GOVERNANCE AND TRUST:
An institutional economics perspective on Taiwan's financial reform

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A thesis submitted in partial fulfillment of
the requirements of the University of
Brighton for the degree of
Doctor of Philosophy

2012

The University of Brighton

Abstract

Evolution of the financial system involves continual institutional changes for reform purposes. However, reform experiences differed considerably from one country to another. Why is it that some countries can effectively implement reforms to foster successful development while others fail to do so? This study takes a first step in answering this question. It aims to explain the variations of financial reform experience in terms of informal institutional influence and highlight the importance of governance in shaping the reform outcome. The thesis studies governance characteristics that influence Taiwan's banking evolution and examines the development of both formal and informal institutions. It argues that development of Taiwan's banking sector has been path-dependent and significantly influenced by informal institutions, which held back its recent reform progress. The study comprises three parts: theoretical framework, quantitative statistical research and qualitative country study. It applies the analytical framework set out in the theoretical part and draws on empirical evidences from quantitative research to form the basis for an empirical investigation into the historical financial development and recent reform experience in Taiwan. At the conceptual level, the research adopts the New Institutional Economics (NIE) framework and argues that governance bears a decisive importance for an effective reform because it fosters trust in the institutions and facilitates the reform by encouraging cooperative behaviours among actors. It identifies that governance of financial service industry is perceived from institutional qualities of property rights protection, corruption prevention, and political stability. Using the case of Taiwan's banking sector, the research explores the sector has been shaped and conditioned by the institutional contexts in which it operates. It discovers that that the underdeveloped mechanism for creditors' rights protection, collusion between financial businesses owners and politicians, deadlocked political situation with China contribute to weak governance which amplified its 1990s banking crises. It is observed that government's behaviours did not transform with the reform to form new habits and thoughts under the influence of the institutional persistence, hence only had limited success in inducing policy enforcement. In terms of policy implications, the research encourages policy makers to study historical development and to build upon existing initiatives taking into account the path-dependent environment and informal institutional embeddedness of implemented projects.

Content List

List of Tables

List of Figures

Preface

This thesis is dedicated with deep gratitude to my parents for their endless love, support and encouragement throughout my life.

謹將完成本文之榮耀與喜悅，獻給我摯愛的父母。因有您們無盡的關愛，無私的付出，和耐心的包容，使我得以無憂地致力學業。感恩之情，無以言表，謹以此文，深表謝恩。

Acknowledgements

I have found writing this PhD thesis a challenging but rewarding experience and I would like to thank all the people that were involved in one or other way.

I thank my supervisors Dr. Jens Hölscher for allowing me the space and freedom to explore this research and for his continued support and guidance. I owe my deepest gratitude to my second supervisor, Dr. Walter Heering, for being my advisor, teacher and friend; he has been invaluable on both an academic and a personal level. I thank him for the patient and insightful guidance and his constant confidence in me.

I also thank members of Research Student Division at Brighton Business School for providing the resourse and supportive environment; particular acknowledgments go to Professor Lew Perren and Jo Lucas for their friendliness, warmth and helpful assistance.

The friends and acquaintances I met in the UK have made my time here enjoyable; I thank you for reminding me there is a life outside work. I am especially grateful to have a strong support network made up by my fellow Taiwanese friends here in Hove, with whom I shared the most difficult time. To my friends and relatives back at home, for always making me feel like I had never been away.

Most of all, I would like to express my greatest appreciations to my family: my two lovely sisters for not taking me too seriously, for reminding me what really matters in life, and tolerating my many absences; my partner, for having faith in me, for keeping me going when times were tough, for looking after me and being my rock throughout it all; lastly but most importantly, my parent for their unconditional love, support, and encouragement throughout my life.

This thesis was achieved by a number of personal circumstances and substantial support of beloved people who accompanied me during this journey. To all of you, I offer my sincere thanks, regards and blessings.

Declaration

I declare that the research contained in this thesis, unless otherwise formally indicated within the text, is the original work of the author. The thesis has not been previously submitted to this or any other university for a degree, and does not incorporate any material already submitted for a degree.

Chuang Hsiaochi

21. May. 2012

List of Abbreviations

The following table describers the significance of various abbreviations and acronyms use throughout the thesis.

Abbreviation	Meaning
AMC	Asset Management Companies
BAROC	The Bankers Association of the Republic of China
CBC	Central Bank of the Republic of China
CDFFAs	Credit Departments of the Farmers' and Fishermen's associations
CDIC	Central Deposit Insurance Corporation
DISCRIM analysis	Discriminant analysis
DPP	Democratic Progressive Party
FSC	Financial Supervisory Commission
GDP	Gross Domestic Product
GNP	Gross National Product
IMD	Institute for Management Development
KMT	Kuomingtang, the nationalist party
M&A	Mergers and Acquisitions
MOF	Ministry of Finance
NIE	New Institutional Economics
NPL	Non-Performing Loans
NTD	New Taiwan Dollar
PFP	People First Party
P.R.C.	People's Republic of China
OBU	Offshore Banking Units
QFII	Qualified Foreign Institutional Investor
ROA	Return on Asset
ROE	Return on Equity

R.O.C.	Republic of China, the official name of Taiwan
SMEs	Small and Medium-sized Enterprises
SOEs	State Owned Enterprises
TICs	Trust and Investment Companies
TMEB	Taiwan Medium Enterprise Bank
U.S.	United States
USD	United States Dollar
WEF	World Economic Forum
WGI	Worldwide Governance Indicators
WTO	World Trade Organisation

Introduction

Financial sector reform was high on the agenda of policymakers in the last quarter of the 20th century. This was particularly the case in emerging economies, which since the end of the 1980s have implemented a process of financial liberalisation, and were at the same time confronted with banking crises. However, reform experiences have differed considerably from one country to another. Why have some countries been able to successfully implement reforms and achieve sustained growth, while others failed to do so? This thesis aims to explain the variations of financial reform achievements in terms of informal institutional influence using the New Institutional Economics (NIE, hereafter) approach. The evolution of financial system involves continual institutional changes imposed by public policy and behavioural changes induced by market signals, known as financial reform. Employing the case of Taiwan's banking sector, the research explores how such changes are shaped and conditioned by the institutional contexts within which reform takes place.

