcomes	<-- Government commitment	-0.054	-0.683	0.495
Privatisation outcomes	<-- Legal framework	-0.052	-0.65	0.516
Privatisation outcomes	<-- Public awareness	-0.054	-0.721	0.471
Privatisation outcomes	<-- Firm-level privatisation strategy	0.672	2.404	0.016
Privatisation outcomes	<-- Fairness	0.219	1.063	0.288
Privatisation outcomes	<-- Stakeholder involvement	0.135	1.153	0.249
Privatisation outcomes	<-- Institutional arrangements	0.037	0.257	0.797
Impacts on \$\$\$ system	<-- Privatisation outcomes	0.544	10.377	***
Intentions	<-- Privatisation outcomes	0.381	4.967	***

Source: Author's calculations

8.4.2 Moderating effects by educational level

This sub-section outlines the multiple-group analysis of Model 3 by educational level: tertiary education (162) and postgraduate education (197). The main purpose was to examine whether the pattern of structural relationships hypothesised in the path model followed the same dynamics for both sub-groups.

CFA measurement model by educational level

In performing the CFA measurement model for multiple-group analysis (see Appendices 4-5A 'tertiary education samples' and 4-5B 'postgraduate education samples' for behind-the-scene working diagrams), two competing measurement models of group-variant

and group-invariant models were assessed using these education sub-groups. Appendix 3-9A presents the chi-square goodness-of-fit statistics, baseline comparisons fit indices, and model comparison statistics for the group-variant and group-invariant measurement models.

Although the chi-square values for both models were statistically significant (i.e. both models yielded poor fit by the chi-square goodness-of-fit test), the baseline fit indices of TLI and CFI for both models were all above 0.90 (range: 0.906 - 0.918). Also, both RMSEA values for the group-variant and group-invariant models were 0.039. It could therefore be said that the two models fit the data well. In addition to the well-fitting models, the results suggest that the two competing models did not differ significantly in their goodness-of-fit, as indicated by: $\Delta\chi^2 = 35.704$ ($\Delta df = 26$, $p > 0.05$) and $\Delta CFI < 0.01$. Furthermore, the AIC measure for the group-invariant model (2150.385) was slightly lower than that for the group-variant model (2166.681), indicating that the group-invariant model was both more parsimonious and better fitting than the group-variant model. Consequently, the group-invariant model's estimates were preferable to the group-variant model's estimates.

Examining the critical ratio test for educational level differences among the regression weights, it was found that five of the pairwise comparisons (educational level: tertiary versus postgraduate education) for regression weights (f1 – m1, f4 – m4, f9 – m9, f10 – m10, and f20 – m20) were significant in a critical ratio test (range: 2.030 - 2.354; $CR > \pm 1.96$, $p < 0.05$). Thus, these educational level differences in regression weights (associated with the measurement variables of gov4, law4, inst3, inst2 and fdist) were incorporated in the multiple-group analysis of the structural path model.

Structural path model by educational level

In performing the structural model for multiple-group analysis (see Appendices 4-6A 'tertiary education samples' and 4-6B 'postgraduate education samples' for behind-the-scene working diagrams), two competing measurement models of group-variant and group-invariant models were assessed for 'tertiary education samples' and 'postgraduate education samples'. Appendix 3-9B presents the chi-square goodness-of-fit statistics, baseline comparisons fit indices, and model comparison statistics for the group-variant and group-invariant measurement models.

Although the chi-square values for both models were statistically significant at a 0.05 level (i.e. both models yielded poor fit by the chi-square goodness-of-fit test), the baseline fit indices of TLI and CFI for both models were above 0.90 (range: 0.906 - 0.914). Also, both RMSEA values for the group-variant and group-invariant models were 0.039. It could therefore be said that the two models fit the data well. In addition to the well-fitting models, the results suggest that the two competing models did not differ significantly in their goodness-of-fit, as indicated by: $\Delta\chi^2 = 12.569$ ($\Delta df = 9, p > 0.05$) and $\Delta CFI < 0.01$. Furthermore, the AIC measure for the group-invariant model (2133.590) was slightly lower than that for the group-variant model (2138.951), indicating that the group-invariant model was both more parsimonious and better fitting than the group-variant model. Consequently, the group-invariant model's estimates were preferable to the group-variant model's estimates.

Table 8.4 Unstandardised coefficients in the group-invariant model by educational level

		Estimate	CR	p-value
Privatisation outcomes	<-- Government commitment	-0.03	-0.392	0.695
Privatisation outcomes	<-- Legal framework	-0.051	-0.642	0.521
Privatisation outcomes	<-- Public awareness	-0.035	-0.479	0.632
Privatisation outcomes	<-- Firm-level privatisation strategy	0.478	1.751	0.080
Privatisation outcomes	<-- Fairness	0.348	1.762	0.078
Privatisation outcomes	<-- Stakeholder involvement	0.128	1.119	0.263
Privatisation outcomes	<-- Institutional arrangements	0.026	0.183	0.855
Impacts on \$\$\$ system	<-- Privatisation outcomes ¹²	0.529	10.071	***
Intentions	<-- Privatisation outcomes	0.376	4.891	***

Source: Author's calculations

¹² After allowing this path coefficient to be estimated separately, almost all statistical estimates were significantly identical to those derived from the model with this invariant path. The unstandardised path coefficient for both sub-groups, linking positive privatisation outcomes and impacts of privatisation on Laos' financial system, remained significant ($CR > \pm 1.96, p < 0.05$): tertiary education ($\beta = 0.624$) and postgraduate education ($\beta = 0.453$).

Examining the critical ratio test for educational level differences among the path coefficients, it was found that one of the pairwise comparisons between path coefficients (fv8 – mv8) for these two sub-groups was slightly significant in a critical ratio test, at -1.974 ($CR > \pm 1.96, p < 0.05$) and was associated with the endogenous latent constructs of positive privatisation outcomes and impacts of privatisation on Laos' financial system. This suggests that these path coefficients for both sub-groups were almost equivalent. Therefore, almost all hypothesised structural relationships among seven exogenous and three endogenous constructs operated similarly (in magnitude and/or direction) for both educational level sub-groups: tertiary education versus postgraduate education. These findings were consistent with those derived from a single sample of 359 subjects, except for a structural path linking the construct of firm-level privatisation strategy with that of privatisation outcomes at the insignificance level of 0.05. A summary of unstandardised path coefficients is presented in Table 8.4 above.

8.4.3 Multiple-group analysis by workplaces

This sub-section discusses a multiple-group analysis of Model 3 by workplaces: government-related entities (256), and private sector entities and others (103). The main purpose of this analysis was to examine whether the pattern of structural relationships hypothesised in the path model followed the same dynamics for both sub-groups.

CFA measurement model by workplaces

In performing the CFA measurement model for multiple-group analysis (see Appendices 4-5A 'government-related entities' and 4-5B 'other entities' for behind-the-scene working diagrams), two competing measurement models of group-variant and group-invariant models were assessed by using these workplace sub-groups. Appendix 3-10A presents the chi-square goodness-of-fit statistics, baseline comparisons fit indices, and model comparison statistics for the group-variant and group-invariant measurement models.

Although the chi-square values for both models were statistically significant at a 0.05 level (i.e. both models yielded poor fit by the chi-square goodness-of-fit test), the baseline fit indices of TLI and CFI for both models was close to or above 0.90 (range: 0.891 - 0.905). Also, the RMSEA values for the group-variant and group-invariant models were 0.042 and 0.041 respectively. These values suggest that the fit of these two models was adequate. In

addition to the well-fitting models, the results suggest that the two competing models did not differ significantly in their goodness-of-fit, as indicated by: $\Delta\chi^2 = 20.892$ ($\Delta df = 26, p > 0.05$) and $\Delta CFI < 0.01$. Furthermore, the AIC measure for the group-invariant model (2230.151) was slightly lower than that for the group-variant model (2261.259), indicating that the group-invariant model was both more parsimonious and better fitting than the group-variant model. Consequently, the group-invariant model's estimates were preferable to the group-variant model's estimates.

Examining the critical ratio test for workplace differences among the regression weights, it was found that one of the pairwise comparisons (workplaces: government-related entities versus others) for regression weights (f15 – m15) was significant in a critical ratio test of -2.861 ($CR > \pm 1.96, p < 0.05$). Thus, this workplace difference in regression weights (associated with the measurement variable of public4) was incorporated in the multiple-group analysis of the structural path model.

Structural path model by workplaces

In performing the structural model for multiple-group analysis (see Appendices 4-6A 'government-related entities and 4-6B 'other entities' for a behind-the-scene working diagram), two competing measurement models of group-variant and group-invariant were assessed for 'government-related entities' and 'other entities'. Appendix 3-10B presents the chi-square goodness-of-fit statistics, baseline comparisons fit indices, and model comparison statistics for the group-variant and group-invariant measurement models.

Although the chi-square values for both models were statistically significant at a 0.05 level (i.e. both models yielded poor fit by the chi-square goodness-of-fit test), the baseline fit indices of TLI and CFI for both models were all close or equal to 0.90 (range: 0.890 - 0.90). Also, both RMSEA values for the group-variant and group-invariant models were .042. It could therefore be said that the two models fit the data well. In addition to the well-fitting models, the results suggest that the two competing models did not differ significantly in their goodness-of-fit, as indicated by: $\Delta\chi^2 = 11.921$ ($\Delta df = 9, p > 0.05$) and $\Delta CFI < 0.01$. Furthermore, the AIC measure for the group-invariant model (2237.966) was slightly lower than that for the group-variant model (2244.045), indicating that the group-invariant model

was both more parsimonious and better fitting than the group-variant model. Consequently, the group-invariant model's estimates were preferable to the group-variant model's estimates.

Table 8.5 Unstandardised coefficients in the group-invariant model by workplaces

			Estimate	CR	p-value
Privatisation outcomes	<--	Government commitment	-0.054	-0.625	0.532
Privatisation outcomes	<--	Legal framework	-0.039	-0.464	0.643
Privatisation outcomes	<--	Public awareness	-0.041	-0.545	0.586
Privatisation outcomes	<--	Firm-level privatisation Strategy	0.738	2.444	0.015
Privatisation outcomes	<--	Fairness	0.198	0.916	0.359
Privatisation outcomes	<--	Stakeholder involvement	0.117	0.959	0.338
Privatisation outcomes	<--	Institutional arrangements	-0.009	-0.058	0.954
Impacts on \$\$\$ system	<--	Privatisation outcomes	0.537	10.426	***
Intentions	<--	Privatisation outcomes	0.389	5.155	***

Source: Author's calculations

Examining the critical ratio test for workplace differences among the path coefficients, it was found that none of the pairwise comparisons between path coefficients for those respondents who worked for government-related entities and SOEs, and those who worked for private sectors and others was significant ($CR > \pm 1.96$, $p < 0.05$). Thus, the hypothesised structural relationships among seven exogenous and three endogenous constructs operated similarly (in magnitude and/or direction) for both workplace sub-groups: government-related entities and others. The findings were also in line with those derived from a single sample of 359 subjects. A summary of unstandardised path coefficients is presented in Table 8.5 above.

8.4.4 Summary of tests for moderating effects

The results from the multiple-group analyses of Model 3 with Dataset 1, using two different groups of gender, educational level and workplaces, showed similar patterns (directions) to those estimates using a full sample size of 359. Only one (firm-level privatisation strategy) out of seven coefficients associated with the structural paths linking the model's exogenous and endogenous latent construct (positive privatisation outcomes), was significant in a critical

ratio test ($t\text{-value} > \pm 1.96$, $p\text{-value} < 0.05$); the six other constructs were insignificant. In addition, two coefficients with the paths linking the model's endogenous latent construct (positive privatisation outcomes) and the other two endogenous latent constructs (i.e. impacts of privatisation and behavioural intentions) were significant in a critical ratio test ($t\text{-value} > \pm 1.96$, $p\text{-value} < 0.05$). Assuming that the two competing models (variant versus invariant), using multiple-group analysis, did not differ significantly in their goodness-of-fit statistics, suggests that these moderators did not influence the predictors specified in the given model, Model 3. Generally speaking, moderators of gender, educational level and/or workplaces were initially thought to be significantly influential on measured variables and/or structural paths among latent constructs in the hypothesised privatisation model for this study. However, the findings confirmed that either of these moderating effects significantly moderated the measured indicators and/or structural relationships among the latent constructs. Given this, an overall privatisation program was considered preferable to the program being customised and tailored to meet the needs and preferences of particular groups of interest.

8.5 Multiple regressions of perceived privatisation outcomes

In an attempt to answer research question 6 (*what specific privatisation outcomes are likely to influence the development of capital (stock) markets and people's intentions and willingness to invest in shares of SOEs being privatised?*), a stepwise multiple regression analysis was conducted. This was used to further examine the relationships between dependent and independent variables and predict a particular perceived privatisation outcome according to the independent variables (Abu-Bader 2010; Field 2009; Hair et al. 2006; Ho 2006; Pallant 2011). Testable variables included:

Independent variables

1. Maximum values generated from privatisation transactions to the government (prvt5) – renamed *maximum state revenues*: score coded from 1 (strongly disagree) to 5 (strongly agree).
2. Privatisation resulted in satisfactory economic and social values (prvt6) – renamed *social and economic benefits*: score coded from 1 (strongly disagree) to 5 (strongly agree).

3. Privatisation generally resulted in improvements of efficiency and business performance of privatised SOEs (privt7) – renamed *efficiency improvements*: score coded from 1 (strongly disagree) to 5 (strongly agree).
4. Privatisation generally resulted in job creation (privt8) – renamed *job creation*: score coded from 1 (strongly disagree) to 5 (strongly agree).

Dependent variables

1. Privatisation programs supported the establishment and development of the Lao stock market (impact2) – renamed *stock market development*: score coded from 1 (strongly disagree) to 5 (strongly agree).
2. Privatisation programs generally provided enterprises and companies with more access to formal credits, allowing them to reduce their borrowing in informal credit markets (impact3) – renamed *accessibility to formal lending*: score coded from 1 (strongly disagree) to 5 (strongly agree).
3. Privatisation programs generally promoted and reinforced the more efficient mobilisation of domestic funds (impact5) – renamed *mobilisation of funds*: score coded from 1 (strongly disagree) to 5 (strongly agree).
4. Privatisation programs could generally help stimulate and enhance public trust and confidence in the Lao financial system (impact7) – renamed *public confidence*: score coded from 1 (strongly disagree) to 5 (strongly agree).
5. Willingness and behavioural intentions to buy and/or to recommend that relatives and/or friends buy shares in SOEs being privatised through public offerings of shares in the future (intent). This resulted from the summation of three binary variables: intent1, intent3 and intent4 – renamed *behavioural intentions*: score coded from 0 (most likely to say *no*) to 3 (most likely to say *yes*).

Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity. The five stepwise multiple regression analyses were then conducted in order to explore and identify four perceived privatisation outcomes as critical predictors of stock market development, the accessibility to formal lending, the effective fund mobilisation, public confidence in Laos' financial system, and behavioural intentions. Stepwise multiple regression results are summarised in Table 8.6.

Table 8.6 Summarised stepwise regression results

<i>Variables (in order of inclusion)</i>	<i>Regression coefficients</i>				
	Stock exchange development	Accessibility to formal lending	Mobilisation of domestic funds	Public confidence in financial system	Intentions to invest in SOE shares
Efficiency improvements	.266***	.354***	.295***	.304***	.217***
Maximum state revenues	.207***				
Job creation	.122*		.185**	.205***	
Socio & economic Benefits		.143*			
R^2	.246	.216	.186	.208	.047
<i>Adjusted R²</i>	.240	.211	.181	.203	.044

Source: Author's calculations

Note: *, ** and *** denotes significance at 0.05, 0.01 and 0.001

8.5.1 Positive privatisation outcomes as predictors of stock market development

The results of the multiple regression analysis, shown in Table 8.6, indicated that three of the four variables emerged as significant predictors of stock market development ($F = 38.613$, $N = 359$, $p < 0.001$). With a beta of 0.266 ($p < 0.001$), efficiency improvements (prvt7) emerged as the strongest predictor of stock market development, representing 19.80% of the variance. The second strongest variable was maximum revenues from privatisation transactions to the government (prvt5) ($\beta = .207$, $p < 0.001$), representing an additional 3.90% of the variance in stock market development. The third strongest variable was job creation (prvt8) ($\beta = 0.122$, $p < 0.037$). Job creation, however, accounted for only 1% of the variance in stock market development.

These results indicate that higher stock market development is a function of efficiency improvements, maximum revenues from privatisation transactions to the government, and job

creation. Overall, the model explains almost 24.60% of the variance in stock market development. About 75.40% of the variance in stock market development was still unaccounted for in this model.

8.5.2 Positive privatisation outcomes as predictors of the accessibility of formal lending

The results shown in Table 8.6 indicate that two of the four variables emerged as significant predictors of the accessibility of formal lending ($F = 48.948$, $N = 359$, $p < 0.001$). With a beta of 0.354 ($p < 0.001$), efficiency improvements (prvt7) emerged as the strongest predictor of accessibility to formal lending, accounting for 20.50% of the variance. The second strongest variable was social and economic benefits (prvt6) ($\beta = 0.143$, $p < 0.028$). Socio-economic benefits, however, accounted for only 1.10% of the variance in accessibility of formal lending. These results showed that higher accessibility to formal lending was a function of better efficiency improvements and higher socio-economic benefits. Overall, the model explained about 21.60% of the variance in accessibility of formal lending, whereas 78.40% of the variance was still unaccounted for in this model.

8.5.3 Positive privatisation outcomes as predictors of fund mobilisation

The results shown in Table 8.6 revealed that two of the four variables emerged as significant predictors of the effective mobilisation of funds ($F = 40.587$, $N = 359$, $p < 0.000$). With a beta of 0.295 ($p < 0.000$), efficiency improvements (prvt7) emerged as the strongest predictor of the effective mobilisation of funds, accounting for 16.30% of the variance. The second strongest variable was job creation (prvt8) ($\beta = .185$, $p < 0.002$). Job creation, however, accounted for only 2.30% of the variance in the effective mobilisation of funds. These results indicated that more effective mobilisation of funds was a function of better efficiency improvements and higher job creation. Overall, the model explained about 18.60% of the variance in the effective mobilisation of funds, whereas 81.40% of the variance was still unaccounted for in this model.

8.5.4 Positive privatisation outcomes as predictors of the public confidence

The results shown in Table 8.6 revealed that two of the four variables emerged as significant predictors of public confidence in Laos' financial system ($F = 46.641$, $N = 359$, $p < 0.000$). With a beta of 0.304 ($p < 0.000$), efficiency improvements (prvt7) emerged as the strongest

predictor of public confidence in Laos' financial system, accounting for 18.00% of the variance. The second strongest variable was job creation (prvt8) ($\beta = 0.205, p < 0.001$). Job creation, however, accounted for only 2.80% of the variance in public confidence in Laos' financial system. These results indicated that more public confidence in Laos' financial system was a function of better efficiency improvements and higher job creation. Overall, the model explained about 20.80% of the variance in public confidence in Laos' financial system, whereas 79.20% of the variance was still unaccounted for in this model.

8.5.5 Positive privatisation outcomes as predictors of behavioural intentions

The results shown in Table 8.6 revealed that one of the four variables emerged as a significant predictor of behavioural intentions ($F = 17.647, p < 0.001$). With a beta of .217 ($p < 0.001$), efficiency improvements (prvt7) emerged as the only predictor of behavioural intentions in this model, but this observed variable accounted for about 4.70% of the variance. Overall, the model explained only 4.70% of the variance in behavioural intentions. Although around 95.30% of the variance in behavioural intentions was still unaccounted for in this model, the finding suggested that efficiency improvements appeared to be a critical factor in influencing whether respondents bought, and/or recommended their relatives and/or friends to buy and invest in, the shares of SOEs to be privatised.

From the findings shown in Table 8.6, it was concluded that efficiency improvements (prvt7) seemed to be the most influential predictor of these outcomes, as confirmed by the five standardised regression coefficients (range: 0.217 - 0.354; $R^2 = 0.047 - 0.205, p < 0.001$). This indicated that respondents believed that efficiency improvements needed to be prioritised over other privatisation objectives (i.e. maximum revenues from privatisation programs to the government, economic and social benefits, and job creation). Efficiency enhancement was viewed as a priority objective if the Lao government attempted to utilise its privatisation policy to develop the more competitive domestic capital market and promote an equity culture in a way that minimises socialisation of risk through state intervention.

8.5.6 Summary

The results of the stepwise multiple regressions suggested that privatisation programs were required to achieve efficiency improvements and enhance business performance. This is not

to suggest that other privatisation objectives (e.g. maximum government revenues from privatisation transactions, social and economic benefits, and job creation) are unimportant. But if privatisation programs are aimed at developing a domestic capital market and encouraging an equity culture and/or domestic equity investing in a way that minimises the socialisation of risk through state intervention, efficiency improvements would be prioritised.

8.6 Chapter conclusion

This chapter presented the assessment of a complete hypothesised privatisation model to examine the effects of perception-based critical constructs on perceived (positive) privatisation outcomes. Of the seven constructs, only firm-level privatisation strategy was confirmed to have a significant effect on the perceived privatisation outcomes. The six other factors (government commitment, legal and institutional frameworks, institutional arrangements, stakeholder involvement, public education and awareness, and fairness) had little impact. Furthermore, it was found that these perceived outcomes significantly influenced the development and strengthening of Laos' domestic financial system and people's willingness and behavioural intentions in regard to privatisation efforts. In order to further understand the four perceived privatisation predictors (stock market development, fund mobilisation, accessibility to formal lending, public confidence, and behavioural intentions), five multiple regression analyses were conducted. The results suggested that the best predictor of the five aspects of stock market development, accessibility to formal lending, mobilisation of funds, public confidence, and people's behavioural intentions to invest in shares of SOEs, was the likelihood of efficiency improvements in privatisable SOEs. The next chapter presents the conclusions of this study.

Chapter 9

Conclusions and Recommendations

9.1 Introduction

The main purpose of this chapter is to provide an in-depth discussion on the overall implications of key findings, providing a holistic and comprehensive analysis of the SOE privatisation policy in Laos, mainly from the collective perspectives of key stakeholders. This study adopted a concurrent triangulation strategy, with a mixed research approach combining qualitative interviews and a quantitative survey together with other methods for analysing secondary data and previous studies on privatisation efforts in Laos. This enabled the incorporation of evidence from different sources and/or methods to substantiate and validate the final research findings. In answering the research questions, the findings were linked to theoretical and empirical privatisation contexts and objectives. This chapter explores the contributions of this study in terms of theoretical, methodological and practical implications for all stakeholders. It also outlines the limitations and scope of this study, with suggestions for further research.

9.2 Discussion of key findings and answers to the research questions

This section presents the key research findings and answers to the research questions. Findings were derived from three types of data collection techniques: primary qualitative data collected from 14 interviews; quantitative survey data collected from 359 respondents; and secondary data from the financial reports of two partially-privatised SOEs.

9.2.1 Seven factors of privatisation success are likely to emerge

In addressing research question 1 (*what are the critical factors driving the likelihood of favourable or positive privatisation outcomes (privatisation success) in Laos as perceived by key stakeholders in light of theoretical and practical perspectives?*), 14 well-informed interviewees perceived that seven critical factors could help influence the probability of privatisation success (see Sub-section 5.5.10). These factors were: government commitment; legal and regulatory frameworks; institutional arrangements; stakeholder involvement; public education and awareness; firm-level privatisation strategy; and fairness and transparency. Using exploratory principal analysis and a

confirmatory factor analysis measurement model, it was concluded that the interview findings were confirmed by the survey results collected from 359 respondents (see Section 7.3 and Sub-section 7.4.11). Generally speaking, the findings from these qualitative and quantitative datasets were considered nearly identical. Findings were also consistent with prior international perception-based studies (Calabrese 2008; Edwards 1987; Ernst & Young 2010; Guislain 1997; Megyery & Sader 1997; Milne 1991; OECD 2003; Pfeffermann 1988; Vuylsteke 1988; Welch & Frémond 1998; White & Bhatia 1998; World Bank 1995).

9.2.2 Only firm-level privatisation strategy seems to influence privatisation outcomes

In addressing research question 2 (*in what ways would such perceived critical factors influence these perceived privatisation outcomes?*), the findings from the qualitative interview data revealed that, out of seven factors, only one (firm-level privatisation strategy) was thought likely to have positively contributed to positive privatisation outcomes. Two other factors (government commitment and stakeholder involvement) were considered somewhat likely to have a positive influence and four others (legal and regulatory frameworks; institutional arrangements; public education and awareness; and fairness and transparency) were thought unlikely to significantly contribute to successful privatisation programs in Laos (see Sub-section 5.5.11). The SEM results of the data from 359 survey respondents showed that only firm-level privatisation strategy was perceived as likely to significantly influence privatisation success in Laos, whereas the six other factors were viewed as insignificant (see Sub-section 8.3.7). It could be concluded, therefore, that firm-level privatisation strategy should be prioritised in order to improve the likelihood of privatisation success in Laos.

9.2.3 Positive privatisation outcomes are viewed to positively impact a financial system

In addressing research question 3 (*in what ways would such perceived privatisation outcomes impact the development of capital (stock) markets in Laos?*), the 14 well-informed interviewees believed that favourable or positive privatisation outcomes positively contributed to the development and strengthening of the domestic financial system in Laos (see Sub-section 5.5.4). This finding is consistent with that derived from the SEM analysis of the quantitative survey data of 359 respondents (see Sub-section 8.3.7). Findings from the two samples also aligned with evidence from previous

international studies (Bortolotti, Fantini & Siniscalco 2001; Bortolotti & Siniscalco 2004; Boubakri & Hamza 2007; de la Torre & Schmukler 2007; McLindon 1996).

9.2.4 Positive privatisation outcomes seems to positively influence investment decisions

In addressing research question 4 (*in what ways would such perceived privatisation outcomes stimulate and promote an equity culture in a way that simultaneously minimises socialisation of risk through state intervention in Laos?*), the 14 well-informed interviewees also saw favourable privatisation outcomes as positively influencing people's investment decisions. However, it was noted that privatisable and/or privatised SOEs needed to prove that they could offer attractive investment returns relative to other investment options (see Section 5.6). This finding is consistent with that derived from the SEM analysis of the quantitative survey data of 359 respondents (see Sub-section 8.3.7). Consequently, both sample groups believed that favourable privatisation outcomes could help promote an equity culture and/or domestic equity investing, while minimising the socialisation of risk through state intervention in SOEs (see Section 2.10).

9.2.5 Moderating effects on privatisation processes

Prior to conducting the study, it was assumed that the moderating effects of gender, educational level and workplaces would significantly influence privatisation processes in Laos. In addressing research question 5 (*in what ways would moderator(s) of gender, educational level and workplaces affect a privatisation process in Laos?*), this study conducted multiple group analyses on a hypothesised privatisation model (Model 3), using SEM techniques to assess such moderating effects. The findings, however, confirmed that none of these moderators had a significant impact on the measured variables and/or structural relationships among the latent constructs in Model 3. It was concluded, therefore, that general privatisation programs were preferable to those customised and tailored to meet the needs of particular groups of interest.

9.2.6 Efficiency improvement is likely to be a major privatisation objective

In addressing research question 6 (*what specific privatisation outcomes are likely to influence the development of capital (stock) markets and people's intentions and willingness to invest in shares of SOEs being privatised?*), this study conducted five

stepwise multiple regressions using Dataset 1 (see Section 8.4.6). The main purpose was to assess and identify what specific privatisation outcomes would be likely to influence the development of capital markets and people's intentions and willingness to buy shares in SOEs being privatised. The results suggested that efficiency improvement should be prioritised as a central contributing factor in this regard. Other objectives (i.e. job creation, maximum government revenues, and social and economic benefits) were considered essential but not core objective(s) if privatisation programs are to support the development of a domestic capital (stock) market and encourage an equity culture. This finding is consistent with the claims of a number of authors (Domberger & Piggott 1986; Edwards 1987; Kikeri, Nellis & Shirley 1992) (see Section 2.4). In short, privatisation is required to emphasise efficiency improvements in this regard.

Assuming that this conclusion is correct, privatised enterprises need to prove that they can not only secure higher profitability and efficiency, but also offer higher investment returns than other competing investment options, in both formal and informal financial markets (see Sub-sections 5.6 and 6.7). If that is not the case, potential investors are likely to shy away from buying shares in either privatised or existing SOEs. It is evident that the inactive stock trading on the LSX may be partly due to the weak business performance of the two partially privatised SOEs, accounting for almost 90% of total free floating market capitalisation (see Sub-section 4.7.3).

9.2.7 Privatisation appears to produce weak business performance

In addressing research question 7 (*in what way would privatisation affect financial and operating performance of newly-privatised firms in Laos?*), this study used the share issue partial privatisations of two SOEs: BCEL and EDL-GEN, as case studies. Data and information on the business performance of other SOEs and privatised enterprises were publicly inaccessible and/or very unreliable. It was found that privatisation produced mixed business performance outcomes for BCEL and EDL-GEN in terms of profitability, efficiency, outputs, leverage, dividend payouts and employment (see Sub-sections 4.7.3). In both cases, privatisation not only resulted in significant increases in sales efficiency and employment (both the number of employees and annual incomes), and moderate increases in real sales, but also slight declines in financial leverage. However, there were either moderate or remarkable *decreases* in profitability

and net income efficiency. Yet, despite their low capacity for generating income, EDL-GEN and BCEL paid relatively large amounts of cash dividends to their shareholders, as well as high salaries to staff. It was concluded that partial privatisations alone did not improve the business performance of these two firms. Specifically, weak improvements in business performance can partly be explained by majority state ownership (70% and more), since state intervention in the companies' internal affairs was common.

In line with previous international studies (Boubakri & Cosset 1998, 2002; D'Souza & Megginson 1999; Megginson, Nash & van Randenborgh 1994), this research indicated that partial privatisation would not necessarily help improve business performance of previously-privatised SOEs in a lower-middle-income country like Laos, as supported by the two case studies: BCEL and EDL-GEN. However, since this study only investigated two privatised companies, further studies of newly-privatised companies need to be conducted prior to generalising the impacts of privatisation on firm performance in the Lao context.

9.2.8 Learning curve effects appear to be limited in privatisation processes

In addressing research question 8 (*how might a learning curve in the adoption process shift the Lao government's development policies over time, given the importance of capital market development through privatisation programs?*), a learning process relating to privatisation efforts (see Section 2.11) was found likely to be present. This means that the Lao government not only learnt from its own experience and/or the experience of others, but also implemented deliberate activities in order to tailor privatisation efforts to the unique circumstances and reality of Laos. It is evident that in the 1980s the Lao government undertook a step-by-step approach to handle loss-making SOEs by first granting small SOEs (followed by strategic SOEs) certain operating autonomy. Once the government gained sufficient confidence, it implemented a radical SOE reform policy in 1989 by selling off small SOEs and leasing some medium and large SOEs to foreign investors. It then shifted its attention to ownership transfer privatisation techniques in 1992. The inferred objectives and techniques of privatisation used in the previous programs were consistent with those covered in international studies (see Sections 2.4 and 2.5). Such practical objectives and techniques [I believe]

were not uncommon, since privatisation was a part of conditionality requirements imposed by international institutions (see Sub-section 2.2.3). Finally, the partial privatisations of two strategic SOEs (BCEL and EDL-GEN) supported the establishment of the first-ever Lao stock exchange in 2010. The exchange was jointly established by the Bank of the Lao PDR (holds 51%) and Korea Exchange (holds 49%).

Given that there was neither a special law relating to privatisation, nor a centralised agency in charge of executing privatisation programs, a systematic privatisation approach seemed to be absent. In addition, previous privatisations were normally conducted in an ad hoc fashion. Once a privatisation transaction was finalised, the ad hoc committee responsible for its set-up was disbanded. According to Pirie (1988) and Ernst & Young (2010), lessons learnt from prior experience in relevant contexts cannot be analysed in a systematic fashion. As a consequence, best practices are unlikely to be identified and drawn from previous privatisation programs. In conclusion, even though the presence of learning curve effects could not be denied, such effects were limited.

9.3 Research implications

This study has several valuable theoretical, methodological and practical implications.

9.3.1 Theoretical implications

Previous international studies of privatisation have generally been focused on developed and/or large developing economies, with limited applicability to developing small economies like Laos. Even though the privatisation initiatives in Laos began in 1989, they have received little attention from international scholars, partly due to the country's small economy and the lack of publicly available data on SOEs and privatisation programs in Laos. To the researcher's knowledge, this is the first in-depth academic study of SOEs and privatisation policy in Laos. Consequently, this study was built on various theoretical perspectives: the economic theory of privatisation; new institutional economics concerning privatisation; learning curve effects; stakeholder theory; the theory of justice or 'fairness'; and the concept of socialising risk. This study expanded on the existing perception-based privatisation research and empirical studies on the financial and operating performance of newly-privatised SOEs in developed and/or large developing economies, applying findings to the context of small economies, with

Laos as a case study. In addition, the theoretical implications of this study are as follows:

1. A contribution to the understanding of the seven critical factors that can improve the likelihood of privatisation success in the Lao context. These factors are: government commitment, legal and regulatory frameworks, institutional arrangements, stakeholder involvement, public education and awareness, firm-level privatisation strategy, and fairness. Specifically, this study can help researchers understand which factors are likely to significantly contribute to privatisation success.
2. A contribution to the overall discipline of privatisation in terms of how significantly positive privatisation outcomes can influence the development and strengthening of local capital markets and people's investment decisions. It was found that positive privatisation outcomes were seen to have significant influences on these two aspects.
3. The stepwise multiple regression estimates also significantly contribute to the existing literature on privatisation. Efficiency improvement was found likely to be a key privatisation outcome, taking priority over other outcomes, especially if the development of domestic capital markets and promotion of an equity culture is to be part of the government's privatisation policy.
4. In comparing the business performance of newly-privatised SOEs, the findings suggested that partial privatisation with a large remaining state ownership (i.e. $\geq 70\%$) would not necessarily improve SOE business performance. Consequently, this finding significantly contributes to the existing literature in this regard.
5. This study provided guidelines to measure and capture people's attitudes and perceptions about the actual implementation of privatisation programs. This approach represents a significant contribution to the literature, allowing others to analyse and identify critical factors causing privatisation success or failure and, consequently, seeking possible solutions to improve the likelihood of success, especially in small developing economies like Laos.

9.3.2 Methodological implications

The research methodology used in this perception-based study provides a guide for conducting a mixed research approach in further privatisation research, particularly

when examining the critical factors perceived as likely to improve privatisation success.

Guidelines are summarised as follows:

1. To obtain rich information, a semi-structured face-to-face interview technique was used to collect primary qualitative data. This allowed the researcher to direct the interviews in line with the needs and objectives of the study, while still allowing flexibility for the research participant to engage in the interview process and provide their in-depth opinions and perceptions.
2. Tentative interview questions were designed and formulated according to the findings derived from the literature review and the preliminary fieldwork activities. This ensured that comprehensive qualitative data would be collected and aligned to theoretical and practical perspectives.
3. In addition to following the seven steps of planning and preparation procedures for qualitative interviews suggested by Mason (2002), a pilot study was performed with a small sample size. This ensured that the content validity of interview materials could be enhanced prior to conducting actual data collection.
4. The sample was randomly drawn from the sampling frame to ensure that findings drawn from the qualitative data could be justified. In doing so, biased conclusions could be avoided. Another important point is that the sampling frame needed to be considered carefully in order to recruit only eligible research subjects (e.g. interviewees) into a study. If the research was technically specific, laypersons should be excluded and only well-informed sample should be included in such a study.
5. A set of interview materials was personally delivered to target individuals and/or organisations, inviting their senior officers to participate in the interviews, and an administrative procedure to be put in place. In doing so, the high response rate could be achieved.
6. A thematic analysis technique was used to analyse the qualitative interview data for this study. This involved a process for categorising the responses into themes and then transforming the word responses into numbers (i.e. participants mentioned “unreliable accounting records” 15 times) (Creswell 2012). Ultimately, the central themes were then identified and the interpretations of the meaning of the data were conducted at the interpretation stage.

In addition to the qualitative interview data, this study presented the guidelines about quantitative data include. These are summarised as follows:

1. To obtain reliable and valid information, a self-administered survey technique (delivery and collection questionnaires) was used to collect primary quantitative data. This technique was chosen to maximise the response rate, provide an opportunity for survey respondents to seek clarification if necessary, and improve survey quality.
2. Survey questionnaires were designed and formulated according to the findings derived from the literature review and the preliminary fieldwork activities. This ensured that comprehensive quantitative data would be collected and aligned to theoretical and practical perspectives.
3. The recommended approaches of de Vaus (2002), Gray, DE (2004) and Creswell (2012) were used in the survey questionnaire development. 'Don't know' response options were included in attitude or perception questions for respondents who lacked the requisite knowledge and information. A pilot study was also performed with a small sample size. This ensured that the content quality and validity of the survey questionnaire could be enhanced prior to conducting actual data collection.
4. The sample was randomly drawn from the pre-defined sampling frame to ensure that findings uncovered from the qualitative and quantitative data could be justified. In doing so, biased conclusions could be avoided. Another important point is that the sampling frame needed to be considered carefully in order to recruit only eligible research subjects (e.g. interviewees) into a study. If the research was technically specific, only well-informed sample should be included in such a study.
5. A set of survey materials was personally delivered to target organisations and individual respondents, inviting them to participate in the survey, and an administrative procedure was also put in place.
6. Tests for data reliability and validity in both the pre-testing and final data were critically important. Discriminant validity of constructs was tested using the SEM analysis technique (i.e. SPSS AMOS). This technique is strongly recommended for model testing and generalising when the proposed research model has been decided prior to actual data collection. According to Byrne

(2010) and Hair et al. (2006), the SEM technique has many advantages over traditional multivariate techniques. First, SEM presents is well-suited to data analysis for the purpose of inferential statistics and the assessment of causal relationships among constructs in a given model. Second, it can provide explicit estimates of error variance parameters. Third, it can incorporate both observed variables and unobserved variables (latent constructs) in a given model. Finally, tests for hypotheses can be performed under the SEM technique.

7. In the case of non-normal distribution of data, the Bollen-Stine p -value approach is recommended as a bootstrapping method. This procedure calculates a new chi-square value (adjusted chi-square) against the originally estimated chi-square value. An adjusted p -value is then estimated. The number of bootstrap samples (e.g. 250) is found to be sufficiently practical. Like chi-square statistics, the Bollen-Stine p -value approach is sensitive to large sample size and model complexity.
8. ‘Don’t know’ response options are recommended to enhance data quality and avoid biased responses resulting from closed-ended questions. However, handling ‘don’t know’ responses can be problematic since these responses can fall into either a ‘no knowledge’ category or an ‘unwilling to answer’ category. As a general rule, ‘don’t know’ responses are treated as missing values. However, due to the fact that there are no studies on how ‘don’t know’ responses should be treated empirically in the Lao context, such responses are treated as missing values with certain assumed meanings such as strongly agree ‘5’ and strongly disagree ‘1’). Consequently, those missing values can be imputed for further analysis.
9. In order to handle a large number of measured variables in a certain construct, an item parcelling technique is highly recommended. Such a technique can not only reduce the number of variables in the construct in a manageable fashion and capture the multiple aspects of a concept in a single-item construct, but also mitigate the problem of data non-normality. Tests for unidimensionality of indicator variables are also needed prior to parcelling pre-defined variables.
10. A single-item construct emerges due to the item parcelling technique. In handling a single-item construct, this study adopted Jöreskog and Sörbom’s

(1982) single-item measurement technique, since a reliability value of 0.85 is considered conservatively arbitrary.

11. A stepwise multiple regression technique is useful since it can assess and identify which measured variables should be prioritised. It assumes that all measured variables are equally essential, but one or more variables can be found as likely to be preferable over other variables. Consequently, findings uncovered from this technique can suggest possible solutions order to intervene in a certain process (e.g. a privatisation process as proposed in this study).
12. In analysing the financial and operating performance of newly-privatised SOEs using two partially privatised case studies, an MNR methodology was adopted, as proposed by Megginson, Nash and van Randenborgh (1994). The findings made contribution to the literature pertaining to the business performance of newly-privatised firms in a small economy like Laos.

9.3.3 Practical implications

This study has policy implications that could improve the likelihood of privatisation success in the development of local capital markets in the small economy of Laos. Since its inception in 1989, privatisation remains part of an ongoing national debate. Recently, the Lao government attempted to link its privatisation policy with the development of local capital markets and the promotion of an equity culture in Laos. As a consequence, the first-ever stock exchange was established in 2010, resulting from share issue partial privatisations of two strategic SOEs. No additional SOEs have since been privatised through public offerings of shares or listed on the exchange. The challenging question is how privatisation programs can be properly implemented in a way that can bring suitable benefits for all concerned stakeholders and promote the development of local capital markets in Laos.

This study provides insights and better understanding of Laos' privatisation policy, uncovered through qualitative interview and quantitative survey data. This data focused on the collective views and perceptions of key stakeholders who, directly or indirectly, were involved in SOEs and privatisation processes. The practical implications of this study have the potential to improve and foster the effective implementation of privatisation programs in Laos, if appropriately utilised. Most importantly, since

privatisation is a political process, strong government commitment and clarity are a must. The findings of this study have major implications for policy-makers and decision-makers in governmental organisations and relevant agencies involved in SOEs and privatisation processes. They could help create an enabling environment and a level playing field for potential SOEs offered for privatisation, potential investors and various groups of interest. To ensure that suitable benefits can be achieved for all concerned stakeholders, the practical implications and corresponding recommendations are presented based upon the key research findings. The conclusions drawn from Laos as a case study may be applicable to other small developing economies, where many pre-conditions for privatisation success are limited.

9.4 Policy recommendations concerning privatisation programs

In an attempt to improve the effective implementation of privatisation programs, specifically in the development and strengthening of local capital markets in Laos, the following recommendations are made:

1. The study respondents highlighted the importance of government commitment in the privatisation process, but noted that such commitment was often unclear or inconsistent. Consequently, some groundwork is needed to signify strong government commitment in support of privatisation efforts. This will ensure that privatisation brings benefits to all concerned stakeholders. Importantly, government policy should be more than just a statement; it must be implementable and enforced. The absence of a special law and agency directly responsible for privatisation, plus the lack of public consultations and local awareness are also associated with weak government support and commitment to the implementation of privation programs. These issues need to be addressed.
2. Seven factors were identified as critical to the likelihood of privatisation success. These were: government commitment, legal and regulatory frameworks, institutional arrangements, stakeholder involvement, public education and awareness, firm-level privatisation strategy, and fairness and transparency. Of these critical factors, only firm-level privatisation strategy was believed to be significant. Specifically, firm-level strategy involved: well-managed firm preparation activities (including initial assessment of an SOE's readiness for

privatisation and corporate restructuring of a privatisable SOE); appropriate selection of SOEs offered for privatisation; practical firm pricing and valuation mechanisms; and appropriate levels of post-privatisation state ownership. Favourable outcomes from privatisation programs were seen to be achievable in practice. Therefore, the firm-level privatisation strategy should be considered as a top priority in the privatisation process if the development of domestic capital markets and promotion of an equity culture is to be part of the government's privatisation policy.

3. Public education and awareness programs are essential to building stakeholder consensus, transparent processes, and public confidence in the privatisation process. Consequently, stakeholder communication and public awareness mechanisms need to be put in place; for example, public consultation sessions and information disclosure on SOEs and/or privatisation. This would ensure that all stakeholders have equal opportunity to express their concerns and opinions, allowing their needs to be addressed in the development of programs. Building public trust is significantly critical.
4. Given the current absence of systematic privatisation procedures, it is recommended that a privatisation process be implemented and formalised in law. This law should clarify the criteria for selecting SOEs for privatisation and potential buyers, as well as outline tendering procedures, firm valuing and pricing mechanisms, feasibility study processes, information disclosure and guidelines for formulating a privatisation commitment. This would ensure that privatisation processes are implemented in a consistent and effective manner. Public confidence and trust in the process would then be restored and enhanced, making privatisation successes more likely.
5. Unclear and weak institutional arrangements (i.e. ad hoc privatisation committees) appear to have resulted in scepticism about the credibility of privatisation transactions and reduced opportunities for learning. It is therefore recommended that a centralised governmental agency (i.e. an independent entity or specific department) be established. This would ensure a consistent and predictable privatisation process, as well as create opportunities to learn from privatisation practices and share such learning with relevant parties.

6. Efficiency improvements should be prioritised over short-term objectives (i.e. government revenue and reduction of state subsidies to the SOEs). This will help ensure the further development of the local stock market and promote the concept of socialisation of risk. If efficiency is not prioritised, people could shy away from buying shares in SOEs if competing investment options offer more attractive investment returns according to risk-and-reward mechanisms. The two cases of BCEL and EDL-GEN provide strong evidence of this issue.
7. It is recommended that privatisation transactions be conducted through a competitive auction mechanism, rather than through direct sales (negotiations) or private placements. This is likely to enhance government revenue, as well as public confidence in the process. Specifically, the inappropriate actions and/or behaviours of those in charge of executing programs would be minimised or eliminated.
8. The preparation of enterprises for privatisation is important, as this can influence the likelihood of success (ADBI (2000)). Currently, the remaining SOEs face a number of challenges: weak financial discipline and corporate governance, inadequate accounting and auditing, treatment of losses, obsolete equipment and production facilities, and overstaffing. For these reasons, it is recommended that SOEs offered for privatisation should be reformed and restructured prior to privatisation. But such restructuring should be conducted with care in order to minimise costs.

9.5 Limitations of the study

The research findings of this study are valuable as they have drawn on a wide range of theoretical and empirical perspectives and a series of statistical analysis techniques. The study employed a large sample of key stakeholders from medium and large SOEs and previously-privatised SOEs in the capital of Laos (Vientiane Capital). However, this study did have some limitations that should be taken into consideration.