Subject Background: Taiwan

Taiwan was colonised by Japan until 1945 when the island was retuned to the Republic of China (R.O.C.) in China led by the Nationalist government - Kuomintang (KMT). In 1949, the KMT lost its battle against the Chinese Communists party in China and was forced to relocate the government and institutions of the R.O.C. to Taiwan. Since then, Taiwan has come a long way from planned economy to market economy and experienced a period of rapid political transition. It has achieved rapid economic growth since the 1970s and has successfully transformed from an agricultural society to a technology-oriented industrialised society. The average economic growth rate was 7.2% between 1979 and 2000. In 2001, Taiwan had its first negative economic growth rate of -2.2% but recovered to 10.8% in 2010. In terms of the real Gross National Product (GNP), it increased about ten times, while the per capita GNP soared from US$1,920 to US$18,603 from 1979 to 2010[1]. As one of the competitively advanced emerging markets[2], Taiwan has been ranked first on the Growth Competitiveness Index[3] in Asia, and was in the top ten among 102 world econo-

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[1] Data source: Council for Economic Planning and Development, Executive Yuan R.O.C. (2010)
[2] The FTSE Group (2010) distinguishes between advanced and secondary emerging markets on the basis of their national income and the development of their market infrastructure. The advanced emerging markets are classified as such because they are upper middle income countries with advanced market infrastructures or high income countries with lesser developed market infrastructures.
[3] The Growth Competitiveness Index conducted by the World Economic Forum has been published annually since1989. The index covers over 100 national economies and provides rankings of their comparative strengths and weaknesses to

mies between 2001 and 2005[4]. Since 2006, it has fallen out of the top ten but is still in the top twenty. Correspondingly, its financial system has undergone a transformation in the process of economic development. The financial liberalisation process in Taiwan has followed the order suggested by McKinnon (1993) to transfer from a financially controlled to a market-oriented economy. However, whether the transformation of the financial system has enhanced its performance and facilitated its further development is in doubt. In his study of political democratisation and financial development in East Asia, Lim (1995) suggests that despite Taiwan's state-of-the-art economic development, its financial system is regarded as underdeveloped compared to other sectors in the country and its banking system is still medieval. Inappropriate political intervention in the operation of the financial system often takes the blame.

When the KMT relocated to Taiwan in 1949, Taiwan was only a sideshow to their grander effort to recover all of China after the war and financial repression policy was used to maintain economic stability and to guard against the rise of domestic capitalists. Instead of developing financial system to perform its functions, KMT designed it according to their leaderships' political objectives. During this time, the banking sector was a state dominated system and merely an instrument to assist the government's selective credit allocation for promoting the economy. After decades of financial repression, the pressures for financial deregulation started to mount in the 1980s and finally took effect with the end of single party state in 1988.

Following the liberalisation of financial institutions establishments, banking licenses were issued to the private sectors and the banking system was transformed from a state-owned to a privatised one in the 1990s. However, the licenses granted were criticised as being in favour of big enterprises that had built good connections with the KMT. In addition, the excessive number of licenses granted was suspected to be down to loopholes in the examination process and pressures from the shareholders of news banks with political leverage. The rapid expansion of banks without careful planning together with the manipulations of the KMT to stay in power after democratisation contributed to distort the financial system.

achieve sustained economic growth. It is composed of three pillars: (1) the quality of the macroeconomic environment, (2) the state of a country's public institutions, (3) a country's technological readiness given the increasing importance of technology in the development process.

[4] Taiwan was ranked 10th regarding its growth competitiveness in 2000 and 7th, 3rd, 5th, 4th, 8th between 2001 and 2005. It was ranked 13th in 2006 and 14th, 17th, 12th, 13th, 13th between 2007 and 2011 (The Global Competitiveness Report produced by World Economic Forum).

Speedy banking privatisation and inappropriate lending practices have brought about serious bad loan problems which led to banking fragility and made financial reform the government's top priority.

In 2000, the Democratic Progressive Party (DPP) won the presidential election ending the KMT's fifty-year monopoly of power and Taiwan experienced its first democratic rotation of political power. The subsequent deterioration of banking conditions and the exogenous shock of political change led to a much needed financial restructuring. With the restructuring of the banking sector as the top priority, Taiwan's financial sector reform took place in two phases that started in 2001. The first phase, between 2001 and 2004, was aimed at maintaining the integrity of the financial market and facilitating the sound development of financial services. The second phase of reform began in July 2004 with key objective to consolidate and promote Taiwan as a regional fund-raising and asset management centre. However, despite the nation's great competitive potential and government's efforts towards financial reform, the development of financial systems in Taiwan has still lagged behind. The perceived soundness of Taiwanese banking was ranked 36th, 53rd, 61st, 73rd and 68th in 2000, 2001, 2002, 2003 and 2004 respectively based on survey results from World Economic Forum (WEF).

To study how existing institutional behaviours reacted to reform policies and how they evolved in such a transformation process, this thesis focuses on the first phase of the reform between 2001 and 2004.The aims is to investigates the reasons for Taiwan's slow pace of financial reform from the perspective of informal institutional drawbacks, with emphasis of governance quality

Literature overview

Numerous studies have established that a country's financial development is related to its institutional characteristics. North (1994:360) states that "institutions are the humanly devised constraints that structure human behaviours". He explains that institutions are made up of 'formal institutions' as rules, laws and constitutions, and 'informal constraints' as including conventions, norms and rules of behaviours that have evolved spontaneously over a long period of time. According to New Institutional Economics, it is the joint role of formal and informal institutions that reduces transaction costs and facilitates any reform process.