First, this study was conducted only in Vientiane Capital. This geographical focus was due to resource constraints: time and budget. Consequently, qualitative and quantitative data were collected at a single point in time in 2015. Specifically, the research findings may not be generalised to other stakeholders who resided in other provincial capitals.

Second, this study mainly employed two forms of newly-created primary data collected from qualitative interviews and quantitative surveys. In an attempt to collect the relevant information required for this study, the interview questions and survey questionnaires were derived from the extensive review of literature and the preliminary fieldwork activities in 2014. Consequently, the ability to extract the right information from the research participants may have been compromised since these research materials were not directly adopted from any prior interview questions or surveys. Although considerable care was taken to reduce the limitations of these two data collection methods, possible biases may still be present.

Third, this study adopted the maximum likelihood estimation technique to assess the hypothesised privatisation model. Such a technique requires indicator variables having a normal distribution of data. Three binary items pertaining to behavioural intentions were aggregated into a single measured variable. Although the results derived from this single-item construct could improve the path coefficient linking the perceived privatisation outcomes and behavioural intentions, as well the overall model fit indices, generalising the results still needed to be made with caution.

Fourth, it cannot be denied that using 'don't know' response options can help enhance data survey quality and avoid biased responses resulting from closed-ended questions. But there is no consensus on how to handle the 'don't know' responses. This study therefore treated 'don't know' responses as missing values, assuming that these values would have certain meanings and could be imputed. Although the results derived from using the imputed dataset were most likely to produce valid and reliable results, generalising the results still needed to be made with caution.

9.6 Suggestions for further research

Given the scope of this study and its limitations, there are many opportunities for further research using the hypothesised privatisation model. First, if necessary resources (i.e. time and budget) are available, the scope of this study could be extended to include potential stakeholders from medium and large SOEs in other provincial capitals. Qualitative interviews and quantitative questionnaires could also be conducted in a

different point in time. In other words, qualitative interviews (i.e. preliminary fieldwork activities) could be carried out prior to administering quantitative questionnaires, in order to gain further understanding and knowledge of the research topic. Second, 'don't know' response options could be removed from survey questionnaires. In this way, respondents would be forced to try their best to answer pre-determined questions. Consequently, the researcher could assess and cross-validate whether the findings derived from the two studies were equivalent and could be further generalised. 'Don't know' responses could also be empirically treated in this area of study in the Lao context. Third, binary observed variables in the survey could be modified into at least 5-point scales. This would allow the researcher to assess and cross-validate whether the findings derived from the two studies are equivalent and could be further generalised. Finally, seven critical factors were perceived to significantly influence the likelihood of privatisation success. Only firm-level privatisation strategy was considered a significant contributing factor. Further research could be conducted to assess and identify which other key factors should be prioritised in order to further improve privatisation success.

9.7 Chapter conclusion

This chapter summarised the key research findings according to the research objectives and research questions. Theoretical, methodological and practical implications were presented for those interested in investigating the practical implementation of a privatisation policy in a small economy, such as Laos. Owing to the limited availability of data on SOEs and privatisation programs, this perception-based study represents a powerful tool for analysing and understanding collective views and perceptions of well-informed stakeholders. The research findings are applicable to other small developing economies, where critical pre-conditions for privatisation success may be limited. Learning from the practical implications and recommendations of this research, these countries could maximise their financial and human resources, as well as time, in understanding their own reality and circumstances pertaining to SOEs and privatisation initiatives. As a consequence, they could tailor and customise their own programs according to existing reality. The limitations of this study have been acknowledged, highlighting opportunities for further research.

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Appendix 1
Research Instruments

Appendix 1-1: Guided interview questions

Interview Background

Interviewer name:	Interview date:
	Time:

Interviewee name:
Position:
Name of organisation:
Contact address:
Nature of business:

Guided Interview Questions

Part I. Lao state-owned enterprises

1. What do you think about the business performance of Lao state-owned enterprises?
2. What are the main causes or factors that have contributed to the strong or poor business performance of those SOEs?
3. What do you think about the business performance of those SOEs in comparison with their counterparts, such as joint-ventures and private companies? Why?

Part II. Previous privatisation

4. What do you think about past privatisation?
5. What are the main objectives of privatisation of state-owned enterprises?
6. What were the main techniques of privatisation generally used in Laos?
7. What do you think are procedures or processes for privatisation?
8. What were the pros and cons in regard to past privatisations?
9. How successful or effective do you think past privatisations were? Why or why not?
10. Are there any specific legal and regulatory frameworks, privatisation procedure manuals, and/or policies in relation to privatisation of state-owned enterprises?
11. What institutional models do you think the government used to manage and implement privatisation programs?
12. Is there any key stakeholder involvement in the privatisation process? What methods and mechanisms were used in order to allow key stakeholders to get involved in the privatisation process?
13. Have the previous privatisation experiences been reviewed and are the lessons learnt being applied to the new privatisation program? Please provide further details.

Part III. Financial systems and privatisations

14. Do you think privatisation has had an impact on and made a contribution to the development of current financial markets in Laos? Please provide further details.
15. Are available domestic funds sufficient to absorb upcoming privatisations?
16. Do general citizens want or are they willing to invest in privatisable SOEs?
17. What should we do to encourage and promote domestic participation in privatisation?

Part IV. Final comments

18. How do we learn from our own privatisation transactions and those of foreign countries? How do we adapt and apply those lessons and experiences in response to our social and economic reality?
19. How do you think problems and challenges in relation to privatisation programs have been solved in order to ensure successful and efficient privatisation transactions? Please provide some evidence.
20. What should we do to increase the likelihood of the success of privatisation? What factors should be taken into consideration in order to tailor privatisation programs in connection with development of capital (especially stock) markets in Laos?

Appendix 1-2: Questionnaire survey

Part 1. General information of the respondents

1. What is your gender?
 Female Male

2. In which age group do you belong to?
 Less than 25 years old 25-29 years old
 30-34 years old 35-39 years old
 40-44 years old 45-49 years old
 50-54 years old 55-59 years old
 60 years old or more

3. What is the highest education level you have achieved?
 Senior secondary education or below Technical college
 Higher education Bachelor degree
 Master degree Doctorate degree

4. In what field have you achieved your highest education level?
 Public administration /political science
 Law
 Education
 Economics or trade
 Business administration
 Finance
 Banking
 Civil engineering
 Agriculture or forestry
 Health or medicines
 Others, please specify

5. How do you best describe your organisation?
 Government unit or authority
 Foreign embassy or international organisation
 State-owned enterprise
 Public and private joint-venture company
 Domestic and foreign private joint-venture company
 Domestic wholly-owned (100%) company
 Foreign wholly-owned (100%) company
 Others, please specify:

Part 2. Your perceptions about the business activities of SOEs in Laos

6. In comparison to private sector enterprises, how efficient do you think state-owned enterprises (SOEs) generally are in operating their businesses in the following areas?

	higher efficiency	Equivalent	lower efficiency	don't know
1) Production of goods and provision of services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) Quality of goods and services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Capacity and capability in generating profits (profitability)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4) Utilisation and allocation of financial capital	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5) Utilisation and allocation of labour forces	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6) Financial obligations to the state (e.g. dividend or tax payment to the government)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. How would you rate the main external challenges and difficulties that state-owned enterprises might currently face?

	very big	big	medium	small	no problem
1) Unclear, inconsistent or unstable government policies supporting the business activities of state-owned enterprises	<input type="checkbox"/>				
2) Lack of applicable legal and regulatory frameworks in regard to management and support for state-owned enterprises	<input type="checkbox"/>				
3) Lack of relevant institutions whose central functions and responsibilities are to manage, supervise and support state-owned enterprises	<input type="checkbox"/>				
4) Limited special treatments on tax and tariffs to be granted to state-owned enterprises	<input type="checkbox"/>				
5) Limited financial subsidies from the state to state-owned enterprises	<input type="checkbox"/>				
6) Limited access to direct credit policy from the government to state-owned enterprises	<input type="checkbox"/>				
7) State-owned enterprises face shrinking markets partly due to severe domestic competition	<input type="checkbox"/>				

8. How would you rate the main internal challenges and difficulties that state-owned enterprises might currently face?

	very big	big	medium	small	no problem
1) Limited access to capital partly due to the fact that state-owned enterprises cannot use their assets for loan collateral	<input type="checkbox"/>				
2) State-owned enterprises face large accumulated loans and unsettled debts	<input type="checkbox"/>				
3) Low capacity of generating profitability	<input type="checkbox"/>				
4) Obsolete technology, production facilities and machinery	<input type="checkbox"/>				
5) Overstaffing and job redundancy	<input type="checkbox"/>				
6) Low capacity of competitiveness: high costs and low quality of their own products or services	<input type="checkbox"/>				
7) Lack of managerial and financial autonomy	<input type="checkbox"/>				
8) Ineffective corporate governance	<input type="checkbox"/>				
9) A wide range of bureaucratic procedures: decisions on material issues concerning business activities of the state-owned enterprises	<input type="checkbox"/>				
10) Lack of qualified, knowledgeable and competent management and staff	<input type="checkbox"/>				
11) Weak and unreliable accounting and financial records (unreliable financial statements)	<input type="checkbox"/>				

Part 3. Your perceptions about the objectives and methods of previous privatisations

9. What do you think were the main objectives of past privatisations of state-owned enterprises? (Multiple answer possible)

1) Stimulate, encourage and expand the private sector's roles and activities in the economy	<input type="checkbox"/>
2) Stimulate and foster competition, by abolishing monopolies of state-owned enterprises	<input type="checkbox"/>
3) Establish and develop capital markets, including the strengthening of a banking system	<input type="checkbox"/>
4) Attract and access foreign investment capital	<input type="checkbox"/>
5) Attract and access to new technology, plant and equipment	<input type="checkbox"/>
6) Promote investment and entrepreneurship of the domestic private sector	<input type="checkbox"/>
7) Foster the enterprise's profitability, efficiency, productivity and domestic competitiveness	<input type="checkbox"/>
8) Promote and foster broader ownership (equity holding) among general citizens	<input type="checkbox"/>
9) Encourage employee ownership (management-employee buyouts)	<input type="checkbox"/>
10) Restore full rights to original property owners	<input type="checkbox"/>
11) Reduce and/or eliminate the state's direct investment or subsidies to state enterprises	<input type="checkbox"/>
12) Raise funds into treasury to fund government expenditures or trim or pay off public sector debts	<input type="checkbox"/>
13) Mobilise private sector sources to finance investments that can no longer be funded from public finances	<input type="checkbox"/>
14) Reduce the size and scope of the public sector (the role of the state) in the economy	<input type="checkbox"/>
15) Reduce the government's ownership or share in economic activities	<input type="checkbox"/>
16) Redefine the field of activity of the public sector, abandoning production tasks and focusing on core governmental functions and responsibilities	<input type="checkbox"/>

10. What were the main techniques of privatisation that the government used in order to achieve the above objectives of privatisation? (Multiple answer possible)

1) Contracting out or hiring private management to manage and operate SOEs	<input type="checkbox"/>
2) Contracting out or outsourcing private sector actors to deliver goods or services	<input type="checkbox"/>
3) Leasing public assets or granting a concession to the private sector	<input type="checkbox"/>
4) Deregulating or reducing barriers in a particular sector to allow private sector entrants	<input type="checkbox"/>
5) Direct sales to domestic buyer(s)	<input type="checkbox"/>
6) Direct sales to foreign buyer(s)	<input type="checkbox"/>
7) Direct sales to management and employees (collective workforce) of an SOE	<input type="checkbox"/>
8) Transfer of ownership back to original owner(s) of an enterprise, assets or land	<input type="checkbox"/>
9) Establishing a public-private joint-venture enterprise (a greenfield enterprise)	<input type="checkbox"/>
10) Public share issues through a Lao stock market	<input type="checkbox"/>
11) Sales or liquidation of state assets	<input type="checkbox"/>

Part 4. Your perceptions about investment options and levels of domestic savings

11. How do you perceive that general citizens save or invest their incomes after consumption? (Multiple answer possible)

- Buying or investing in stocks being listed on the Lao Securities Exchange
- Bank deposits
- Money deposits in deposit-taking financial institutions
- Money deposits in credit unions or village banks
- Buying and holding precious metals such as jewellery or gold
- Buying and holding foreign currencies such as US dollars
- Investing in real estate such as a plot(s) of land (land ownership) and property
- Contributing to rotating savings and credit associations or *'hoauy'*
- Providing informal credits

12. In your opinion, what is the capacity of domestic savings 'capital' in both formal and informal capital markets to absorb state-owned enterprises to be privatised?

very high	high	neutral	low	very low	don't know
<input type="checkbox"/>					

Part 5. Your perceptions about critical factors influencing privatisation success

13. To what extent, do you agree or disagree with the following statements about government commitment relative to privatisations. Please tick (✓) where appropriate.

	strongly agree	agree	neutral	disagree	strongly disagree	don't know
1) The government has sound, clear and implementable policies to create and encourage a market-oriented economy, which consists of multiple economic actors	<input type="checkbox"/>					
2) The government supports and ensures certainty, equal and non-discriminatory treatment for all economic entities and protection of legitimate property rights	<input type="checkbox"/>					
3) The government has clear, certain, and consistent decisions and policies to promote privatisation of state-owned enterprises	<input type="checkbox"/>					
4) The government has a policy to reduce the size, role and scope of the public sector in the economy	<input type="checkbox"/>					
5) The government reduces and limits direct credit policies and/or financial subsidies to SOEs	<input type="checkbox"/>					
6) The government leader(s) strongly and firmly commits to and supports privatisation programs	<input type="checkbox"/>					

14. To what extent, do you agree or disagree with the following statements about the legal and regulatory frameworks relative to privatisations. Please tick (✓) where appropriate.

	strongly agree	agree	neutral	disagree	strongly disagree	don't know
1) Sound, predictable and consistent legal and regulatory frameworks have been put in place to support privatisation programs	<input type="checkbox"/>					
2) Applicable laws and regulations have been put in place to ensure and specify clear and consistent roles and responsibilities of concerned government agencies in the privatisation process	<input type="checkbox"/>					
3) Applicable laws and regulations have been put in place to ensure clear and consistent guidelines for the implementation of the privatisation process	<input type="checkbox"/>					
4) Market-friendly rules and regulations have been put in place to support privatisation transactions	<input type="checkbox"/>					
5) Applicable laws and regulations were put in place to ensure equal treatment, the protection of legitimate rights and interests of individuals and entities	<input type="checkbox"/>					

15. To what extent, do you agree or disagree with the following statements about the importance of different aspects of institutional frameworks relating to privatisations. Please tick (✓) where appropriate.

	strongly agree	agree	neutral	disagree	strongly disagree	don't know
1) Institutional setup (e.g. an agency or committee) for executing privatisation transactions is generally reasonable in response to Laos' context	<input type="checkbox"/>					
2) Any privatisation body has sufficient powers and autonomy to execute its mandate and responsibilities	<input type="checkbox"/>					
3) The privatisation body ensures sufficient mechanisms for cooperation, coordinating and consultative processes with concerned authorities and stakeholders	<input type="checkbox"/>					
4) There are normally no membership changes in any particular privatisation body during the privatisation process	<input type="checkbox"/>					
5) Any privatisation body ensures a fair, creditable and transparent privatisation process at a satisfactory level	<input type="checkbox"/>					
6) Any privatisation body generally reassured and enhanced certainty and stability in privatisation programs	<input type="checkbox"/>					
7) Any privatisation body has sufficient and reasonable financial resources to perform its mandates and responsibilities	<input type="checkbox"/>					
8) Any privatisation body has a sufficient number of employees to perform its mandates and responsibilities	<input type="checkbox"/>					
9) Any privatisation body has an appropriate number of employees and members with sufficient qualifications, knowledge, competency, and experience in privatisation issues	<input type="checkbox"/>					
10) Any privatisation body normally recruits into the privatisation team and/or hires external advisor(s) and/or its staff with exclusive private-enterprise experience	<input type="checkbox"/>					
11) A suitable incentive system (incentives and penalties) has been put in place to ensure proper execution of the programs	<input type="checkbox"/>					

16. To what extent, do you agree or disagree with the following statements about stakeholder involvement relating to privatisations. Please tick (✓) where appropriate.

	strongly agree	agree	neutral	disagree	strongly disagree	don't know
1) The government normally adopts a stakeholder-oriented model as its top priority when embarking on privatisation programs	<input type="checkbox"/>					
2) The government prioritises and accommodates the stakeholders' collective needs and expectations into a privatisation program	<input type="checkbox"/>					
3) Key stakeholders generally get involved in the determination and strategic planning of privatisation programs	<input type="checkbox"/>					
4) Key stakeholders generally get involved in the execution stage of privatisation programs	<input type="checkbox"/>					
5) Timely, regular communications (i.e. mechanisms for consultations and discussions) with stakeholders have been put in place to determine their expectations and needs for each privatisation	<input type="checkbox"/>					
6) Key stakeholders normally support the implementation of privatisation program(s)	<input type="checkbox"/>					

17. To what extent, do you agree or disagree with the following statements about public education and awareness relating to privatisations. Please tick (✓) where appropriate.

	strongly agree	agree	neutral	disagree	strongly disagree	don't know
1) Sufficient mechanisms were put in place in order to raise public awareness and understanding about privatisation programs	<input type="checkbox"/>					
2) Timely, regular dissemination of information and campaigns about privatisation programs were put in place	<input type="checkbox"/>					
3) Different means of mass media were used to publicly advertise and disseminate information about privatisation programs	<input type="checkbox"/>					
4) Promotional activities including roadshows and seminars were regularly organised to educate the public and prospective investors	<input type="checkbox"/>					
5) Sufficient mechanisms were put in place in order to answer the public's questions and concerns about privatisations	<input type="checkbox"/>					
6) The general public normally supports implementing privatisation programs	<input type="checkbox"/>					

18. To what extent, do you agree or disagree with the following statements about the importance of different aspects of firm-level privatisation strategy relating to privatisation programs. Please tick (✓) where appropriate.

	strongly agree	agree	neutral	disagree	strongly disagree	don't know
1. Pre-privatisation activities						
1) Initial assessment of readiness was generally conducted prior to starting a process at a reasonable level	<input type="checkbox"/>					
2) Operational improvements and restructuring were generally carried out at a reasonable level	<input type="checkbox"/>					
3) Corporate reforming and restructuring has been normally carried out; for example, organisational restructuring, debt unsettlement, overstaffing and employee welfare issues	<input type="checkbox"/>					
4) Management restructuring and strengthening were generally carried out at a reasonable level	<input type="checkbox"/>					
5) Preparation of critical information to support the government's decision-making and potential buyers was generally carried out at a reasonable level	<input type="checkbox"/>					
6) Test the market and organise roadshows in advance of the privatisation in order to decide potential prices shares of privatisable SOEs that investors are willing to pay	<input type="checkbox"/>					
2. Enterprise pricing and valuation						
1) Reasonable valuation methods were generally put in place to assess enterprise values	<input type="checkbox"/>					
2) Valuation procedures were conducted in a reasonable manner and time (not too short or too long)	<input type="checkbox"/>					
3) Enterprise valuation expectations were reasonable and realistic (not too high or too low)	<input type="checkbox"/>					
4) The enterprise sale price(s) was reasonably and realistically determined (not too high or too low)	<input type="checkbox"/>					
5) The government generally discounted the sale prices for enterprises at a reasonable level	<input type="checkbox"/>					
3. Privatisable state-owned enterprises						
1) Privatised state-owned enterprises generally had sound 'effective' corporate governance	<input type="checkbox"/>					
2) Privatised state-owned enterprises generally had qualified, expert, and knowledgeable management	<input type="checkbox"/>					
3) Privatised enterprises generally had sound operating efficiency, financial performance and profitability	<input type="checkbox"/>					
4) Privatised enterprises were generally medium and/ or large and well-known state-owned enterprises	<input type="checkbox"/>					
5) Privatised state-owned enterprises generally had sound, creditable and reliable accounting and auditing practices and financial statements for valuation purposes and investment decision-making	<input type="checkbox"/>					

4. Post-privatisation ownership structure						
1) The government generally retained some portion of its ownership in privatised enterprises at a reasonable level	<input type="checkbox"/>					
2) The government generally transferred its ownership or sold its equity holding in a reasonable portion of ownership in privatisable enterprises to core 'strategic' investor(s)	<input type="checkbox"/>					
3) Employee ownership schemes were generally applied to enterprise management and employees at a reasonable portion of ownership	<input type="checkbox"/>					
4) Share ownership structure has been normally widened and distributed to domestic investors at a reasonable portion of ownership	<input type="checkbox"/>					
5) The government generally sold or distributed its equity ownership to foreign investor(s) at a reasonable portion of ownership	<input type="checkbox"/>					

19. To what extent, do you agree or disagree with the following statements about the importance of different aspects of fairness relating to privatisations. Please tick (✓) where appropriate.

	strongly agree	agree	neutral	disagree	strongly disagree	don't know
1. Distributive fairness						
1) The transactional outcomes from the privatisation body were appropriate for the time and money buyers spent	<input type="checkbox"/>					
2) The final transactional outcomes that the buyers received from the privatisation body were fair, given the time and money	<input type="checkbox"/>					
3) The transactional outcomes from the privatisation body reflected the time and money the buyers put in	<input type="checkbox"/>					
4) Considering the time and money that the buyers spent, the buyers achieved what they deserved from the privatisation body in a reasonable manner	<input type="checkbox"/>					
2. Procedural fairness						
1) The transactional procedures provided by the privatisation body were applied consistently	<input type="checkbox"/>					
2) The privatisation body has fair policies and practices for overall privatisation transactions, including an evaluation criteria framework to determine the winning bid	<input type="checkbox"/>					
3) The privatisation body has adequate mechanisms and/or a fact-based framework for decisions on material issues	<input type="checkbox"/>					
4) With respect to its policies and procedures, the privatisation body handled overall privatisation transactions in a fair manner	<input type="checkbox"/>					
3. Interpersonal fairness						
1) The privatisation body treated all prospective buyers with respect	<input type="checkbox"/>					
2) The privatisation body treated all prospective buyers with dignity	<input type="checkbox"/>					
3) The privatisation body treated all prospective buyers with politeness	<input type="checkbox"/>					
4) The privatisation body explained their decisions to prospective buyers (if required)	<input type="checkbox"/>					
4. Informational fairness						
1) The privatisation body gave timely and specific explanations to prospective buyers in privatisation transactions	<input type="checkbox"/>					
2) The privatisation body provided reasonable explanations to prospective buyers in privatisation transactions	<input type="checkbox"/>					
3) The privatisation body gave thorough explanations to prospective buyers in privatisation transactions	<input type="checkbox"/>					
4) The privatisation body tailored explanations to the needs of prospective buyers in privatisation transactions	<input type="checkbox"/>					

Part 6. Your perceptions about overall privatisation outcomes

20. To what extent, do you agree or disagree with the following statements about the overall outcomes of privatisation programs. Please tick (✓) where appropriate.

	strongly agree	agree	neutral	disagree	strongly disagree	don't know
1) The overall privatisation transactions were successfully implemented according to the pre-determined privatisation objectives at a satisfactory level	<input type="checkbox"/>					
2) Successful privatisation transactions generally outnumbered privatisation failures	<input type="checkbox"/>					
3) Privatisations have gradually become fairer, more transparent and creditable, when compared with earlier privatisations	<input type="checkbox"/>					
4) Domestic and foreign investors became more confident in buying and investing in SOEs shares in Laos	<input type="checkbox"/>					
5) Maximum value was achieved in past privatisation at a satisfactory level	<input type="checkbox"/>					
6) Gross economic value and the value to society was achieved in past privatisation at a satisfactory level						
7) Privatisations generally resulted in performance improvements in terms of value and quality of service at a satisfactory level	<input type="checkbox"/>					
8) Previous privatisation programs made privatised state enterprises more efficient in terms of job creation (the privatised enterprises employed more workers)	<input type="checkbox"/>					
9) Generally, the lessons and experiences learnt from previous domestic and foreign privatisation programs have resulted in creative, pragmatic privatisation programs designed to respond to socio-economic reality	<input type="checkbox"/>					

Part 7. Your perceptions about impacts of privatisation on Laos' financial system

21. To what extent, do you agree or disagree with the following statements about the impacts of privatisation programs on the domestic financial system (i.e. banking and securities-related industries). Please tick (✓) where appropriate.

	strongly agree	Agree	neutral	disagree	strongly disagree	don't know
1) Previous privatisation programs were linked with the strengthening and development of the banking sector	<input type="checkbox"/>					
2) Previous privatisation programs were linked with the establishment and development of the Lao stock market	<input type="checkbox"/>					
3) Previous privatisation programs generally provided enterprises and companies with more access to formal credits (e.g. bank loans or capital markets) and reduced their borrowing or credits in informal credit markets	<input type="checkbox"/>					
4) Previous privatisation programs generally reduced and limited financial transactions (borrowing or investing) in informal credit markets	<input type="checkbox"/>					
5) Previous privatisation transactions promoted and reinforced the mobilisation of funds more effectively	<input type="checkbox"/>					
6) Previous privatisation transactions promoted and enhanced the allocation of funds more effectively	<input type="checkbox"/>					
7) Previous privatisation programs helped stimulate and enhance public confidence and trust in the Lao financial system	<input type="checkbox"/>					

Part 8. Your intention and willingness to buy or invest in SOEs

22. Do you think you would buy or invest in shares of state-owned enterprise(s) if any make an initial public offering of shares in the foreseeable future?

Yes

No

23. Do you think you would participate in an open, competitive auction to buy or invest in an SOE if the Lao government organises such an auction in the foreseeable future?

Yes

No

24. Do you think you would recommend that your relatives buy or invest in shares of any state-owned enterprises if the Lao government organises either a public offering or a tender offer to sell its enterprises in the foreseeable future?

Yes

No

25. Do you think you would recommend that your friends buy or invest in shares of any state-owned enterprises if the Lao government organises either a public offering or a tender offer to sell its enterprises in the foreseeable future?

Yes

No

Appendix 1-3: Coding sheet

Variable name	Part/ Quest. no.	Description	Scale	Measure
gender	1.1	Gender	2 opts	Nominal
age	1.2	Age	9 opts	Nominal
edu	1.3	Educational level	6 opts	Nominal
edf	1.4	Field of highest educational level	11 opts	Nominal
org	1.5	Workplace	8 opts	Nominal
eff1	2.6.1	Production of goods and provision of services	4 opts	Scale
eff2	2.6.2	Quality of goods and services	4 opts	Scale
eff3	2.6.3	Capacity and capability in generating profits (profitability)	4 opts	Scale
eff4	2.6.4	Utilisation and allocation of financial capital	4 opts	Scale
eff5	2.6.5	Utilisation and allocation of labour forces	4 opts	Scale
eff6	2.6.6	Financial obligations to the state	4 opts	Scale
exprob1	2.7.1	The government's policies supporting SOE business activities are not clear, consistent and stable	5 opts	Scale
exprob2	2.7.2	Lack of applicable legal and regulatory frameworks in regard to management and support for SOEs	5 opts	Scale
exprob3	2.7.3	Lack of relevant institutions whose central functions and responsibilities are to manage, supervise and support SOEs	5 opts	Scale
exprob4	2.7.4	Limited special treatments on tax and tariffs to be granted to SOEs	5 opts	Scale
exprob5	2.7.5	Limited financial subsidies from the state to the SOEs	5 opts	Scale
exprob6	2.7.6	Limited access to direct credit policy from the government to SOEs	5 opts	Scale
exprob7	2.7.7	SOEs face shrinking markets partly due to severe domestic competition	5 opts	Scale
inprob1	2.8.1	Limited access to capital partly due to the fact that the SOEs cannot use their assets for loan collateral	5 opts	Scale
inprob2	2.8.2	SOEs face large accumulated loans and unsettled debts	5 opts	Scale
inprob3	2.8.3	Low capacity of generating profitability	5 opts	Scale
inprob4	2.8.4	Obsolete technology, production facilities and machinery	5 opts	Scale
inprob5	2.8.5	Overstaffing and job redundancy	5 opts	Scale
inprob6	2.8.6	Low capacity of competitiveness: high costs and low quality of their products or services	5 opts	Scale

inprob7	2.8.7	Lack of managerial and financial autonomy	5 opts	Scale
inprob8	2.8.8	Ineffective corporate governance	5 opts	Scale
inprob9	2.8.9	A wide range of bureaucratic procedures: decisions on material issues concerning business activities of the SOEs	5 opts	Scale
inprob10	2.8.10	Lack of qualified, knowledgeable and competent management and staff	5 opts	Scale
inprob11	2.8.11	Weak and unreliable accounting and financial records	5 opts	Scale
obj	3.9	Objectives of privatisation	16 opts	Nominal
mode	3.10	Techniques of privatisation	11 opts	Nominal
inv	4.11	Investment alternatives	9 opts	Nominal
flevel	4.12	The capacity of domestic savings 'capital' to absorb shares of SOEs to be privatised	6 opts	Scale
gov1	5.13.1	The government has sound, clear and implementable policies to create and encourage a market-oriented economy which consists of multi-sectoral economic actors	6 opts	Scale
gov2	5.13.2	The government supports and ensures for certainty and equal and non-discriminatory treatment of all economic entities and protection of legitimate property rights	6 opts	Scale
gov3	5.13.3	The government has clear, certain, and consistent decisions and policies to promote privatisation of SOEs	6 opts	Scale
gov4	5.13.4	The government has a policy to reduce the size and scope of the public sector (the role of the state) in the economy	6 opts	Scale
gov5	5.13.5	The government reduces and limits direct credit policies and/or financial subsidies to state-owned enterprises	6 opts	Scale
gov6	5.13.6	The government leader(s) is strongly committed to support for privatisation programs	6 opts	Scale
law1	5.14.1	Sound, predictable and consistent legal and regulatory frameworks have been put in place to support privatisation programs	6 opts	Scale
law2	5.14.2	Applicable laws and regulations have been put in place to ensure for and specify clear and consistent roles and responsibilities of concerned state agencies in the privatisation process	6 opts	Scale

law3	5.14.3	Applicable laws and regulations have been put in place to ensure privatisation and clear and consistent guidelines for the implementation and the privatisation process	6 opts	Scale
law4	5.14.4	Market-friendly rules and regulations were put in place in order to support privatisation transactions	6 opts	Scale
law5	5.14.5	Applicable laws and regulations were put in place to ensure for equal treatment, the protection of legitimate rights and interests of individuals and entities	6 opts	Scale
inst1	5.15.1	Institutional setup (e.g. an agency or committee) for executing privatisation transactions is generally reasonable in response to the reality of Laos	6 opts	Scale
inst2	5.15.2	Any privatisation body has sufficient powers and autonomy to execute its mandate and responsibilities	6 opts	Scale
inst3	5.15.3	The privatisation body ensures sufficient mechanisms for cooperation, coordinating and consultative processes with concerned authorities and stakeholders	6 opts	Scale
inst4	5.15.4	There are normally no changes in members of any particular privatisation body during the privatisation process	6 opts	Scale
inst5	5.15.5	Any privatisation body ensures a fair, credible and transparent privatisation process at a satisfactory level	6 opts	Scale
inst6	5.15.6	Any privatisation body generally reassured and enhanced certainty and stability in privatisation programs	6 opts	Scale
inst7	5.15.7	Any privatisation body has sufficient and reasonable financial to perform its mandates and responsibilities	6 opts	Scale
inst8	5.15.8	Any privatisation body has a sufficient number of employees to perform its mandates and responsibilities	6 opts	Scale
inst9	5.15.9	Any privatisation body has a sufficient number of employees and members, who have sufficient qualifications, knowledge, competency, and experience in privatisation issues	6 opts	Scale
inst10	5.15.10	Any privatisation body normally recruits and/or hires external advisor(s) and/or its staff with exclusive private-enterprise experience into the	6 opts	Scale

		privatisation team		
inst11	5.15.11	A suitable incentive system (incentives and penalties) has been put in place to ensure proper execution of the programs	6 opts	Scale
stake1	5.16.1	The government normally takes a stakeholder-oriented model as its top priority in order to embark on privatisation programs	6 opts	Scale
stake2	5.16.2	The government prioritises and accommodates the stakeholders' collective expectations and needs into each privatisation program	6 opts	Scale
stake3	5.16.3	Key stakeholders generally get involved in the determination and strategic planning of privatisation programs	6 opts	Scale
stake4	5.16.4	Key stakeholders generally get involved in the execution stage of privatisation programs	6 opts	Scale
stake5	5.16.5	Timely, regular communications (i.e. mechanisms for consultations and discussions) with stakeholders have been put in place to collect their expectations and needs for each privatisation	6 opts	Scale
stake6	5.16.6	Key stakeholders normally support the implementation of privatisation programs	6 opts	Scale
public1	5.17.1	Sufficient mechanisms were put in place to raise public awareness and understanding about privatisation programs	6 opts	Scale
public2	5.17.2	Timely, regular dissemination of information and campaigns about privatisation programs were put in place	6 opts	Scale
public3	5.17.3	Different means of mass media were used to publicly advertise and disseminate information about privatisation programs	6 opts	Scale
public4	5.17.4	Promotional activities including roadshows and seminars were regularly organised to educate the public and prospective investors	6 opts	Scale
public5	5.17.5	Sufficient mechanisms were put in place to answer the public's questions and concerns about privatisation	6 opts	Scale

public6	5.17.6	The general public normally support the implementation of privatisation program(s)	6 opts	Scale
prep1	5.18.1.1	Initial assessment of readiness was generally conducted prior to starting a process at a reasonable level	6 opts	Scale
prep2	5.18.1.2	Operational improvements and restructuring were generally carried out at a reasonable level	6 opts	Scale
prep3	5.18.1.3	Corporate reforming and restructuring has been normally carried out (e.g. organisational restructuring, debt unsettlement, overstaffing and employee welfare issues)	6 opts	Scale
prep4	5.18.1.4	Management restructuring and strengthening were generally conducted at a reasonable level	6 opts	Scale
prep5	5.18.1.5	Preparation of critical information to support the government's decision-making and potential buyers were generally carried out at a reasonable level	6 opts	Scale
prep6	5.18.1.6	Test the market and organise roadshows in advance of the privatisation in order to decide potential prices shares of privatisable SOEs that investors are willing to pay	6 opts	Scale
price1	5.18.1.1	Reasonable valuation methods were generally put in place to determine enterprise values	6 opts	Scale
price2	5.18.2.2	Valuation procedures were conducted in a reasonable manner and time (not too short or too long)	6 opts	Scale
price3	5.18.2.3	Enterprise valuation expectations were reasonable and realistic (not too high or too low)	6 opts	Scale
price4	5.18.2.4	Enterprise sale price(s) were reasonably and realistically determined (not too high and too low)	6 opts	Scale
price5	5.18.2.5	The government generally discounted the sale prices for enterprises to buyers at a reasonable level	6 opts	Scale
soe1	5.18.3.1	Privatised SOEs generally had sound, 'effective', corporate governance	6 opts	Scale
soe2	5.18.3.2	Privatised state-owned enterprises generally had qualified, expert, and knowledgeable management	6 opts	Scale
soe3	5.18.3.3	Privatised enterprises generally had sound operating efficiency, such as	6 opts	Scale

		sound financial performance and profitability		
soe4	5.18.3.4	Privatised enterprises were generally medium and/ or large and well-known state-owned enterprises	6 opts	Scale
soe5	5.18.3.5	Privatised state-owned enterprises generally had sound, creditable and reliable accounting and auditing practices and financial statements for valuation purposes and investment decision-making	6 opts	Scale
own1	5.18.4.1	The government generally retained some portion of its ownership in privatised enterprises at a reasonable level	6 opts	Scale
own2	5.18.4.2	The government generally transferred its ownership or sold its equity holding with a reasonable portion of ownership in privatisable enterprises to a strategic investor	6 opts	Scale
own3	5.18.4.3	Employee ownership schemes were generally applied to enterprise management and employees at a reasonable portion of ownership	6 opts	Scale
own4	5.18.4.4	Share ownership structure has been normally widened and distributed to domestic investors at a reasonable portion of ownership	6 opts	Scale
own5	5.18.4.5	The government generally sold or distributed its equity ownership to foreign investor(s) at a reasonable portion of ownership	6 opts	Scale
fdist1	5.19.1.1	The transactional outcomes from the privatisation body was appropriate for the time and money the buyers spent	6 opts	Scale
fdist2	5.19.1.2	The final outcomes of the transactions that the buyers received from the privatisation body was fair, given the time and money	6 opts	Scale
fdist3	5.19.1.3	The transactional outcomes from the privatisation body reflect the time and money the buyers have put in	6 opts	Scale
fdist4	5.19.1.4	Considering the time and money that the buyers spent, the buyers achieved what they deserved from the privatisation body in a reasonable manner	6 opts	Scale
fproc1	5.19.2.1	The transactional procedures provided by the privatisation body were applied	6 opts	Scale

		consistently		
fproc2	5.19.2.2	The privatisation body has fair policies and practices for overall privatisation transactions including the evaluation criteria framework to determine the winning bid	6 opts	Scale
fproc3	5.19.2.3	The privatisation body has adequate mechanisms and/or a fact-based framework for decisions on material issues	6 opts	Scale
fproc4	5.19.2.4	With respect to its policies and procedures, the privatisation body handled overall privatisation transactions in a fair manner	6 opts	Scale
fintp1	5.19.3.1	The privatisation body treated all prospective buyers with respect	6 opts	Scale
fintp2	5.19.3.2	The privatisation body treated all prospective buyers with dignity	6 opts	Scale
fintp3	5.19.3.3	The privatisation body treated all prospective buyers with politeness	6 opts	Scale
fintp4	5.19.3.4	The privatisation body explained to any prospective buyers (if required) the rationale or justification for their decision	6 opts	Scale
finfo1	5.19.4.1	The privatisation body gave timely and specific explanations to the prospective buyers for a privatisation transaction	6 opts	Scale
finfo2	5.19.4.2	The privatisation body provided reasonable explanations to the prospective buyers for a privatisation transactions	6 opts	Scale
finfo3	5.19.4.3	The privatisation body gave thorough explanations to the prospective buyers for a privatisation transaction	6 opts	Scale
finfo4	5.19.4.4	The privatisation body tailored the explanations to the needs of prospective buyers for a privatisation transaction	6 opts	Scale
privt1	6.20.1	The overall privatisation transactions were successfully implemented according to the defined privatisation objectives at a satisfactory level	6 opts	Scale
privt2	6.20.2	Successful privatisation transactions generally outnumbered privatisation failures	6 opts	Scale
privt3	6.20.3	Privatisations have gradually become fairer, more transparent and creditable, when compared with earlier privatisations	6 opts	Scale

privt4	6.20.4	Domestic and foreign investors became more confident in buying and investing in SOEs shares in Laos	6 opts	Scale
privt5	6.20.5	Maximum value had been achieved in past privatisations at a satisfactory level	6 opts	Scale
privt6	6.20.6	Gross economic value and value to society had been achieved in past privatisations at a satisfactory level	6 opts	Scale
privt7	6.20.7	Privatisations generally resulted in performance improvements in terms of value and quality of service at a satisfactory level	6 opts	Scale
privt8	6.20.8	Previous privatisation programs make privatised state enterprises more efficient in terms of job creation (the privatised enterprises employed more workers)	6 opts	Scale
privt9	6.20.9	Generally, the lessons and experiences learnt from previous domestic and foreign privatisation programs resulted in more creative, pragmatic privatisation programs in response to socio-economic reality	6 opts	Scale
impact1	7.21.1	Previous privatisation programs were linked with strengthening and developing the banking sector	6 opts	Scale
impact2	7.21.2	Previous privatisation programs were linked with the establishment and development of the Lao securities (stock) market	6 opts	Scale
impact3	7.21.3	Previous privatisation programs generally provided enterprises and companies with more access to formal credits (e.g. bank loans or capital markets) and reduced their borrowing or credits in informal credit markets	6 opts	Scale
impact4	7.21.4	Previous privatisation programs generally reduced and limited financial transactions (borrowing or investing) in informal credit markets	6 opts	Scale
impact5	7.21.5	Previous privatisation transactions promoted and reinforced mobilisation of funds more effectively	6 opts	Scale
impact6	7.21.6	Previous privatisation transactions promoted and enhanced allocation of funds more effectively	6 opts	Scale
impact7	7.21.7	Previous privatisation programs could stimulate and enhance public	6 opts	Scale

		confidence and trust in the Lao financial system		
intent1	8.22	Do you think you would buy or invest in SOE(s) shares if any SOE makes an initial public offering of shares in the foreseeable future?	2 opts	Binary
intent2	8.23	Do you think you would participate in an open, competitive auction to buy or invest in a SOE if the Lao government organises such an auction in the foreseeable future?	2 opts	Binary
intent3	8.24	Do you think you would recommend that your relatives buy or invest in any SOE shares if the Lao government organises either a public offering or a tender offer to sell its enterprises in the foreseeable future?	2 opts	Binary
intent4	8.25	Do you think you would recommend that your friends buy or invest in any SOE shares if the Lao government organises either a public offering or a tender offer to sell its enterprises in the foreseeable future?	2 opts	Binary

Appendix 1-4: Certification of translation of research instruments

SIMEUANG DOCUMENT SERVICE

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Date: 20th February 2015

It is hereby certified that the following research-related instruments in the title of **'Privatization of State-owned Enterprises and Development of Capital Markets in Laos'** named:

1. Cover letter for 'survey questionnaire' and 'interview session'
2. Consent form for participants involved in research for 'survey questionnaire' and 'interview session'
3. Information to participants involved in research for 'survey questionnaire' and 'interview session'
4. Survey Questionnaire; and
5. Tentative interview questions

for Mr. Sompasong Phommasane (Student ID: 4198201), PhD Candidate at Victoria University in Victoria, Australia were translated from English to Lao language by Simeuang Document Services. This letter further serves to certify that the translation of the above-mentioned documents is true and accurate to the best of our abilities.

Please feel free to contact us if you need any further clarification.

SIMEUANG DOCUMENT SERVICE



Khanida KHAMKHOSY

Appendix 2
Descriptive Data Statistics

Appendix 2-1: Descriptive statistics of 91 model analysis variables

Descriptive Statistics

	N	Min – Max	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
gov1	359	1 – 5	3.98	.998	-.981	.129	.387	.257
gov2	359	1 – 5	3.68	1.068	-.602	.129	-.518	.257
gov3	359	1 – 5	3.76	.998	-.792	.129	.202	.257
gov4	359	1 – 5	3.50	.950	-.326	.129	-.582	.257
gov5	359	1 – 5	3.37	.996	-.410	.129	-.544	.257
gov6	359	1 – 5	3.60	.979	-.450	.129	-.408	.257
law1	359	1 – 5	3.83	.995	-.827	.129	.155	.257
law2	359	1 – 5	3.75	.938	-.601	.129	-.210	.257
law3	359	1 – 5	3.68	.965	-.656	.129	.011	.257
law4	359	1 – 5	3.72	.949	-.790	.129	.398	.257
law5	359	1 – 5	3.68	.979	-.594	.129	-.013	.257
inst1	359	1 – 5	3.47	.950	-.401	.129	-.558	.257
inst2	359	1 – 5	3.34	.952	-.262	.129	-.699	.257
inst3	359	1 – 5	3.45	.910	-.460	.129	-.425	.257
inst4	359	1 – 5	3.13	.999	.051	.129	-.784	.257
inst5	359	1 – 5	3.39	1.048	-.349	.129	-.529	.257
inst6	359	1 – 5	3.31	.977	-.290	.129	-.522	.257
inst7	359	1 – 5	3.39	.964	-.313	.129	-.452	.257
inst8	359	1 – 5	3.35	.984	-.324	.129	-.688	.257
inst9	359	1 – 5	3.30	1.077	-.133	.129	-.820	.257
inst10	359	1 – 5	3.38	.959	-.443	.129	-.313	.257
inst11	359	1 – 5	3.41	1.035	-.446	.129	-.465	.257
stake1	359	1 – 5	3.83	.860	-.979	.129	1.067	.257
stake2	359	1 – 5	3.42	.932	-.490	.129	-.301	.257
stake3	359	1 – 5	3.71	.861	-.823	.129	.578	.257
stake4	359	1 – 5	3.68	.828	-.697	.129	.360	.257
stake5	359	1 – 5	3.47	.961	-.657	.129	.028	.257
stake6	359	1 – 5	3.54	.926	-.611	.129	-.020	.257
public1	359	1 – 5	3.36	1.142	-.452	.129	-.764	.257
public2	359	1 – 5	3.36	1.169	-.302	.129	-.987	.257
public3	359	1 – 5	3.42	1.093	-.301	.129	-.934	.257
public4	359	1 – 5	3.44	1.066	-.333	.129	-.810	.257
public5	359	1 – 5	3.25	1.060	-.311	.129	-.796	.257
public6	359	1 – 5	3.24	.997	-.339	.129	-.415	.257
prep1	359	1 – 5	3.54	.933	-.542	.129	-.391	.257
prep2	359	1 – 5	3.55	.911	-.546	.129	-.268	.257
prep3	359	1 – 5	3.57	.956	-.576	.129	-.116	.257
prep4	359	1 – 5	3.49	.967	-.549	.129	-.347	.257
prep5	359	1 – 5	3.48	.946	-.625	.129	-.185	.257
prep6	359	1 – 5	3.30	.982	-.357	.129	-.644	.257
price1	359	1 – 5	3.36	.966	-.453	.129	-.510	.257
price2	359	1 – 5	3.29	.893	-.368	.129	-.594	.257
price3	359	1 – 5	3.39	.947	-.434	.129	-.407	.257
price4	359	1 – 5	3.33	.929	-.428	.129	-.450	.257
price5	359	1 – 5	3.21	.959	-.444	.129	-.371	.257
soe1	359	1 – 5	3.47	.997	-.628	.129	-.201	.257
soe2	359	1 – 5	3.44	.961	-.527	.129	-.457	.257