Research on institutions in financial development has drawn attention to the influences of legal and regulatory framework on financial development. La Porta et al. (1997b; 1998) have argued that the origins of legal codes (common law or civil law) substantially influence the treatment of creditors and shareholders and the efficiency of contract enforcement. The causality between creditor protection and the breadth of credit market has also been identified by Levine (1998), Wurgler (2000), and Galino and Micco (2001). Among others, Jappelli and Pagano (1999; 2000) and Mayer and Sussman et al. (2001) have emphasised that regulations concerning information disclosure and accounting standards permit banks to make more accurate assessments of their customers and appear to have material effects on financial development.

When searching for the decisive importance of institutions for successful economic performance, good governance is often identified as the main underlying factor (Olson, 1996; Linders et al., 2005). This is explained by the impact governance has on enforcing a system of laws and regulations that formally structure social interaction and economic change (Raiser, 1997). In addition to this, good governance promotes efficient allocation of resources, thus enabling individuals to specialise in different tasks and then transact with one another to achieve the full economic potential of the society (Dixit, 2009). In studying financial crises, Rajan and Zingales (1998b) and Francis (2003) found institutions, rules, and laws that govern the financial environmentt are of first-order importance for the stability of financial systems. Their studies addressed the role of governance mechanisms as a means of reducing financial fragility.

Any reform process involves radical institutional changes in terms of laws and regulations. Changing a set of formal rules is comparatively easy but changing a set of informal institutions takes considerably more time and, in most cases, cannot be designed deliberately. The process of institutional change is overwhelmingly incremental and path-dependent because of informal institutional constraints (North, 1995). As Raiser (1997: 1) states "any process of rapid formal institutional change must be content with the legacy of an inherited set of informal institutions that may or may not be efficient under a changing economic and social environment". By efficient informal institutions is meant the trust embedded in institutions that do encourage cooperative behaviours among economic actors for a smooth reform. Based on such assumptions, efficient informal institutions are the deciding factors

in whether financial reforms undertaken to promote financial development can achieve the desired results

Research objectives

The review of literature establishes the evidences that differences in formal institutional settings across countries account for the variety of financial developments. In contrast, the impact of informal institutional constraints has been rather overlooked. This thesis aims to highlight the influence of informal institutions on financial reform achievements from two perspectives. First, it argues that trust is beneficial for institutional changes and that institutional trust is crucial for the financial system to perform its functions. Trust is credited with reducing the cost of enforcing agreement and making creditable commitments. Hence, for institutional change to achieve its desired results, it relies on the soundness of reformed regulations as well as the residents' confidence in these institutions. Trust is particularly important for financial services business because financial intermediaries have evolved to reduce transaction costs incurred in trading promises between individuals or agents who do not trust each other fully. In this sense, their function is to bridges trust between individuals and agents and trust in financial system stems from trust in institutions. Second, the research draws attention to the incremental and path-dependent characteristics of institutional changes in shaping reform outcome. It seeks to explore how institutions have evolved to create existing forms of cooperative social behaviours, what people believe about institutions, and how they have arrived at those beliefs. This helps studying whether institutions are altered to create new habits of thought to support reform policies and eventfully decide reform outcome.

Moreover, although the governance is identified as the fundamental institutional quality which enhances economic development, there are several issues remained to be explored. First, the importance of governance in facilitating institutional changes is not sufficiently addressed. The thesis argues that governance is the key institutional factor which alters the level of trust in the financial system. Good governance creates trust in institutions, hence encouraging cooperative behaviours. In the process of reforming a financial system, governance institutions ensure a smooth reform process by maintaining trust among financial market participants, and as a result determine the success of the reform. Furthermore, like any aspect of institutional performance, governance quality is evaluated by objective governance mechanisms and subjective perceptions. While the governance institutions such as

creditors' rights protection have been studied by many studies, few attempts have been made to investigate the influence of subjective governance. This study offers a step in this direction by examining the impacts of perceived institutional barriers on financial reform achievements. Finally, even if governance has been recognised for supporting economic activities, it remains unclear what institutional qualities contributed to good financial governance. The research undertaken for this thesis aims to identify the determinants of good governance for financial development. The focus is on three institutional dimensions - property rights protection, corruption prevention and political stability - which are found in this study to mainly determine governance quality.

The research is designed to answer the question *how do informal institutional constraints shape financial reform?* The main research question is explored in the subsidiary questions:

(1) Why are institutional support and trust particularly important in enabling a financial system to perform its function? Where does trust in financial system stem from and what is the role of trust in achieving success of reform?

(2) Why and how do informal institutions contribute to diverse reform experiences? How do path-dependent institutional features affect financial development and shape reform outcome?

(3) Why governance is the fundamental factor of an effective reform? How do the perceptions of governance influence the public's beliefs and as a result facilitate or obstruct institutional changes? Most importantly, what are the determinants of good governance for financial system?

Thesis outline

The research uses combined strategies of quantitative and qualitative analysis. After a preliminary quantitative analysis, the analytical framework set out in the literature review is applied to the study of Taiwan using a qualitative approach to demonstrate how institutional barriers constrain enforcement of financial reform measures.

This thesis consists of three parts: theoretical framework, quantitative statistical research and a country case study using qualitative approach. The theoretical framework is based on NIE to form a foundation for the analysis of the project. Next, the quantitative empirical research examines correlations between institutional indicators and a trust-in-banks indica-

tor through a cross-sectional study. This is to form a basis for the investigation of institutional influence on level of trust in banks and validate governance as a decisive factor. Finally, a country study of Taiwan forms the core of this research. It applies the analytical framework set out in theoretical studies and draws on empirical evidence from quantitative research to form the basis for an empirical investigation into Taiwan's financial development and recent financial reform. The outline of the thesis is as follows:

Chapter 1 offers the political, historical and economic context for the financial development in Taiwan. It also provides an understanding of the structure and evolution of Taiwanese financial system since 1949.