soe3	359	1 – 5	3.38	.995	-.402	.129	-.588	.257
soe4	359	1 – 5	3.66	.909	-.696	.129	.099	.257
soe5	359	1 – 5	3.41	1.031	-.530	.129	-.450	.257
own1	359	1 – 5	3.58	.958	-.799	.129	.217	.257
own2	359	1 – 5	3.32	1.005	-.652	.129	-.351	.257
own3	359	1 – 5	3.38	.893	-.538	.129	-.220	.257
own4	359	1 – 5	3.39	.926	-.654	.129	-.043	.257
own5	359	1 – 5	3.21	1.009	-.488	.129	-.458	.257
fdist1	359	1 – 5	3.45	.866	-.420	.129	-.302	.257
fdist2	359	1 – 5	3.36	.840	-.499	.129	-.233	.257
fdist3	359	1 – 5	3.39	.841	-.564	.129	.033	.257
fdist4	359	1 – 5	3.37	.908	-.458	.129	-.164	.257
fproc1	359	1 – 5	3.45	.944	-.556	.129	-.302	.257
fproc2	359	1 – 5	3.47	.891	-.539	.129	-.154	.257
fproc3	359	1 – 5	3.40	.880	-.406	.129	-.447	.257
fproc4	359	1 – 5	3.44	.888	-.493	.129	-.346	.257
fintp1	359	1 – 5	3.63	.862	-.676	.129	.270	.257
fintp2	359	1 – 5	3.68	.808	-.563	.129	.424	.257
fintp3	359	1 – 5	3.57	.860	-.610	.129	.272	.257
fintp4	359	1 – 5	3.49	.900	-.564	.129	-.013	.257
finfo1	359	1 – 5	3.41	.949	-.438	.129	-.419	.257
finfo2	359	1 – 5	3.41	.892	-.437	.129	-.443	.257
finfo3	359	1 – 5	3.38	.892	-.335	.129	-.345	.257
finfo4	359	1 – 5	3.37	.962	-.493	.129	-.447	.257
prvt1	359	1 – 5	3.44	.976	-.436	.129	-.621	.257
prvt2	359	1 – 5	3.27	.916	-.313	.129	-.701	.257
prvt3	359	1 – 5	3.23	.939	-.358	.129	-.700	.257
prvt4	359	1 – 5	3.27	.943	-.232	.129	-.613	.257
prvt5	359	1 – 5	3.22	.938	-.179	.129	-.412	.257
prvt6	359	1 – 5	3.32	.961	-.518	.129	-.316	.257
prvt7	359	1 – 5	3.45	.958	-.729	.129	.025	.257
prvt8	359	1 – 5	3.65	.867	-.903	.129	.744	.257
prvt9	359	1 – 5	3.37	.925	-.521	.129	-.124	.257
impact1	359	1 – 5	3.67	.898	-.668	.129	.035	.257
impact2	359	1 – 5	3.80	.816	-.926	.129	1.045	.257
impact3	359	1 – 5	3.70	.893	-.814	.129	.498	.257
impact4	359	1 – 5	3.31	.997	-.183	.129	-.815	.257
impact5	359	1 – 5	3.53	.853	-.637	.129	.113	.257
impact6	359	1 – 5	3.55	.802	-.488	.129	-.017	.257
impact7	359	1 – 5	3.57	.889	-.601	.129	.013	.257
intent1	359	0 – 1	.65	.477	-.640	.129	-1.599	.257
intent2	359	0 – 1	.42	.495	.311	.129	-1.914	.257
intent3	359	0 – 1	.72	.449	-.992	.129	-1.021	.257
intent4	359	0 – 1	.73	.445	-1.039	.129	-.925	.257
Valid N (listwise)	359							

Appendix 2-2: Tests for normality of 91 model analysis variables

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
gov1	.283	359	.000	.820	359	.000
gov2	.282	359	.000	.862	359	.000
gov3	.287	359	.000	.855	359	.000
gov4	.252	359	.000	.887	359	.000
gov5	.257	359	.000	.887	359	.000
gov6	.257	359	.000	.885	359	.000
law1	.296	359	.000	.842	359	.000
law2	.286	359	.000	.861	359	.000
law3	.280	359	.000	.870	359	.000
law4	.300	359	.000	.853	359	.000
law5	.257	359	.000	.880	359	.000
inst1	.272	359	.000	.878	359	.000
inst2	.244	359	.000	.889	359	.000
inst3	.283	359	.000	.870	359	.000
inst4	.176	359	.000	.910	359	.000
inst5	.220	359	.000	.906	359	.000
inst6	.219	359	.000	.902	359	.000
inst7	.218	359	.000	.910	359	.000
inst8	.246	359	.000	.890	359	.000
inst9	.198	359	.000	.913	359	.000
inst10	.234	359	.000	.898	359	.000
inst11	.245	359	.000	.897	359	.000
stake1	.338	359	.000	.812	359	.000
stake2	.270	359	.000	.877	359	.000
stake3	.324	359	.000	.830	359	.000
stake4	.325	359	.000	.835	359	.000
stake5	.272	359	.000	.872	359	.000
stake6	.284	359	.000	.872	359	.000
public1	.265	359	.000	.885	359	.000
public2	.242	359	.000	.890	359	.000
public3	.245	359	.000	.886	359	.000
public4	.252	359	.000	.891	359	.000
public5	.247	359	.000	.891	359	.000
public6	.207	359	.000	.914	359	.000
prep1	.302	359	.000	.857	359	.000
prep2	.297	359	.000	.858	359	.000
prep3	.279	359	.000	.875	359	.000
prep4	.284	359	.000	.867	359	.000
prep5	.292	359	.000	.860	359	.000
prep6	.245	359	.000	.887	359	.000
price1	.270	359	.000	.880	359	.000
price2	.255	359	.000	.872	359	.000
price3	.260	359	.000	.883	359	.000
price4	.259	359	.000	.881	359	.000
price5	.224	359	.000	.897	359	.000

soe1	.287	359	.000	.867	359	.000
soe2	.293	359	.000	.865	359	.000
soe3	.265	359	.000	.884	359	.000
soe4	.311	359	.000	.851	359	.000
soe5	.274	359	.000	.881	359	.000
own1	.308	359	.000	.850	359	.000
own2	.285	359	.000	.859	359	.000
own3	.267	359	.000	.874	359	.000
own4	.282	359	.000	.863	359	.000
own5	.237	359	.000	.889	359	.000
fdist1	.258	359	.000	.877	359	.000
fdist2	.260	359	.000	.866	359	.000
fdist3	.265	359	.000	.866	359	.000
fdist4	.249	359	.000	.887	359	.000
fproc1	.278	359	.000	.875	359	.000
fproc2	.276	359	.000	.876	359	.000
fproc3	.266	359	.000	.873	359	.000
fproc4	.274	359	.000	.874	359	.000
fintp1	.299	359	.000	.856	359	.000
fintp2	.291	359	.000	.863	359	.000
fintp3	.277	359	.000	.865	359	.000
fintp4	.274	359	.000	.876	359	.000
finfo1	.264	359	.000	.883	359	.000
finfo2	.275	359	.000	.873	359	.000
finfo3	.247	359	.000	.891	359	.000
finfo4	.269	359	.000	.879	359	.000
prvt1	.286	359	.000	.871	359	.000
prvt2	.243	359	.000	.886	359	.000
prvt3	.260	359	.000	.872	359	.000
prvt4	.226	359	.000	.894	359	.000
prvt5	.179	359	.000	.916	359	.000
prvt6	.256	359	.000	.878	359	.000
prvt7	.300	359	.000	.850	359	.000
prvt8	.333	359	.000	.820	359	.000
prvt9	.254	359	.000	.880	359	.000
impact1	.308	359	.000	.854	359	.000
impact2	.344	359	.000	.804	359	.000
impact3	.321	359	.000	.835	359	.000
impact4	.235	359	.000	.899	359	.000
impact5	.307	359	.000	.848	359	.000
impact6	.293	359	.000	.855	359	.000
impact7	.295	359	.000	.860	359	.000
intent1	.419	359	.000	.602	359	.000
intent2	.381	359	.000	.628	359	.000
intent3	.454	359	.000	.561	359	.000
intent4	.458	359	.000	.555	359	.000

^a Lilliefors Significance Correction

Appendix 2-3: Rotated factor loadings and communalities

Rotated Component Matrix^a

	Component															Communalities	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Initial	Extraction
gov1											.609					1.000	.629
gov2											.591					1.000	.624
gov3											.702					1.000	.718
gov4											.681					1.000	.575
gov5	-	-	-	-	-	-	-	-	-	-	.443	-	-	-	-	1.000	.473
gov6	-	-	-	-	-	-	-	-	-	-	.491	-	-	-	-	1.000	.554
law1							.750									1.000	.725
law2							.811									1.000	.795
law3							.805									1.000	.797
law4							.669									1.000	.642
law5							.607									1.000	.638
inst1			.624													1.000	.583
inst2			.622													1.000	.598
inst3			.576													1.000	.589
inst4	-	-	-	-	-	-	-	-	-	-	-	.373	-	-	-	1.000	.462
inst5			.584													1.000	.602
inst6			.500													1.000	.660
inst7			.464													1.000	.512
inst8			.391													1.000	.596
inst9		.362	.591													1.000	.676
inst10			.485													1.000	.528
inst11		.366	.487													1.000	.592
stake1													.512			1.000	.652

stake2													.553				1.000	.546
stake3													.679				1.000	.737
stake4													.591				1.000	.698
stake5													.379				1.000	.629
stake6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.000	.524
public1		.700															1.000	.758
public2		.778															1.000	.838
public3		.771															1.000	.786
public4		.765															1.000	.801
public5		.739															1.000	.762
public6	-	.398	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.000	.412
prep1					.540												1.000	.609
prep2					.738												1.000	.708
prep3					.649												1.000	.645
prep4					.687												1.000	.713
prep5					.587												1.000	.597
prep6					.615												1.000	.613
price1	-	-	-	-	.393	-	-	-	-	-	-	.465	-	-	-	-	1.000	.630
price2	-	-	-	-	.368	-	-	-	-	-	-	.519	-	-	-	-	1.000	.658
price3												.619					1.000	.697
price4												.623					1.000	.707
price5												.594					1.000	.618
soe1								.677									1.000	.676
soe2								.719									1.000	.728
soe3								.704									1.000	.701
soe4	-	-	-	-	-	-	-	.579	-	-	-	-	-	-	-	-	1.000	.533
soe5								.669									1.000	.710
own1	-	-	-	-	-	-	-	-	.511	-	-	-	-	-	-	-	1.000	.537
own2									.703								1.000	.660

own3									.738								1.000	.691
own4									.655								1.000	.632
own5									.761								1.000	.688
fdist1										.658							1.000	.700
fdist2										.700							1.000	.750
fdist3										.663							1.000	.704
fdist4										.712							1.000	.658
fproc1	-	-	-	.401	-	-	-	.356	-	.384	-	-	-	-	-	-	1.000	.650
fproc2				.495													1.000	.593
fproc3				.495													1.000	.652
fproc4				.447													1.000	.614
fintp1														.681			1.000	.717
fintp2														.659			1.000	.747
fintp3														.665			1.000	.749
fintp4	-	-	-	.443	-	-	-	-	-	-	-	-	-	.430	-	-	1.000	.598
finfo1				.660													1.000	.661
finfo2				.747													1.000	.736
finfo3				.729													1.000	.710
finfo4				.638													1.000	.696
prvt1	.632																1.000	.642
prvt2	.598																1.000	.553
prvt3	.655																1.000	.641
prvt4	.643																1.000	.616
prvt5	.726																1.000	.643
prvt6	.744																1.000	.695
prvt7	.669																1.000	.680
prvt8	.523																1.000	.610
prvt9	.613																1.000	.588
impact1							.520										1.000	.580

impact2						.640											1.000	.621
impact3						.624											1.000	.578
impact4						.674											1.000	.611
impact5						.750											1.000	.684
impact6						.748											1.000	.663
impact7						.647											1.000	.640
intent1																.633	1.000	.562
intent2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.596	1.000	.504
intent3																.807	1.000	.738
intent4																.833	1.000	.796

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalisation.

a. Rotation converged in 10 iterations.

Note: Twelve measured variables were dropped, partly due to low factor loadings (less than |0.35|), cross-factor loadings (0.35 and above) and low communality values (0.50 and less). These variables were: gov5, gov6, inst4, stake6, public6, price1, price2, soe4, own1, fproc1, fintp4, and intent2.

Appendix 3
Structural Equation Modelling – Statistical Estimates

Appendix 3-1: Statistical estimates for single-factor congeneric models

Constructs/factors	Statistical estimates									
	Items	Construct Reliability	Chi-square <i>p</i> -value	Bollen-Stine <i>p</i> -value	χ^2/df	GFI	TLI	CFI	SRMR	RMSEA
Government commitment	4	.831	.311	.450	1.169	.997	.998	.999	.012	.022
The existence of a legal and regulatory framework	4	.893	.075	.191	2.589	.995	.989	.996	.012	.067
The existence of institutional arrangements	5	.835	.075	.116	2.004	.988	.984	.992	.023	.053
The existence of stakeholder involvement	5	.849	.024	.100	2.580	.986	.978	.989	.023	.066
Public awareness	4	.916	.841	.936	.173	1.000	1.005	1.000	.003	.000
Firm-level privatisation strategy	4	.787	.057	.207	2.864	.992	.971	.990	.022	.072
Fairness	4	.842	.037	.163	3.306	.991	.975	.992	.018	.080
Positive privatisation outcomes	4	.834	.231	.319	1.465	.996	.995	.998	.013	.036
Privatisation impacts on Laos' financial system	4	.803	.718	.825	.331	.999	1.009	1.000	.007	.000
Behavioural intentions	3 [†]	.785								

Note: [†] A three indicator model is considered just-identified

Appendix 3-2: AMOS outputs for correlation coefficients of ten latent constructs

	GOVT	LAW	INST	STAKE	PUB	FIRM	FAIR	PRVT	IMP	INT
GOVT	1.0									
LAW	.64	1.0								
INST	.60	.65	1.0							
STAKE	.57	.54	.72	1.0						
PUB	.57	.54	.76	.60	1.0					
FIRM	.53	.45	.77	.71	.61	1.0				
FAIR	.48	.44	.69	.68	.57	.88	1.0			
PRVT	.27	.23	.46	.46	.34	.60	.57	1.0		
IMP	.43	.32	.45	.56	.39	.63	.60	.69	1.0	
INT	.25	.17	.13	.29	.16	.31	.28	.25	.21	1.0

Note: Government commitment (GOVT); the existence of a legal and regulatory framework (LAW); the existence of institutional arrangements (INST); the existence of stakeholder involvement (STAKE); public education and awareness (PUB); firm-level privatisation strategy (FIRM); fairness (FAIR); positive or favourable privatisation outcomes (PRVT); impacts of privatisation on Laos' financial system (IMP); and behavioural intentions (INTENT)

Appendix 3-3: AMOS outputs for a full CFA measurement model

Unstandardised Regression Weights: (Group 1 - Default model)

			Estimate	SE	CR	P
gov1	<---	Government commitment	0.877	0.06	14.71	***
gov2	<---	Government commitment	0.994	0.063	15.745	***
gov3	<---	Government commitment	1			
gov4	<---	Government commitment	0.678	0.059	11.46	***
law1	<---	Legal framework	0.973	0.049	20.029	***
law2	<---	Legal framework	0.985	0.044	22.525	***
law3	<---	Legal framework	1			
law4	<---	Legal framework	0.777	0.051	15.147	***
inst2	<---	Institutional arrangements	0.889	0.066	13.516	***
inst3	<---	Institutional arrangements	0.795	0.063	12.526	***
inst6	<---	Institutional arrangements	1			
inst7	<---	Institutional arrangements	0.825	0.067	12.244	***
inst9	<---	Institutional arrangements	1.06	0.074	14.341	***
stake1	<---	Stakeholder involvement	1.003	0.07	14.36	***
stake2	<---	Stakeholder involvement	0.94	0.077	12.2	***
stake3	<---	Stakeholder involvement	1.085	0.069	15.669	***
stake4	<---	Stakeholder involvement	1			
stake5	<---	Stakeholder involvement	1.063	0.079	13.525	***
public1	<---	Public awareness	1			
public3	<---	Public awareness	0.997	0.05	19.933	***
public4	<---	Public awareness	0.989	0.048	20.413	***
public5	<---	Public awareness	0.959	0.049	19.619	***
prep	<---	Firm-level strategy	0.998	0.073	13.622	***
price	<---	Firm-level strategy	1			
soe	<---	Firm-level strategy	0.993	0.083	12.015	***
own	<---	Firm-level strategy	0.826	0.077	10.722	***
fdist	<---	Fairness	0.857	0.058	14.873	***
fproc	<---	Fairness	1			
fintp	<---	Fairness	0.86	0.061	14.169	***
finfo	<---	Fairness	0.949	0.063	15.132	***
prvt5	<---	Privatisation outcomes	0.721	0.058	12.491	***
prvt6	<---	Privatisation outcomes	0.911	0.056	16.158	***
prvt7	<---	Privatisation outcomes	1			
prvt8	<---	Privatisation outcomes	0.727	0.052	13.89	***
impact2	<---	Impacts	1			
impact3	<---	Impacts	1.041	0.087	11.988	***
impact5	<---	Impacts	0.956	0.083	11.546	***
impact7	<---	Impacts	1.099	0.087	12.645	***
intent1	<---	Intentions	0.525	0.064	8.18	***
intent3	<---	Intentions	0.904	0.069	13.015	***
intent4	<---	Intentions	1			

Standardised Regression Weights: (Group 1 - Default model)

			Estimate
gov1	<---	Government commitment	0.735
gov2	<---	Government commitment	0.779
gov3	<---	Government commitment	0.838
gov4	<---	Government commitment	0.597
law1	<---	Legal framework	0.828
law2	<---	Legal framework	0.889
law3	<---	Legal framework	0.877
law4	<---	Legal framework	0.693
inst2	<---	Institutional arrangements	0.706
inst3	<---	Institutional arrangements	0.660
inst6	<---	Institutional arrangements	0.774
inst7	<---	Institutional arrangements	0.647
inst9	<---	Institutional arrangements	0.744
stake1	<---	Stakeholder involvement	0.746
stake2	<---	Stakeholder involvement	0.646
stake3	<---	Stakeholder involvement	0.806
stake4	<---	Stakeholder involvement	0.773
stake5	<---	Stakeholder involvement	0.708
public1	<---	Public awareness	0.829
public3	<---	Public awareness	0.864
public4	<---	Public awareness	0.878
public5	<---	Public awareness	0.855
prep	<---	Firm-level strategy	0.759
price	<---	Firm-level strategy	0.729
soe	<---	Firm-level strategy	0.669
own	<---	Firm-level strategy	0.598
fdist	<---	Fairness	0.741
fproc	<---	Fairness	0.813
fintp	<---	Fairness	0.712
finfo	<---	Fairness	0.752
prvt5	<---	Privatisation outcomes	0.634
prvt6	<---	Privatisation outcomes	0.781
prvt7	<---	Privatisation outcomes	0.861
prvt8	<---	Privatisation outcomes	0.691
impact2	<---	Impacts	0.735
impact3	<---	Impacts	0.699
impact5	<---	Impacts	0.671
impact7	<---	Impacts	0.741
intent1	<---	Intentions	0.453
intent3	<---	Intentions	0.829
intent4	<---	Intentions	0.927

Squared Multiple Correlations: (Group 1 - Default model)

	Estimate
gov1	0.541
gov2	0.607
gov3	0.703
gov4	0.357
law1	0.685
law2	0.790
law3	0.770
law4	0.480
inst2	0.498
inst3	0.435
inst6	0.599
inst7	0.418
inst9	0.553
stake1	0.557
stake2	0.417
stake3	0.650
stake4	0.597
stake5	0.501
public1	0.687
public3	0.747
public4	0.771
public5	0.732
prep	0.575
price	0.532
soe	0.448
own	0.357
fdist	0.549
fproc	0.661
fintp	0.508
finfo	0.565
prvt5	0.402
prvt6	0.610
prvt7	0.741
prvt8	0.477
impact2	0.540
impact3	0.488
impact5	0.451
impact7	0.550
intent1	0.205
intent3	0.688
intent4	0.859

Appendix 3-4: AMOS outputs for a full CFA structural model (Model 1)

Unstandardised Regression Weights: (Group 1 - Default model)

			Estimate	SE	CR	P
Privatisation outcomes	<---	Government commitment	-0.042	0.081	-0.515	0.606
Privatisation outcomes	<---	Legal framework	-0.041	0.08	-0.507	0.612
Privatisation outcomes	<---	Public awareness	-0.041	0.075	-0.549	0.583
Privatisation outcomes	<---	Firm-level privatisation strategy	0.68	0.301	2.258	0.024
Privatisation outcomes	<---	Fairness	0.190	0.219	0.871	0.384
Privatisation outcomes	<---	Stakeholder involvement	0.162	0.124	1.307	0.191
Privatisation outcomes	<---	Institutional arrangements	0.001	0.16	0.003	0.997
Impacts	<---	Privatisation outcomes	0.55	0.049	11.125	***
Behavioural intentions	<---	Privatisation outcomes	0.126	0.03	4.154	***

Standardised Regression Weights: (Group 1 - Default model)

			Estimate
Privatisation outcomes	<---	Government commitment	-0.043
Privatisation outcomes	<---	Legal framework	-0.043
Privatisation outcomes	<---	Public awareness	-0.048
Privatisation outcomes	<---	Firm-level privatisation strategy	0.483
Privatisation outcomes	<---	Fairness	0.148
Privatisation outcomes	<---	Stakeholder involvement	0.139
Privatisation outcomes	<---	Institutional arrangements	0.000
Impacts	<---	Privatisation outcomes	0.732
Behavioural intentions	<---	Privatisation outcomes	0.244

Squared Multiple Correlations: (Group 1 - Default model)

	Estimate
Privatisation outcomes	0.432
Behavioural intentions	0.059
Impacts	0.536

Appendix 3-5: AMOS outputs for a full CFA structural model (Model 2)

Unstandardised Regression Weights: (Group 1 - Default model)

			Estimate	SE	CR	P
Privatisation outcomes	<---	Government				
		Commitment	-0.048	0.081	-0.596	0.551
Privatisation outcomes	<---	Legal framework	-0.032	0.082	-0.396	0.692
Privatisation outcomes	<---	Public awareness	-0.050	0.076	-0.653	0.514
Privatisation outcomes	<---	Firm-level				
		privatisation strategy	0.712	0.308	2.312	0.021
Privatisation outcomes	<---	Fairness	0.186	0.222	0.841	0.400
Privatisation outcomes	<---	Stakeholder				
		Involvements	0.122	0.109	1.119	0.263
Privatisation outcomes	<---	Institutional				
		Arrangements	0.005	0.16	0.032	0.975
Impacts	<---	Privatisation				
		Outcomes	0.540	0.053	10.231	***
Behavioural intentions	<---	Privatisation				
		Outcomes	0.123	0.03	4.069	***