Chapter 2 provides a theoretical framework for the study by reviewing literature on trust, governance and financial development from an institutional perspective. It concludes that good governance encourage confidence in a financial system, hence facilitate financial reform. The governance of a financial sector is perceived from three dimensions: property rights protection, corruption prevention and political stability. One of a financial system's main functions is to ensure an efficient resource allocation by facilitating the collection of information about enterprises and allocating capital to sound, productive investment (Fuchs, 2002). Property rights protection is the first important quality of financial governance because they determine the incentives for the use of resources hence influence on resource allocation (Claessens and Laeven, 2003). The second feature of good financial governance is corruption prevention. Corruption is perceived when property rights are violated. As Acemoglu and Johnson (2005: 6) explain "when property rights institutions do not constrain elites, these elites are more likely to violate the property rights of individual producers and expropriate their income or assets". Political stability is the third important aspect to be studied because it determines a government's capability and willingness to execute designed policies.

Chapter 3 introduces the design of this research and explains the methods applied. It explains the structure of the thesis, analytical procedures, data collection, and analysis approaches for quantitative and qualitative research. In addition, the validities of the research design, data selection and combined research strategies are discussed in this chapter.

Chapter 4 presents results of quantitative analysis on two research propositions. Proposition 1: Residents' trust in banks is affected by their *perceptions of the institutional environment* in which banks operate. Proposition 2: Resident's trust in banks is more strongly related to *subjective perception of institutional quality* than to *objective measures of banking development.* The findings ascertain institutional influence on the level of trust in banks and identify governance indicators of *bribery and corruption*, *risk of political instabilities* and *personal security and private property* as key factors. In addition, the results show that institutional variables have greater impacts on trust in banks than financial ratios obtained from banks' balance sheets.

Based on the theoretical framework formed in the literature review and the quantitative findings, a qualitative study of Taiwan is conducted in Chapters 5, 6 and 7. Chapter 5 provides the history of Taiwan's post-war banking sector development to offer insights into the way it has been formed and its inherited institutional culture. Chapter 6 reviews banking privatisation, starting in 1989, and provides an institutional interpretation of the causes of the banking problems that eventually led to financial reform in 2001. Chapter 7 investigates the institutional obstacles to implement financial reform measures. The chapter starts by introducing the objects of the reform and the measures designed to achieve those objects, followed by an investigation of governance performance during the transformation process. The purpose is to examine the institutional drawbacks of implementing the reform measures due to their path-dependent characteristics. Throughout the study governance qualities of property rights protection, corruption prevention, and political stability are focused on. The findings from Taiwan's reform experience suggest that the existed institutional norms have not been altered to form new habits and thoughts to support reform actions. The institutional context was not transformed to improve governance quality and support the reformed policies. As a result, path dependency in poor governance became obstacles to enforce reformed measures and held back reform progress.

Chapter 8 summarises the findings, draws conclusions, indicates implications and states the contribution of this thesis to knowledge. Limitations of the study and suggestions for further research in this field are also considered.

Summary and contributions

The thesis' contribution is twofold: practical and theoretical. The practical contribution is

offering policy makers a new angle in understanding financial reform as a process of trust building. In this the thesis makes a contribution by drawing out three implications. First, as the financial reform is eminently a process of institutional change, it is conditioned to a substantial extent by the inheritance of existing institutional context. For a reform to achieve its desirable results, policies are best designed taking into consideration the institutional context which will shape people's expectations and will constrain the enforcement of new policies. The second implication is that financial reform involves not only a reconstruction of the financial industry, but also a strengthening of governance quality. Developing a decision-support tool for policymakers and authorities for measuring governance quality to support financial reform is worth considering. The last implication is that an effort should be made to kindle trust in institutions through implementing reform measures. If the given trust level is low in government and its formal institutions, signalling reform commitments helps to enhance government's credibility by. Financial reform will only bring substantial developments to financial system when trust is created or regained in the system.

The theoretical contribution is found in the thesis' addressing of governance quality with regard to financial reform achievements. This research builds on previous and ongoing work on institutional influences on financial development. Instead of looking at formal institutional settings for the difference in financial development, this thesis looks at the informal institutional constraints on financial reform achievements. The finding is that the new habits of thought that facilitate reform measures need to be created by altering existing institutional attitudes and behaviours in enabling a financial reform for better results. Furthermore, this study adds to previous researches on the topic of trust in financial development. The thesis ascertains that trust is a beneficial factor, which allows financial system to function. Trust in the system comes from trust in the institutions governing the system. High quality of governance contributes to high level of trust in the institutions, which encourages cooperative behaviours among actors for a smooth reform process. In addition, this study advances the field of good governance on supporting development. The research claims that three aspects of governance deserving of special attention in financial industry are: (1) property rights protection, (2) corruption prevention, and (3) political stability. Finally, the approach taken in this study differs from that in previous research. Instead of being primarily based on quantitative approach, which studies correlations between institutional variables and financial development variables, this research uses quantitative find-

ings to form a basis for an in-depth qualitative case study. In the quantitative part of the research, instead of using pre-selected institutional indicators, the analysis employs a group of thirty-six institutional variables without assigning their importance beforehand. This enables identification of the key factors that reflect perception of an overall institutional environment. In terms of qualitative research, the study investigates how institutional behaviours have evolved over time rather than at a certain point in the process. The research design combines the strengths of quantitative and qualitative approaches, which are able to deal with the questions of what people believe in the institutions and how they arrive at those beliefs.

Overall, the implication from this research is that governance quality offers key explanations for the persistent disparity in financial market development across countries. For an emerging economy like Taiwan, measures need to be taken to strengthen the financial sector, so that its role in supporting sustainable growth in the economy can be enhanced. Financial system is important in supporting a country's economic development. Although a well developed financial system is not sufficient to guarantee long-term growth, long-term growth is difficult to achieve without a sound financial system. The imposition of appropriate financial reforms at a critical juncture could help ensure the operation of a sound financial system and equip Taiwan's financial institutions with the ability to cope with the increasing competitiveness of the challenging financial environment.

1 Overview of Taiwan's financial system[5]

Since the post-war time, Taiwan had been through remarkable transformations from single-party authoritarianism to multi-party democracy, from a farmland to a high tech industrial economy, from financial repression to financial liberalisation. It had an extraordinary rate of economic growth with the average economic growth rate of 7.2% during the years of 1979 to 2000 and a ten times increase of its real GNP (Yu and Wang, 2005).The nation's strengths to achieve sustained economic growth remained top ten from 102 economics between 2001 and 2005[6]. Development of financial system certainly contributed to making this economic performance possible. Nonetheless, the financial system has often been criticised as being underdeveloped and inefficient which shows in the poor ranking of the soundness of its banking system. Much of the financial inefficiency and underdeveloped were blamed on the institutional rigidity[7], reluctance to changes as well as the high degree of government intervention.

As described in the Introductory chapter, the objective of this thesis is to investigate how informal institutions impact on implementations of reform measures in the case of Taiwan's financial industry. This chapter provides an overview of how the financial system in Taiwan was developed and structured. The purpose is to lay out the foundation of the subject and provide information and knowledge about the prerequisites of Taiwan's financial industry in order to fully understand the in-depth analysis presented in the forthcoming chapters.

The chapter starts by introducing the general background of Taiwan to obtain an understanding of the historical and economic context of its financial development. The structure and evolution of financial system are presented in sections 1.2 and 1.3. The chapter is summed up in section 1.4.

1.1 General background of Taiwan

Taiwan is an island off the south-eastern coast of China with a total area of about 36,000 square kilometres and a population of about 23 million. It was colonised by the Nether-

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[5] This part of study was published in McGee (2008) 'Accounting and financial system reform in transition and developing' under the title of The changing financial system in Taiwan.
[6] Refer to footnote number 4 of the Introduction Chapter.
[7] Rigidity is defined as market processes face some interruption or obstacle, often of a bureaucratic of political nature (Wade 1985).

lands between 1624 and 1662 and by Japan between 1895 and 1943. After Japan's uncon-ditional surrender in August 1945, the island was retroceded to the Republic of China (R.O.C.) in China led by the Nationalist government - Kuomintang (KMT) according to a plan drawn up by Allied leaders. In 1949, the KMT lost its battle against the Chinese Communists party and was forced to relocate the government and institutions of the R.O.C. to Taiwan. Following the victory, the Chinese Communist party declared the founding of the People's Republic of China (P.R.C.). This was the beginning of a sixty-year and still ongoing standoff between China as the P.R.C. and Taiwan as the R.O.C. When the KMT retreated to Taiwan, it was believed that the days of the KMT regime were numbered. However, the outbreak of the Korean War in June 1950 helped to extend the life of the Na-tionalist regime.[8] The resumption of United States (U.S.) military and economic aid helped the Nationalist state apparatus and armed forces to stay afloat (Chu and Lin, 2001). The alliance with the U.S. helped the KMT to build its regime in the early years and eventually to last for another fifty years in Taiwan.

In order to consolidate state power and overcome the political and economic crisis, a 'hard authoritarianism'[9] was shaped from 1949 to the 1950s. Martial law[10] was declared in May 1949 by the dictator Chiang Kai-shek to allow the KTM regime to utilise dictatorial pow-ers. During this time, the KMT government dominated the politico-economic power struc-ture and directed the operation of authoritarianism. The stand-off between the P.R.C. and R.O.C. became clear in the 1960s. To be friendly with the P.R.C. in China, countries that kept diplomatic relations with the R.O.C. in Taiwan broke off those relations and switched their recognition to China. The major setback for the KMT regime was when China's seat at the United Nations was transferred from R.O.C. to P.R.C. in 1971 under the One-China principle. In 1978, the U.S., who previously provided economic aid and political support to the KMT, declared that they would break off diplomatic relations with the R.O.C. and es-tablished relations with the P.R.C. in 1979. Due to the crisis of weakening international

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[8] With the outbreak of the Korean War in 1950 and the formal partition of Vietnam in 1954, the U.S. institutionalised its security commitment to Taiwan by signing the U.S.-ROC Mutual Defence Treaty (Chu and Lin, 2001).

[9] Authoritarianism was defined by Robertson in the Penguin Dictionary of Politics (London, 1986) as follows: the essen-tial element is that it is one in which stern and forceful control is exercised over the population, with no particular con-cern for their preferences or for public opinion. The justification for the rule may come from any one of a number of ideologies, but it will not be a democratic ideology, and ideas of natural rights or civil liberties will be rejected in favour of the government's right to rule by command, backed by all the force it needs. It is very much tied to the idea of com-mand and obedience, of inflexible rule, and a denial of legitimacy of opposition or even counter–argument.

[10] Martial law existed in Taiwan, under the name of the 'Period of Mobilization for Suppression of Communist Rebel-lion' from 1948 to July 1987. Under Martial Law, some of the personal rights ordinarily granted to the citizen were re-duced, i.e. the prohibition on forming political parties and the ban on the freedom of speech, publication, association, and assembly (Chu and Lin, 2001).

legitimacy, the KMT leadership felt compelled to respond by enhancing its own democratic legitimacy at home. Between the 1960s and the 1980s, the KMT rule went from 'hard authoritarianism' to 'soft authoritarianism' giving way to the end of martial law and the beginning of the democratisation process in 1987 (Chu, Lin 2001).