Standardised Regression Weights: (Group 1 - Default model)

			Estimate
Privatisation outcomes	<---	Government commitment	-0.050
Privatisation outcomes	<---	Legal framework	-0.034
Privatisation outcomes	<---	Public awareness	-0.058
Privatisation outcomes	<---	Firm-level privatisation strategy	0.504
Privatisation outcomes	<---	Fairness	0.145
Privatisation outcomes	<---	Stakeholder involvement	0.106
Privatisation outcomes	<---	Institutional arrangements	0.005
Impacts	<---	Privatisation outcomes	0.735
Behavioural intentions	<---	Privatisation outcomes	0.239

Squared Multiple Correlations: (Group 1 - Default model)

	Estimate
Privatisation outcomes	0.415
Behavioural intentions	0.057
Impacts	0.540

Appendix 3-6: AMOS outputs for a full CFA structural model (Model 3)

Unstandardised Regression Weights: (Group 1 - Default model)

			Estimate	SE	CR	P
Privatisation outcomes	<---	Government commitment	-0.049	0.081	-0.604	0.546
Privatisation outcomes	<---	Legal framework	-0.032	0.082	-0.384	0.701
Privatisation outcomes	<---	Public awareness	-0.049	0.076	-0.645	0.519
Privatisation outcomes	<---	Firm-level privatisation strategy	0.714	0.308	2.315	0.021
Privatisation outcomes	<---	Fairness	0.190	0.222	0.854	0.393
Privatisation outcomes	<---	Stakeholder involvement	0.124	0.109	1.134	0.257
Privatisation outcomes	<---	Institutional arrangements	0.000	0.16	-0.001	0.999
Impacts	<---	Privatisation outcomes	0.538	0.053	10.231	***
Behavioural intentions	<---	Privatisation outcomes	0.367	0.077	4.793	***

Standardised Regression Weights: (Group 1 - Default model)

			Estimate
Privatisation outcomes	<---	Government commitment	-0.050
Privatisation outcomes	<---	Legal framework	-0.033
Privatisation outcomes	<---	Public awareness	-0.057
Privatisation outcomes	<---	Firm-level privatisation strategy	0.504
Privatisation outcomes	<---	Fairness	0.147
Privatisation outcomes	<---	Stakeholder involvement	0.108
Privatisation outcomes	<---	Institutional arrangements	0.000
Impacts	<---	Privatisation outcomes	0.734
Behavioural intentions	<---	Privatisation outcomes	0.289

Squared Multiple Correlations: (Group 1 - Default model)

	Estimate
Privatisation outcomes	0.416
Behavioural intentions	0.083
Impacts	0.538

Appendix 3-7A: AMOS outputs for unstandardised regression weights (Model 3)

Unstandardised Regression Weights: - Dataset 1

			Estimate	SE	CR	P
Privatisation outcomes	<---	Government commitment	-0.049	0.081	-0.604	0.546
Privatisation outcomes	<---	Legal framework	-0.032	0.082	-0.384	0.701
Privatisation outcomes	<---	Institutional arrangements	0.000	0.16	-0.001	0.999
Privatisation outcomes	<---	Stakeholder involvement	0.124	0.109	1.134	0.257
Privatisation outcomes	<---	Public awareness	-0.049	0.076	-0.645	0.519
Privatisation outcomes	<---	Firm-level privatisation strategy	0.714	0.308	2.315	0.021
Privatisation outcomes	<---	Fairness	0.190	0.222	0.854	0.393
Impacts	<---	Privatisation outcomes	0.538	0.053	10.231	***
Behavioural intentions	<---	Privatisation outcomes	0.367	0.077	4.793	***

Unstandardised Regression Weights: - Dataset 2

			Estimate	SE	CR	P
Privatisation outcomes	<---	Government Commitment	-0.076	0.081	-0.931	0.352
Privatisation outcomes	<---	Legal framework	-0.030	0.082	-0.370	0.712
Privatisation outcomes	<---	Institutional arrangements	0.006	0.156	0.038	0.969
Privatisation outcomes	<---	Stakeholder involvement	0.163	0.111	1.467	0.142
Privatisation outcomes	<---	Public awareness	-0.064	0.073	-0.884	0.377
Privatisation outcomes	<---	Firm-level privatisation strategy	0.700	0.312	2.244	0.025
Privatisation outcomes	<---	Fairness	0.194	0.223	0.867	0.386
Impacts	<---	Privatisation outcomes	0.505	0.052	9.662	***
Behavioural intentions	<---	Privatisation outcomes	0.375	0.076	4.924	***

Unstandardised Regression Weights: - Dataset 3

			Estimate	SE	CR	P
Privatisation outcomes	<---	Government commitment	-0.053	0.08	-0.661	0.509
Privatisation outcomes	<---	Legal framework	-0.043	0.082	-0.533	0.594
Privatisation outcomes	<---	Institutional arrangements	-0.046	0.151	-0.302	0.762
Privatisation outcomes	<---	Stakeholder involvement	0.185	0.107	1.730	0.084
Privatisation outcomes	<---	Public awareness	-0.056	0.073	-0.772	0.440
Privatisation outcomes	<---	Firm-level privatisation strategy	0.741	0.328	2.26	0.024
Privatisation outcomes	<---	Fairness	0.177	0.240	0.737	0.461
Impacts	<---	Privatisation outcomes	0.555	0.053	10.548	***
Behavioural intentions	<---	Privatisation outcomes	0.373	0.077	4.849	***

Unstandardised Regression Weights: - Dataset 4

			Estimate	SE	CR	P
Privatisation outcomes	<---	Government commitment	-0.046	0.077	-0.603	0.546
Privatisation outcomes	<---	Legal framework	-0.072	0.081	-0.897	0.370
Privatisation outcomes	<---	Institutional arrangements	0.095	0.145	0.654	0.513
Privatisation outcomes	<---	Stakeholder involvement	0.174	0.104	1.676	0.094
Privatisation outcomes	<---	Public awareness	-0.091	0.073	-1.254	0.210
Privatisation outcomes	<---	Firm-level privatisation strategy	0.634	0.306	2.073	0.038
Privatisation outcomes	<---	Fairness	0.182	0.226	0.806	0.420
Impacts	<---	Privatisation outcomes	0.545	0.052	10.432	***
Behavioural intentions	<---	Privatisation outcomes	0.382	0.077	4.949	***

Unstandardised Regression Weights: - Dataset 5

			Estimate	SE	CR	P
Privatisation outcomes	<---	Government commitment	-0.087	0.085	-1.029	0.304
Privatisation outcomes	<---	Legal framework	-0.009	0.088	-0.097	0.923
Privatisation outcomes	<---	Institutional arrangements	-0.055	0.158	-0.349	0.727
Privatisation outcomes	<---	Stakeholder involvement	0.174	0.111	1.561	0.119
Privatisation outcomes	<---	Public awareness	-0.050	0.076	-0.662	0.508
Privatisation outcomes	<---	Firm-level privatisation strategy	0.904	0.344	2.629	0.009
Privatisation outcomes	<---	Fairness	0.023	0.246	0.092	0.927
Impacts	<---	Privatisation outcomes	0.535	0.052	10.328	***
Behavioural intentions	<---	Privatisation outcomes	0.360	0.076	4.760	***

Appendix 3-7B: Comparison of standardised path coefficients (*p*-values) and model fit indices using 5 imputed datasets

Standardised path coefficients (p-values)

	Dataset 1	Dataset 2	Dataset 3	Dataset 4	Dataset 5	Average
Government commitment → Privatisation outcomes	-.050 (.546)	-.070 (.352)	-.054 (.509)	-.048 (.546)	-.089 (.304)	-0.062 (.457) [†]
Legal framework → Privatisation outcomes	-.033 (.701)	-.031 (.712)	-.044 (.594)	-.073 (.370)	-.009 (.923)	-0.038 (.670) [†]
Institutional arrangements → Privatisation outcomes	.000 (.999)	.005 (.969)	-.066 (.762)	.090 (.513)	-.057 (.727)	-0.006 (.999) [†]
Stakeholder involvement → Privatisation outcomes	.108 (.257)	.141 (.142)	.162 (.084)	.154 (.094)	.149 (.119)	0.143 (.145) [†]
Public awareness → Privatisation outcomes	-.057 (.519)	-.074 (.377)	-.042 (.440)	-.106 (.210)	-.051 (.508)	-0.066 (.421) [†]
Firm-level privatisation strategy → Privatisation outcomes	.504* (.021)	.500* (.025)	.525* (.024)	.456* (.038)	.646** (.009)	0.526* (.038) [†]
Fairness → Privatisation outcomes	.147 (.393)	.151 (.386)	.139 (.461)	.145 (.420)	.018 (.927)	0.120 (.547) [†]
Privatisation outcomes → Impacts outcomes	.734*** (.000)	.713*** (.000)	.750*** (.000)	.732*** (.000)	.743*** (.000)	0.734*** (.000) [†]
Privatisation outcomes → Behavioural intentions	.289*** (.000)	.296*** (.000)	.292*** (.000)	.298*** (.000)	.286*** (.000)	0.292*** (.000) [†]

Note: All factor coefficients are standardised (p-value) at the significance level of .05 (), .01 (**), and .001 (***)*

[†]*p*-value refers to a pooled estimate derived from five datasets using a formula suggested by Gelman et al. (2014, p. 453).

Model fit statistics

	Dataset 1	Dataset 2	Dataset 3	Dataset 4	Dataset 5	Average
Chi-square	996.887	1035.674	996.565	1013.715	1018.150	1012.198
Degree of freedom	565	565	565	565	565	565
χ^2/df	1.764	1.833	1.764	1.794	1.802	1.791
<i>p</i> -value	.000	.000	.000	.000	.000	.000
Bollen-Stine <i>p</i> -value	.004	.004	.004	.004	.004	.004
GFI	.872	.869	.870	.869	.870	.870
TLI	.932	.927	.933	.930	.930	.930
CFI	.939	.934	.939	.938	.937	.937
SRMR	.0498	.0488	.0482	.0491	.0490	.049
RMSEA (LO 90 – HI 90)	.046 (.041 - .051)	.048 (.044 - .053)	.046 (.041 - .051)	.047 (.042 - .052)	.047 (.043 - .052)	0.047 (.042 - .052)
<i>P_{close}</i>	.908	.730	.909	.845	.825	0.843
Hoelter CN .05/.01	224/233	215/224	224/233	220/229	219/228	220/229
AIC	1198.887	1237.674	1198.565	1215.715	1220.150	1214.198

Appendix 3-8A: Measurement model (multiple-group analysis) – Gender

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Variant model	232	1655.265	1100.000	0.000	1.505
Invariant model	206	1673.220	1126.000	0.000	1.486
Saturated model	1332	0.000	0.000		
Independence model	72	8523.284	1260.000	0.000	6.765

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Variant model	0.806	0.778	0.925	0.912	0.924
Invariant model	0.804	0.780	0.926	0.916	0.925
Saturated model	1.000		1.000		1.000
Independence model	0.000	0.000	0.000	0.000	0.000

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Variant model	0.038	0.034	0.041	1.000
Invariant model	0.037	0.033	0.041	1.000
Independence model	0.127	0.125	0.130	0.000

AIC

Model	AIC	BCC	BIC	CAIC
Variant model	2119.265	2260.831		
Invariant model	2085.220	2210.920		
Saturated model	2664.000	3476.784		
Independence model	8667.284	8711.218		

Assuming variant model to be correct:

Model	DF	CMIN	P	TLI rho-2	CFI
Invariant model	26	17.955	0.877	-0.003	-0.001

Appendix 3-8B: Structural path model (multiple-group analysis) – Gender

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Variant model	177	1736.319	1155.000	0.000	1.503
Invariant model	168	1752.193	1164.000	0.000	1.505
Saturated model	1332	0.000	0.000		
Independence model	72	8523.284	1260.000	0.000	6.765

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Variant model	0.796	0.778	0.921	0.913	0.920
Invariant model	0.794	0.777	0.920	0.912	0.919
Saturated model	1.000		1.000		1.000
Independence model	0.000	0.000	0.000	0.000	0.000

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Variant model	0.038	0.034	0.041	1.000
Invariant model	0.038	0.034	0.041	1.000
Independence model	0.127	0.125	0.130	0.000

AIC

Model	AIC	BCC	BIC	CAIC
Variant model	2090.319	2198.324		
Invariant model	2088.193	2190.706		
Saturated model	2664.000	3476.784		
Independence model	8667.284	8711.218		

Assuming variant model to be correct:

Model	DF	CMIN	P	TLI rho-2	CFI
Invariant model	9	15.874	0.070	0.000	0.001

Appendix 3-9A: Measurement model (multiple-group analysis) – Educational level

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Variant model	232	1702.681	1100.000	0.000	1.548
Invariant model	206	1738.385	1126.000	0.000	1.544
Saturated model	1332	0.000	0.000		
Independence model	72	8574.492	1260.000	0.000	6.805

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Variant model	0.801	0.773	0.919	0.906	0.918
Invariant model	0.797	0.773	0.918	0.906	0.916
Saturated model	1.000		1.000		1.000
Independence model	0.000	0.000	0.000	0.000	0.000

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Variant model	0.039	0.036	0.043	1.000
Invariant model	0.039	0.035	0.043	1.000
Independence model	0.128	0.125	0.130	0.000

AIC

Model	AIC	BCC	BIC	CAIC
Variant model	2166.681	2289.894		
Invariant model	2150.385	2259.789		
Saturated model	2664.000	3371.414		
Independence model	8718.492	8756.731		

Assuming variant model to be correct:

Model	DF	CMIN	P	TLI rho-2	CFI
Invariant model	26	35.704	0.097	-0.001	0.002

Appendix 3-9B: Structural path model (multiple-group analysis) – Educational level

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Variant model	181	1776.951	1151.000	0.000	1.544
Invariant model	173	1785.600	1159.000	0.000	1.541
Saturated model	1332	0.000	0.000		
Independence model	72	8574.492	1260.000	0.000	6.805

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Variant model	0.793	0.773	0.916	0.906	0.914
Invariant model	0.792	0.774	0.916	0.907	0.914
Saturated model	1.000		1.000		1.000
Independence model	0.000	0.000	0.000	0.000	0.000

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Variant model	0.039	0.035	0.043	1.000
Invariant model	0.039	0.035	0.042	1.000
Independence model	0.128	0.125	0.130	0.000

AIC

Model	AIC	BCC	BIC	CAIC
Variant model	2138.951	2235.078		
Invariant model	2131.600	2223.479		
Saturated model	2664.000	3371.414		
Independence model	8718.492	8756.731		

Assuming variant model to be correct:

Model	DF	CMIN	P	TLI rho-2	CFI
Invariant model	8	8.649	0.373	-0.001	0.000

Appendix 3-10A: Measurement model (multiple-group analysis) – Workplaces

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Variant model	232	1797.259	1100.000	0.000	1.634
Invariant model	206	1818.151	1126.000	0.000	1.615
Saturated model	1332	0.000	0.000		
Independence model	72	8575.099	1260.000	0.000	6.806

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Variant model	0.790	0.760	0.907	0.891	0.905
Invariant model	0.788	0.763	0.907	0.894	0.905
Saturated model	1.000		1.000		1.000
Independence model	0.000	0.000	0.000	0.000	0.000

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Variant model	0.042	0.039	0.046	1.000
Invariant model	0.041	0.038	0.045	1.000
Independence model	0.128	0.125	0.130	0.000

AIC

Model	AIC	BCC	BIC	CAIC
Variant model	2261.259	2432.697		
Invariant model	2230.151	2382.376		
Saturated model	2664.000	3648.289		
Independence model	8719.099	8772.303		

Assuming variant model to be correct:

Model	DF	CMIN	P	TLI rho-2	CFI
Invariant model	26	20.892	0.748	-0.003	0.000

Appendix 3-10B: Structural path model (multiple-group analysis) – Workplaces

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Variant model	177	1890.045	1155.000	0.000	1.636
Invariant model	168	1901.966	1164.000	0.000	1.634
Saturated model	1332	0.000	0.000		
Independence model	72	8575.099	1260.000	0.000	6.806

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Variant model	0.780	0.760	0.901	0.890	0.900
Invariant model	0.778	0.760	0.900	0.891	0.899
Saturated model	1.000		1.000		1.000
Independence model	0.000	0.000	0.000	0.000	0.000

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Variant model	0.042	0.039	0.046	1.000
Invariant model	0.042	0.039	0.046	1.000
Independence model	0.128	0.125	0.130	0.000

AIC

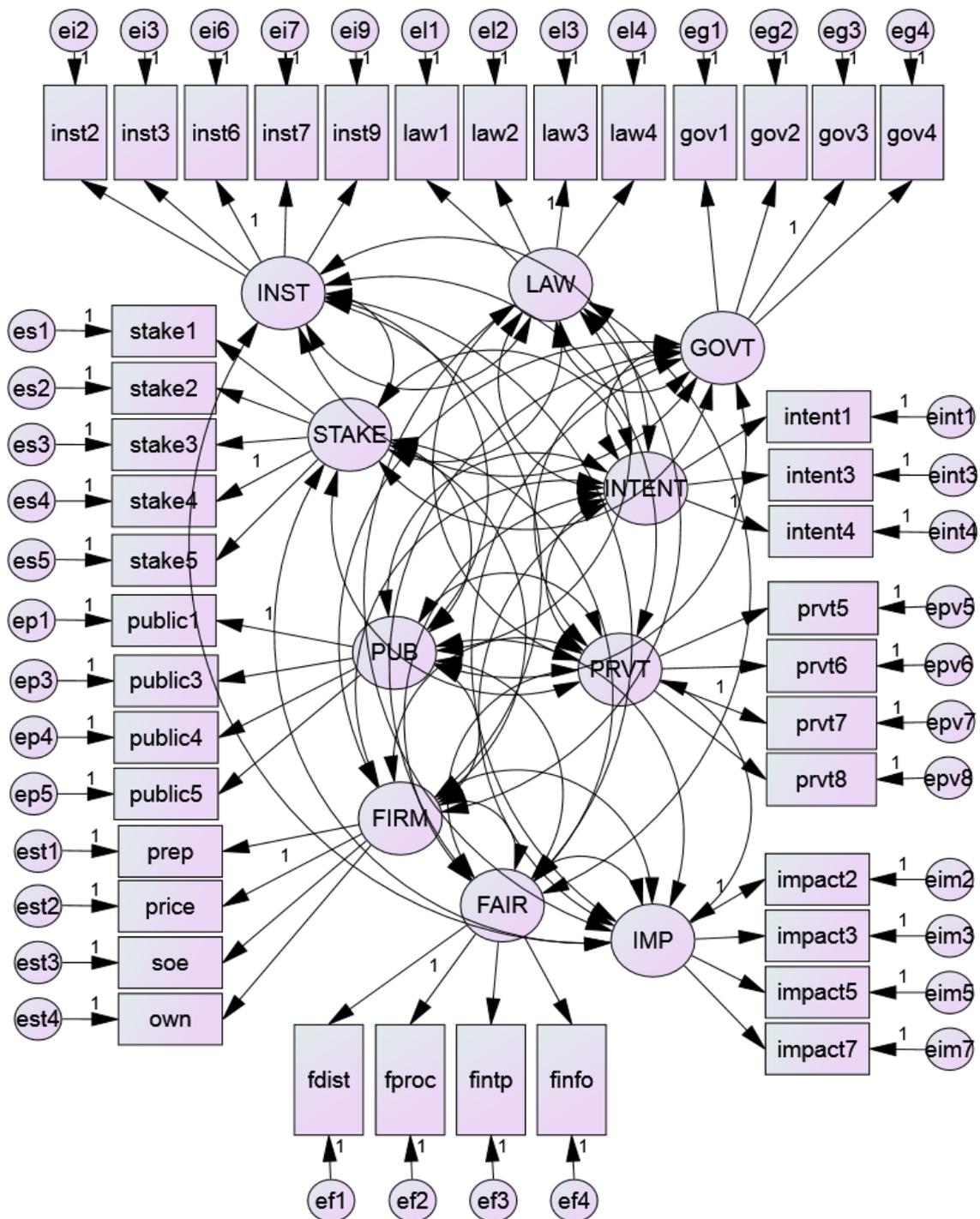
Model	AIC	BCC	BIC	CAIC
Variant model	2244.045	2374.840		
Invariant model	2237.966	2362.110		
Saturated model	2664.000	3648.289		
Independence model	8719.099	8772.303		

Assuming variant model to be correct:

Model	DF	CMIN	P	TLI rho-2	CFI
Invariant model	9	11.921	0.218	0.000	0.001

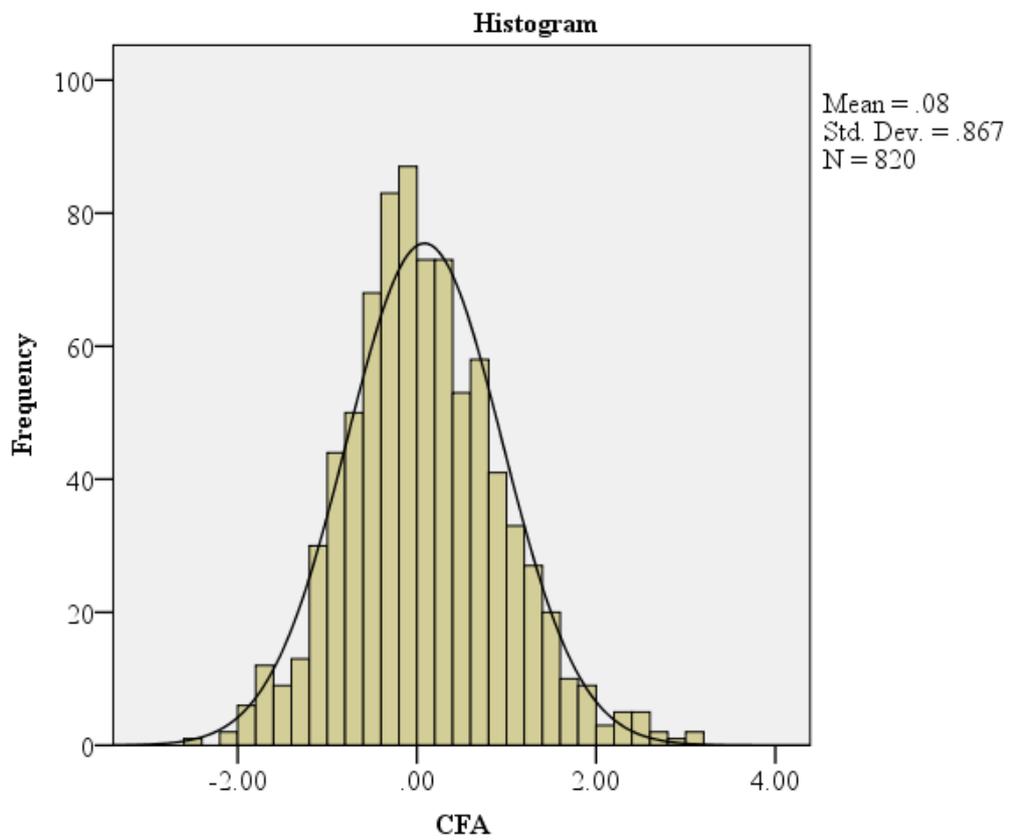
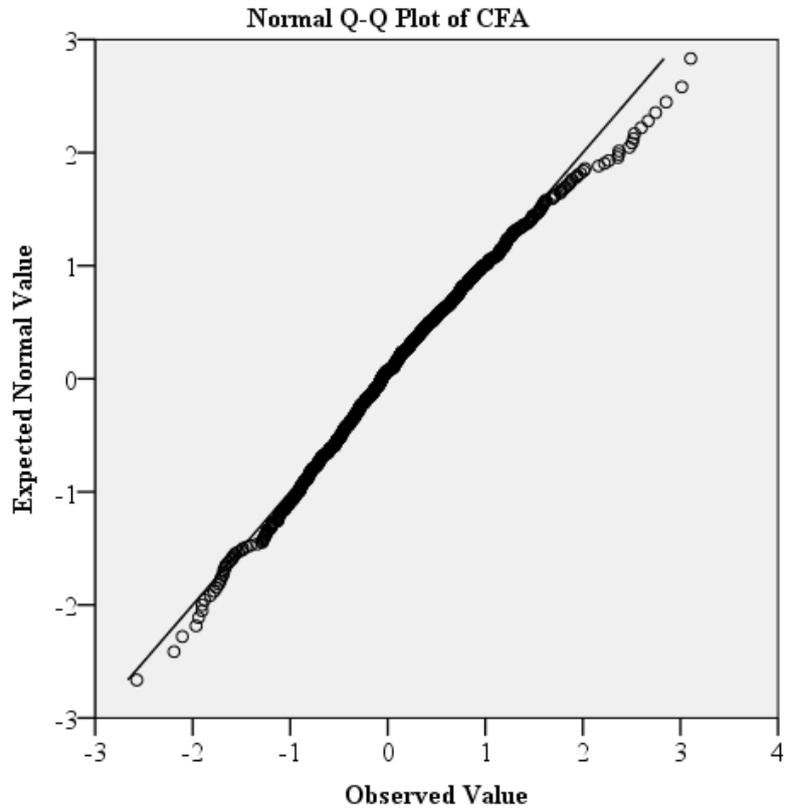
Appendix 4
Structural Equation Modelling – Working Diagrams