In terms of economy, Taiwan suffered severe damage after the Second World War. To help it to recover, import substitution was based on labour-intensive light industries in the 1950s. Then, the policies changed to the export processing of the 1960s and 1970s, the liberalisation and internationalisation of the 1980s, and the burgeoning IT industry of the 1990s. Between 1958 and 1972, Taiwan experienced rapid industrial growth which brought along trade expansion and economic growth. In the 1970s, the economy gradually stabilised as the Ten Major Construction Projects[11] laid a foundation for further economic development.

Taiwan's nominal gross domestic product (GDP) was 449.66 hundred million New Taiwan Dollar (NTD) in 1958 and 3161.72 hundred million in 1972; the economy expanded more than six times in around fourteen years (Yu and Wang, 2005). Government figures reveal that the share of gross domestic saving in Taiwan's Gross National Product (GNP) rose steadily from 14.9% between 1951 and 1960 to 21.1% between 1961 and 1970. It grew again to 31.9% between 1971 and 1980 and rose further to 33.3% for the years 1981-1990 (Shea, 1994). The average economic growth rate was 7.2% from 1979 to 2000. Its real GNP increased about ten times and the per capita GNP soared from USD1,920 to USD18,603 between 1979 and 2010 (Council for Economic Planning and Development, Executive Yuan R.O.C., 2010). In 1998 Taiwan experienced its first economic downturn and then the second one in the last quarter of 2000. In 2001, Taiwan had its first negative economic growth rate of -2.2% but recovered to 10.8% in 2010.

1.2 Financial system structure

1.2.1 Supervisory authorities

Before financial reform took place in 2001, Taiwan used to manage financial institutions using the traditional concept: different regulation and different authorities manage different

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[11] The Ten Major Construction Projects were national infrastructure projects during the 1970's in Taiwan. The government launched this initiative in order to promote the development of capital-intensive basic industries such as iron and steel, petrochemicals, textiles, machinery manufacturing, and auto manufacturing (Government Information Office, R.O.C., 2005b).

markets and different financial institutions. The financial supervisory framework was made up of three components (Figure 1-1).

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│ Central Bank of     │   │ Ministry of Finance │
│ the R.O.C.          │   │                     │
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           │        │ Securities and Futures Commission        │
           │        ├──────────────────────────────────────────┤
           │        │ Department of Insurance                  │
           │        ├──────────────────────────────────────────┤
           │        │ Others (Treasury, Taxation, Customs, etc.)│
           │        └──────────────────────────────────────────┘
    ┌──────────────────────────────────────────┐
    │ Central Deposit Insurance Corporation    │
    └──────────────────────────────────────────┘
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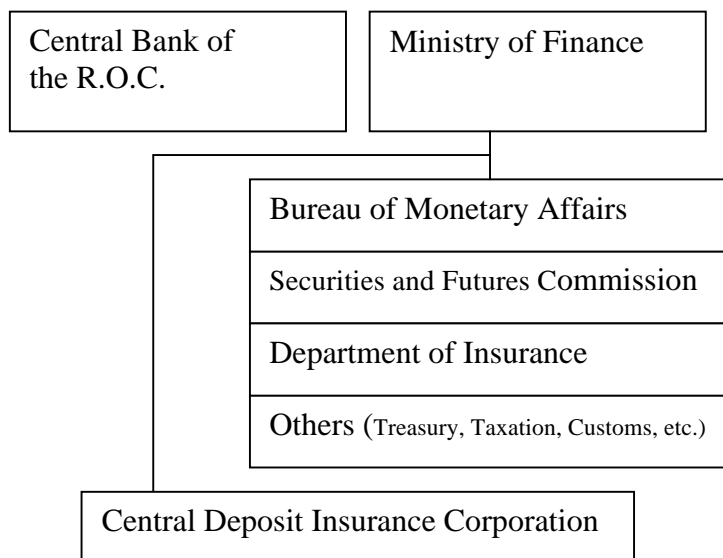
Figure 1-1 Financial supervisory framework

Source: Financial Supervisory Commission, Executive Yuan, R.O.C. (2004)

(1) The Ministry of Finance (MOF) with three major subordinate agencies, namely the Bureau of Monetary Affairs, the Department of Insurance and the Securities and Futures Commission. The MOF was responsible for financial administration and supervision of financial markets and the respective institutions. It was obliged to formulate policies to facilitate development of the financial industry.

(2) The Central Bank of the Republic of China (CBC) which conducted monetary and foreign exchange policy and was responsible for a considerable amount of financial supervision. It issued the nation's currency, and served as the bank of banks and government. Before 1979, the CBC came under presidential authority. Since 1979, the CBC has been under the control of the Executive Yuan, and is thus not as politically and economically independent as before.

(3)The authority of the Central Deposited Insurance Corporation (CDIC) was conferred by the MOF; it was established in an attempt to safeguard the assets of depositors in financial institutions and encourage saving.

1.2.2 Financial institutions

The domestic deposit money banks can be divided into three groups apart from local branches of foreign banks in Taiwan. (1) Commercial banks and savings banks: the former focus on short term deposits and loans while the latter focus on medium or long-term deposits and loans. (2) Specialised banks: the purpose of these banks is to provide specialised lending for small and medium enterprises in order to promote economic development and industrial upgrading. (3) Credit Cooperatives and Credit Departments of Farmers' and Fishermen's Associations (CDFFAs) are banking services in regional communities. CDFFAs have a special function; they promote economic development among farmers and fishermen in residential areas. It is noted that the CDFFAs, as the most grass-roots financial organisations, are unique financial institutions in Taiwan. Lee (1990) mentions two distinct characteristics of CDFFAs. One, unlike with commercial bank credit, collateral requirements are not strictly enforced in CDFFAs so that they can facilitate small borrowers. Two, a package of service activities are coordinated with credit supply to support farmers' and fishermen's businesses. CDFFAs played an irreplaceable role in Taiwan's successful agricultural reform in the 1950s. Other financial Institutions included: Financial Holding Companies, Insurance Institutions, the Postal Savings System, Credit Card Institutions, Investment and Trust Companies, Offshore Banking Units, the Credit Guarantee Fund, and Financial Market Professional Institutions.

1.2.3 Financial markets

There are three main financial markets in Taiwan: the money market, capital market and foreign exchange market. The money market and capital market are classified according to the maturity of the financial instruments they handle.

(1) The money market includes the short-term bills market and the interbank call loan market. Currently, the major instruments traded in the short-term (less than one year) bills money market includes: treasury bills, commercial paper, banker's acceptances, negotiable certificates of deposits, and so on.

(2) The capital market is composed of the bond market, which includes listed and over-the-counter debt certificates, the stock market which includes listed and over-the-counter com-

pany shares, and the futures market, which was set up in 1998. Instruments in the market include equity securities and debt securities with maturities of more than one year.

(3) The foreign exchange market in Taiwan can be characterised as a two-tier trading system which includes banks' customer foreign trading and interbank foreign transactions. The main participants of the first tier consist of authorised foreign exchange banks and their customers. The Central Bank of China, the authorised foreign exchange banks and the foreign exchange brokerage firms play the leading roles in the interbank foreign transaction market, the second tier of the trading system.

1.3 Financial system evolution

The history of Taiwanese banking is divided into three phases: (1) early development stage (1949- 1988), (2) banking privatisation (1989-2000), (3) the new Taiwanese banking with the initiation of the financial and banking sector reform (post 2001).

1.3.1   Early development stage 1949-1988

When the KMT regime retreated to Taiwan in 1949, it nationalised all the financial institutions that had existed during the Japanese occupation of Taiwan and reconstructed the financial system. In the 1960s, new specialised financial organisations for industrial development were established and limited licenses were issued to foreign banks to set up branch in Taiwan. In respond to the crisis of weakening international legitimacy, the KMT continued to expand the banking sector and allowed more foreign bank branches in the 1970s.

During this period, financial repression policy was adopted by the government to keep control of the financial resources and to retain macroeconomic stability. The authorities frequently intervened in the financial system, either formally or informally. Shea (1994) listed the four interventionist policies adopted by Taiwan's government during this time, which were: (1) government ownership of banks, (2) strict entry regulations, (3) interest rate control, and (4) selective credit rationing policies. The banking sector remained a state-monopoly with limited permits given to the private sector.

The negatives consequences of state-ownership and control of the banking sector had caused heated debates among politicians and the general public. Advocates of financial liberalisation came from domestic indigenous capitalists, neoclassical economists and

technocrats. In the late 1970s, the authorities gradually removed the controls on the financial market in order to enhance and strengthen Taiwan's financial system through competition to meet the trend of global financial liberalisation. However, the substantial financial liberalisation was only achieved from 1988 when the leadership of the KMT transformed to the first Taiwan born leader, Lee, Deng-Hui and assumed presidency.

1.3.2   Banking privitisation[12] 1989-2000

The process of Taiwan's financial market modernisation was undertaken in an orderly and progressive manner from the 1980s. There are four main measures to facilitate the newly developed financial markets: (1) deregulation of interest rates and foreign exchange rates; (2) liberalisation of capital movement; (3) liberalization of the establishment of financial institutions; (4) deregulation of securities market.

1.3.2.1 Deregulation of interest rates and foreign exchange rates

Before 1975, interest rates were wholly determined by the CBC. All banks were either owned or partially owned by the government and had to accept the designated rate. As the banking system became more mature, direct control over the interest rate was no longer necessary. Therefore, since 1980, the CBC has adopted a series of measures to gradually remove the controls over interest rates and liberalisation of interest rates was completed when the Banking Act was revised in July 1989. The upper and lower limits on all kinds of loan and deposit interest rates that had to be approved by the central bank were abolished allowing banks to set their own interest rates. To date, interest rates completely depend on demand and supply but the CBC uses various policy instruments to regulate financial conditions and to achieve monetary policy objectives. For instance, the CBC can change required reserve ratios and as a result change the ability of the banking system to extend credit or loans. Among all monetary policy measures, open market operations[13] are the most important because they allow the CBC to directly influence the amount of reserves and the level of interbank call-loan market interest rates through such operations.

In terms of foreign exchange management, from 1949 through 1978, the exchange rate of the New Taiwan Dollar (NTD) was pegged to the U.S. dollar (USD) and controlled by the

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[12] The main sources for Taiwan's financial liberalisation come from Central Bank of the R.O.C. (2003b, 2004), Shea (1994), and Chang, Wang and Hu (2005).
[13] According to Central Bank of the R.O.C. (2004), open market operations refer to the buying and selling of securities by the central bank for its own account in the open market.

CBC to reduce Taiwan's trade deficit and foreign exchange shortage. In 1979, the foreign exchange system moved from a fixed rate system to a managed flexible rate system, while the Taipei foreign exchange market was also established in this year. Under this new system, banks and their customers were able to trade foreign exchange within a small range which was defined by the weighted average of the exchange rates on transactions among banks on the previous day. This was designed to prevent drastic fluctuations in the foreign exchange market.