Appendix 4-1A: Confirmatory factor analysis measurement model

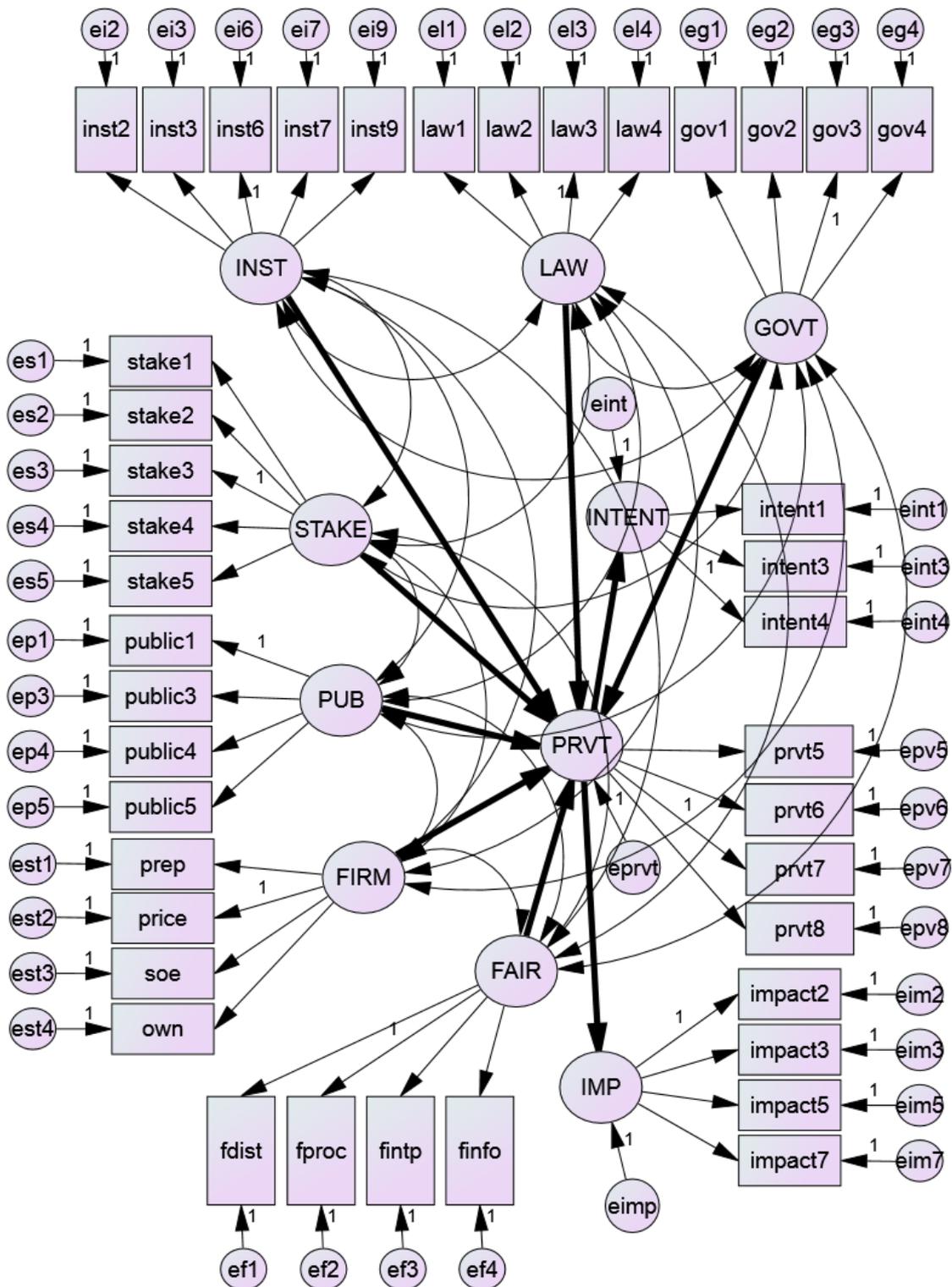


Note: Government commitment (GOVT); the existence of a legal and regulatory framework (LAW); the existence of institutional arrangements (INST); the existence of stakeholder involvement (STAKE); public education and awareness (PUB); firm-level privatisation strategy (FIRM); fairness (FAIR); positive privatisation outcomes (PRVT); impacts of privatisation on Laos' financial system (IMP); and behavioural intentions (INTENT).

Appendix 4-1B: Normal Q-Q plot and histogram of standardised residual covariance (CFA_AMOS)

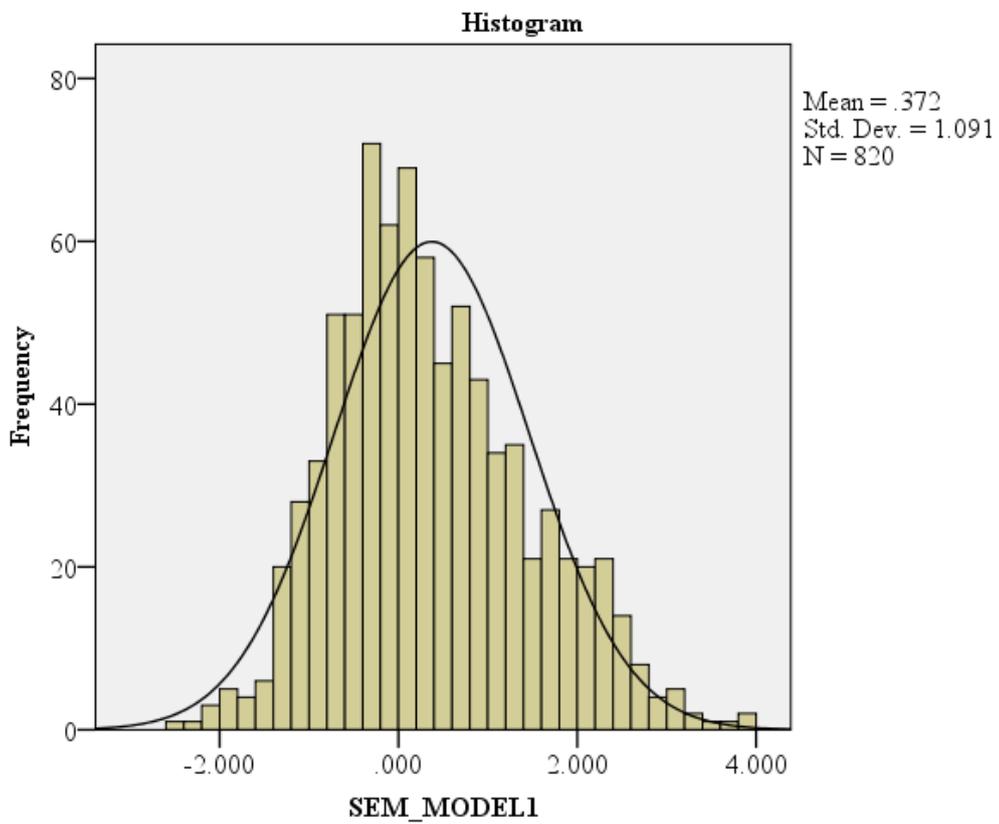
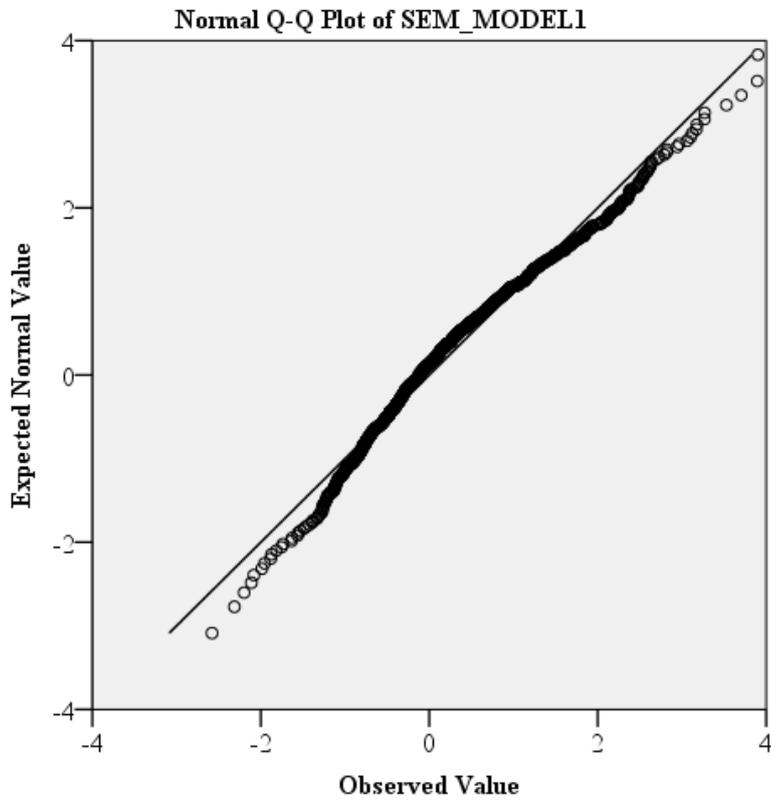


Appendix 4-2A: Hypothesised Model 1 with a 3-item factor of intentions

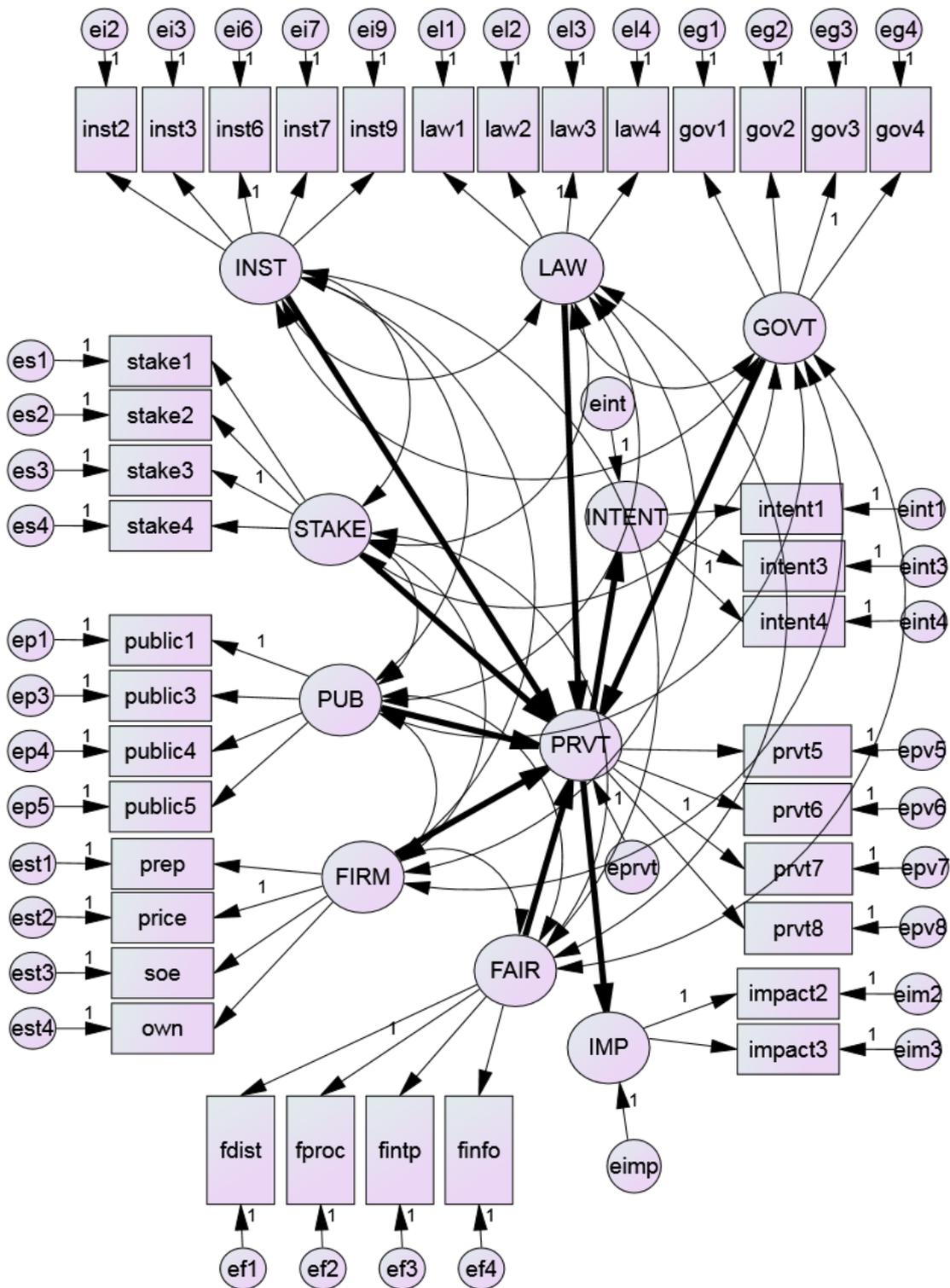


Note: Government commitment (GOVT); the existence of a legal and regulatory framework (LAW); the existence of institutional arrangements (INST); the existence of stakeholder involvement (STAKE); public education and awareness (PUB); firm-level privatisation strategy (FIRM); fairness (FAIR); positive privatisation outcomes (PRVT); impacts of privatisation on Laos' financial system (IMP); and behavioural intentions (INTENT).

Appendix 4-2B: Normal Q-Q plot and histogram of standardised residual covariance (SEM_Model1)

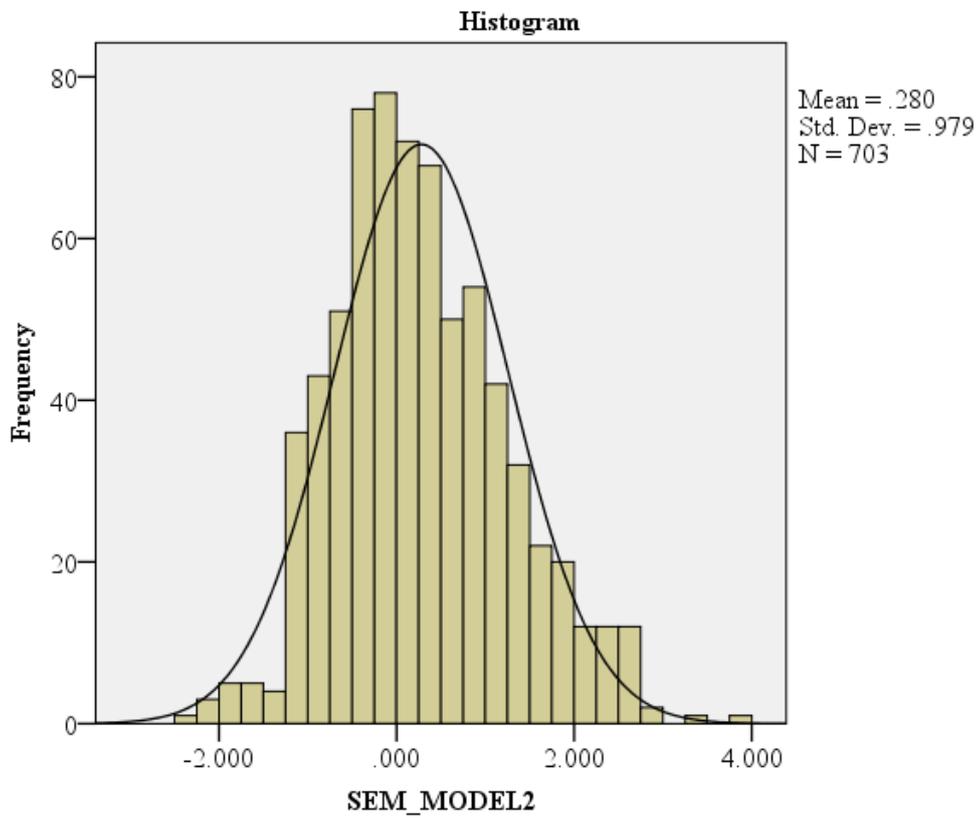
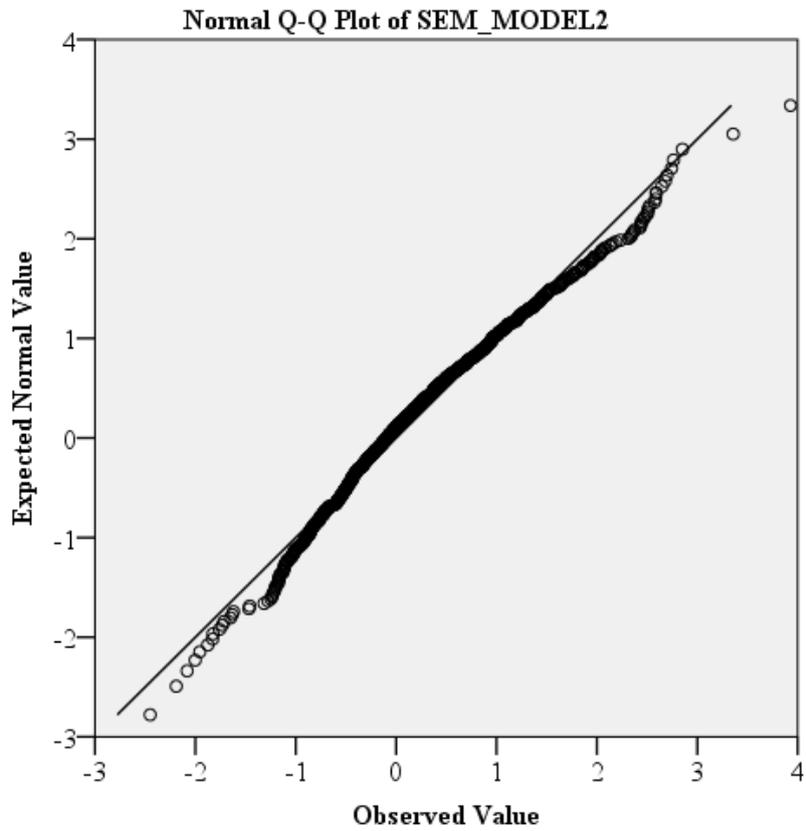


Appendix 4-3A: Hypothesised Model 2 with a three-item factor of intentions

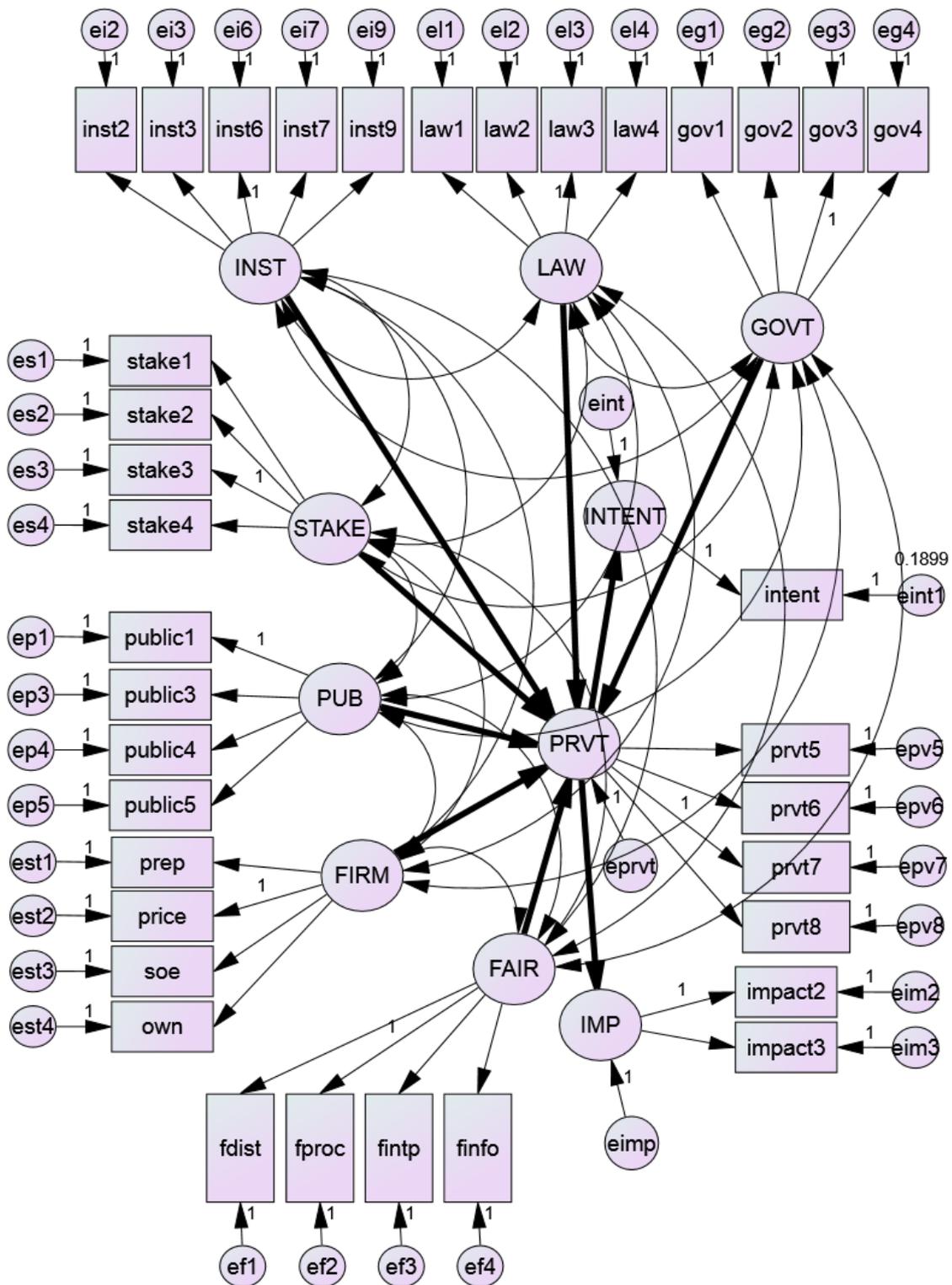


Note: Government commitment (GOVT); the existence of a legal and regulatory framework (LAW); the existence of institutional arrangements (INST); the existence of stakeholder involvement (STAKE); public education and awareness (PUB); firm-level privatisation strategy (FIRM); fairness (FAIR); positive privatisation outcomes (PRVT); impacts of privatisation on Laos' financial system (IMP); and behavioural intentions (INTENT).

Appendix 4-3B: Normal Q-Q plot and histogram of standardised residual covariance (SEM_Model2)

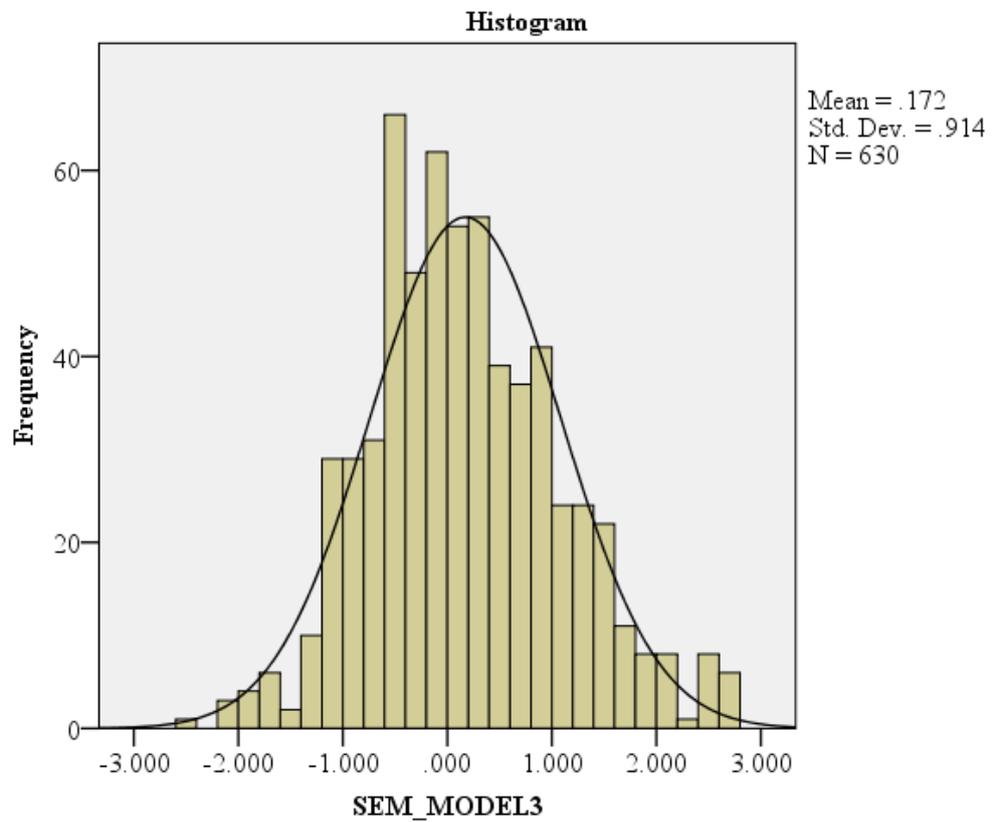
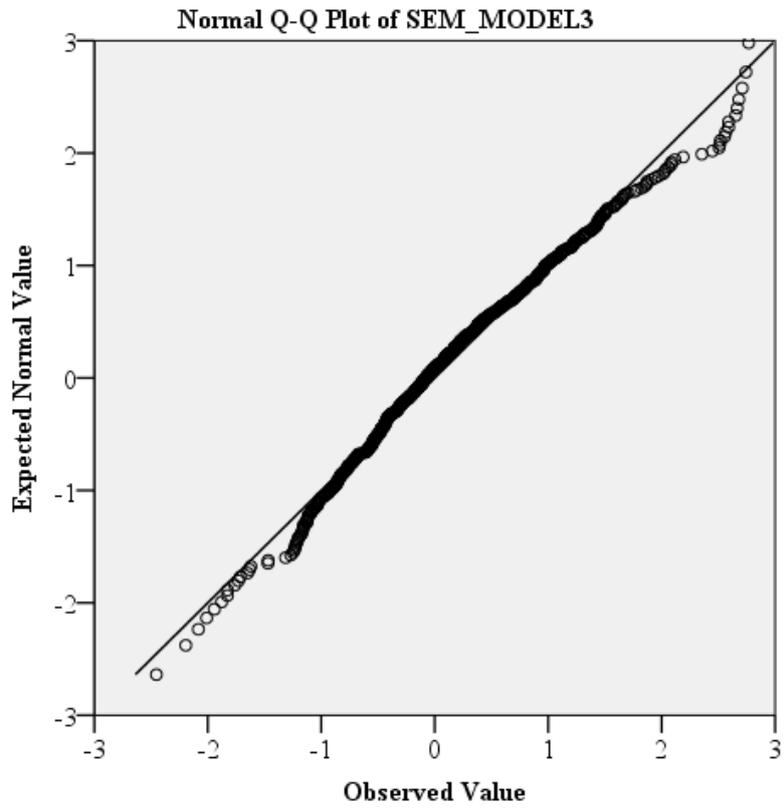


Appendix 4-4A: Hypothesised Model 3 with a single-item factor of intentions

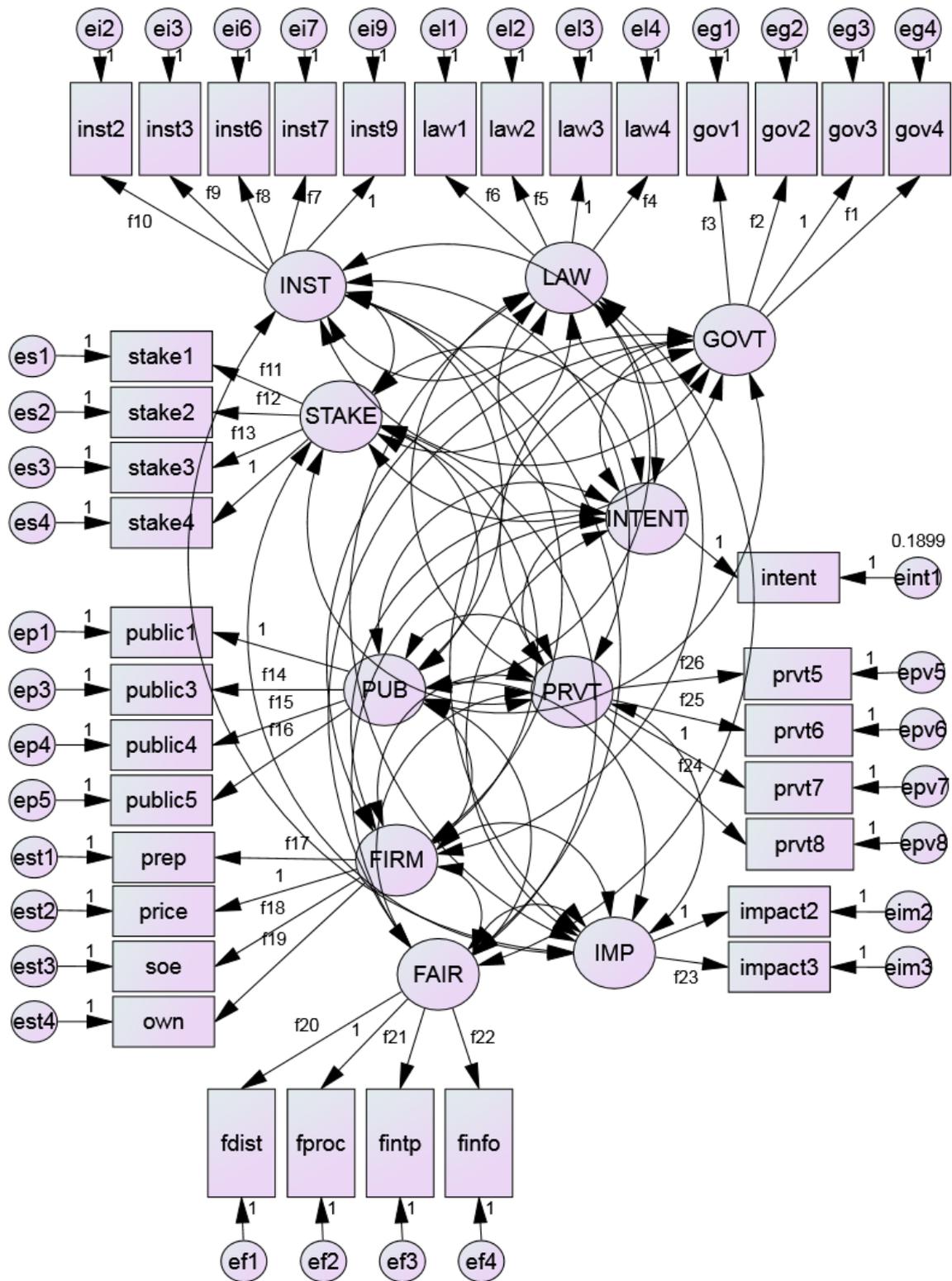


Note: Government commitment (GOVT); the existence of a legal and regulatory framework (LAW); the existence of institutional arrangements (INST); the existence of stakeholder involvement (STAKE); public education and awareness (PUB); firm-level privatisation strategy (FIRM); fairness (FAIR); positive privatisation outcomes (PRVT); impacts of privatisation on Laos' financial system (IMP); and behavioural intentions (INTENT).

Appendix 4-4B: Normal Q-Q plot and histogram of standardised residual covariance (SEM_Model3)

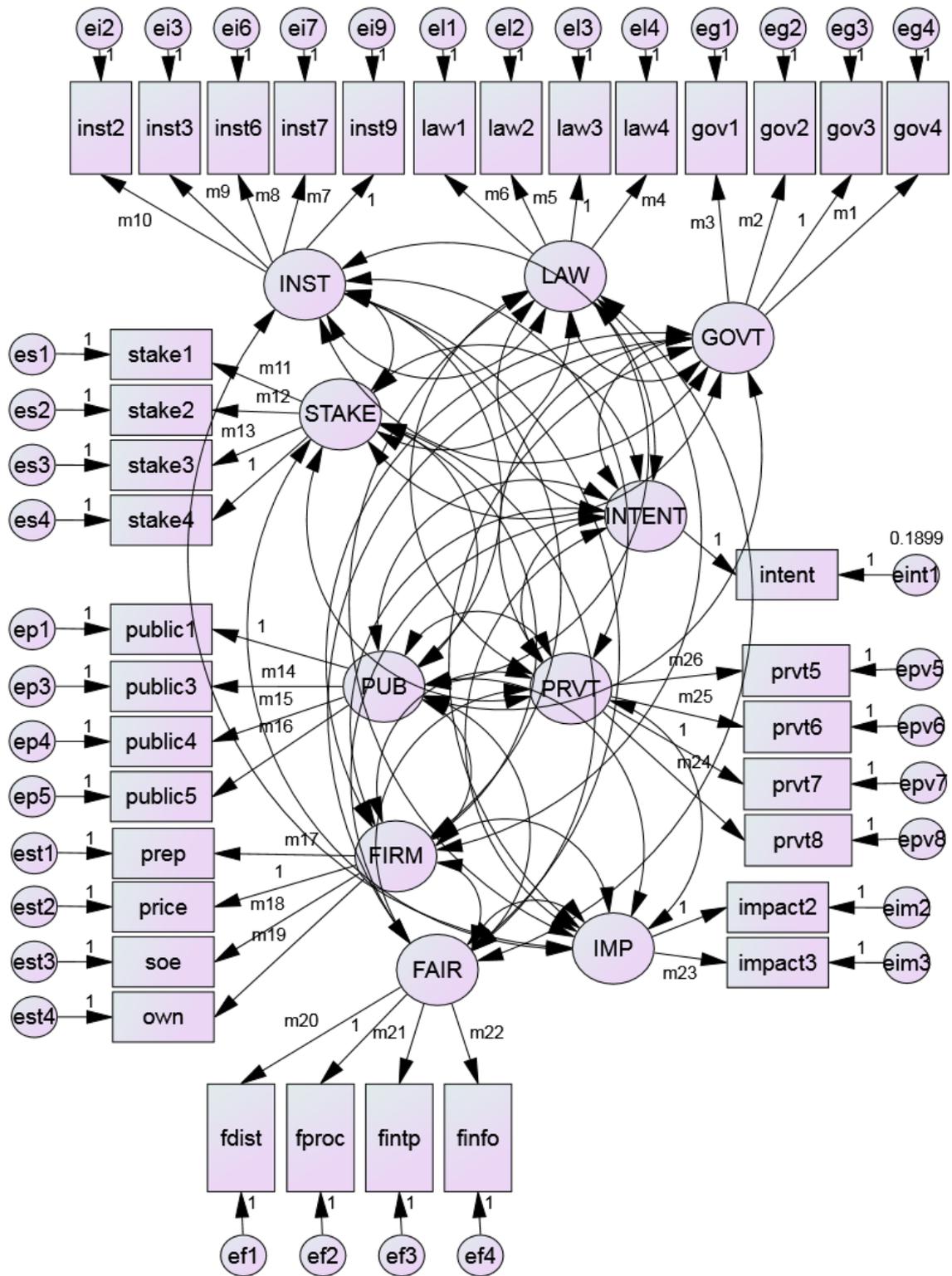


Appendix 4-5A: Multiple-group analysis for measurement models – subgroup 1



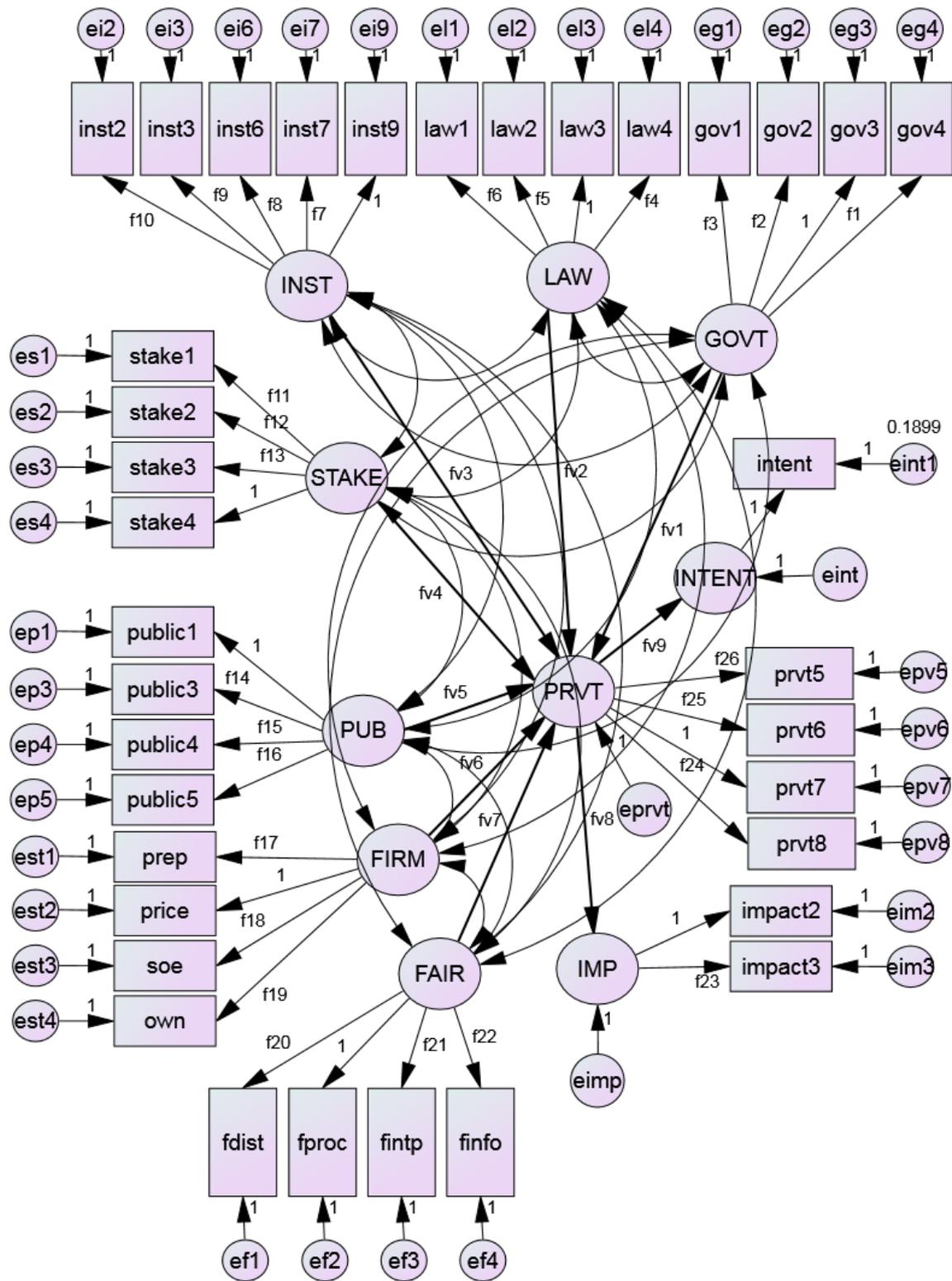
Note: 'f' refers to regression weights for those respondents who are female or those who hold tertiary degrees or those who work for government-related entities and SOEs

Appendix 4-5B: Multiple-group analysis for measurement models – subgroup 2



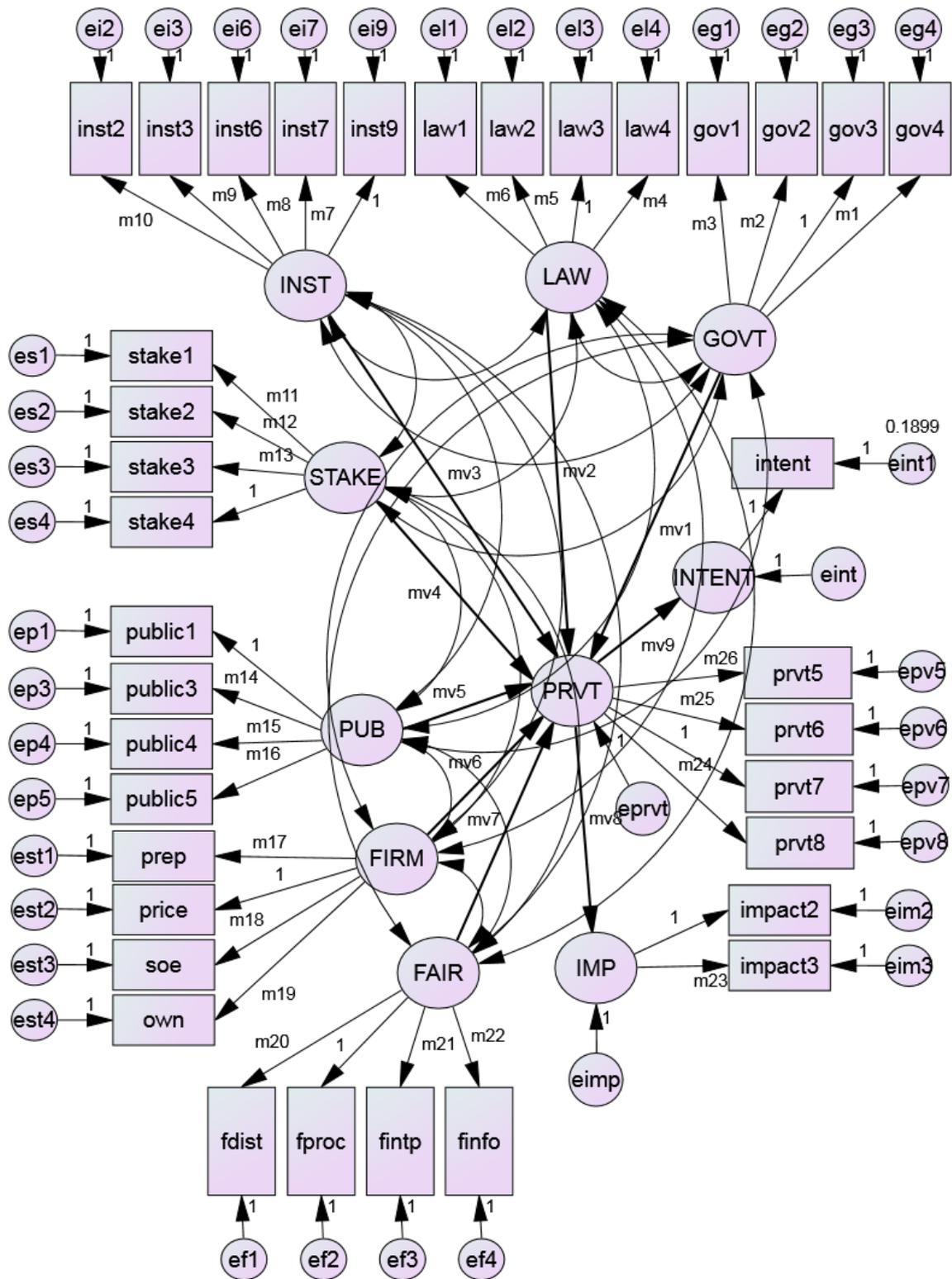
Note: 'm' refers to regressional weights for those respondents who are male or those who held postgraduate degrees or those who work for other entities

Appendix 4-6A: Multiple-group analysis for structural models – subgroup 1



Note: 'f' refers to regression weights for those respondents who are female or those who hold tertiary degrees or those who work for government-related entities and SOEs

Appendix 4-6B: Multiple-group analysis for structural models – subgroup 2



Note: 'm' refers to regression weights for those respondents who are male or those who hold postgraduate degrees or those who work for other entities