During the 1980s, Taiwan's trade surplus increased substantially and foreign exchange was no longer scarce. In April 1989, a new exchange rate system on the basis of free negotiation with bank customers was put in place, as the government was confident enough to release the foreign exchange rate from its control. Under the new system, an authorised foreign exchange bank can, subject to prior consultation with the CBC, determine the level of its own rate and engage in derivatives transactions such as swaps and options. Besides, foreign exchange derived from exports of goods and services can be retained and managed by the private sector. The new system allowed the exchange rate for all transactions to be determined by market forces. The CBC managed the foreign exchange reserves centre based on the philosophy around security, liquidity, and profitability. According to the CBC's financial statistics, Taiwan had foreign exchange reserves of around USD 90 billion in 1993 and these kept increasing to around USD 115 billion by the end of the 1990s.

1.3.2.2 Liberalisation of capital movement

Before 1978, capital movement was strictly controlled by the government with a fixed then a floating exchange rate system. During the 1980s, the trade surplus started to increase and foreign exchange reserves began to accumulate. The government gradually removed capital controls, such as the restrictions on trade-related capital transactions and the inward remittance of foreign exchange. However, both outward and inward direct investments were subject to approval by the government and there was still a strict ceiling for non-traded-related outward remittance by local residents. Until the late 1980s, rapid economic growth caused a huge increase in both the current account surplus and short-term capital inflow. The government took steps towards liberalisation but the capital account has not yet been

fully deregulated in the sense that a person or a company's outward and inward remittances were still restricted by government.[14]

1.3.2.3 Liberalisation of the establishment of financial institutions

Before the 1990s, 77% of banks were owned by the government and took responsibility for helping economic growth. For provincial governments three large commercial banks played significant roles in promoting industrial development, and many local financial institutions assisted farmers and small businesses extensively. Meanwhile, for central government, many banks played key roles in promoting economic development. In 1989, the New Bank Act was enacted due to the need for liberalisation and increasing competition in the financial market. Fifteen new private commercial banks were established in 1991 and this year became the turning point for the shifting of market dominance from government-owned to private banks.

1.3.2.4 Deregulation of securities market

Before 1988, Fun-Hwa Security Finance Company was the only permitted security company with a monopoly status. The deregulation of the securities market started in 1988 when the Securities and Exchange Law was revised to lift restrictions on the establishment of new securities companies. Under the new rule, the licenses were granted to domestic firms that met a basic set of financial and operational requirements (Shea, 1994). At the same time, foreign investors were allowed to set up branches in Taiwan and, subject to Securities and Exchange Commission permission, to invest in local securities. The number of securities companies rose dramatically from twenty in 1988 to 381 at the end of 1990. In the following year, over-the-counter trades were embarked upon. Furthermore, permission to issue equity abroad was granted to domestic companies in 1991. The government also made a great effort to open up the stock market for foreign investors and thus the participation of foreign investors in Taiwanese market was allowed to increase gradually. These measures were designed to slowly integrate Taiwan's financial market into the global financial system. It was also this conservative liberalisation policy and partial deregulation of capital movement that allowed Taiwan's economy to be secure from the speculative attacks of the foreign hedge and mutual funds.

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[14] In 1987, an adult or a company was allowed to remit outward up to USD 50 million annually and the ceiling on inward remittances was USD 50,000 per person per year (Shea, 1994).

The liberalisation of entry into banking sector without carefully planned procedure led to an explosion of new private banks which caused an increase in bad loans and deterioration of banks' asset quality. At the end of 1998, the Asian Financial Crisis[15] begun to influence the economy of Taiwan and aggravated it's already fragile banking system with bank runs spreading across the financial industry. The worsening economy and financial system damaged the public's confidence in the KMT government, which in part contributed to the end of fifty years of the KMT rule. In March 2000, the Democratic Progressive Party (DPP) candidate Chen Shui-bian defeated the KMT candidate in the presidential election. At the centre of Chen's election platform was financial sector reform and the process begun soon after he came into office in May 2000.

1.3.3 Financial reform post 2001

Since November 2000, many important financial laws and regulations were enacted or amended to create a solid regulatory framework to support the reforms. These laws include the six financial regulations: (1) enacting Statute for the Establishment and Administration of the Financial Reconstructing Funds of the Executive Yuan, (2) reversing the Deposit Insurance Act, (3) reversing the Business Tax Law, (4) enacting the Financial Holding Company Act, (5) enacting the Law Governing Bills Finance Business, and (6) reversing the Insurance Act. As these six regulations which were considered to be the most important foundation for the reform became effective in 2001, this year was announced by the government as the first year of Taiwan's financial reform.

The financial sector reform can be divided into two phases. The first phase, between 2001 and 2004, was aimed at maintaining the integrity of the financial market and facilitating the sound development of financial services. The second phase of reform began in July 2004 in which year the DPP narrowly won the second round of the presidential election. The key objective of the second stage reform was to consolidate and promote Taiwan as a regional fund-raising and asset management centre. This thesis focuses on the first phase of the reform between 2001 and 2004. This enables the study to observe how existing institu-

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[15] Until 1997, Asia attracted almost half of the total capital inflow to developing countries. The economies of Southeast Asia in particular maintained high interest rates attractive to foreign investors looking for high rates of return. As a result the region's economies received a large inflow of money and experienced a dramatic run-up in asset prices. The Asian Financial Crisis started in Thailand on 2 July 1997 with the financial collapse of the Baht (currency of Thailand) caused by the decision of the Thai government to float (Hunter et al., 1999).

tional norms affected reform implementations, how they gradually evolved in such a transformation process, and eventually shaped the direction of institutional changes, hence the outcome of the reform.

The first stage reform was designed to tackle the problems of Non-Performing Loans (NPL) in the banking sector and rebuild public confidence in financial system. The objectives were: (1) to establish a financial monitoring system in accordance with international norms and standards; (2) to make the securities market stronger and healthier; and (3) to accelerate the disposal of NPL to enhance Taiwan's financial competitiveness. To achieve the objectives of the reform, several measures were taken: (1) to enhance the quality of the assets, (2) to encourage mergers and acquisitions, (3) to reform financial supervision and to increase financial transparency, and (4) to promote investments in Taiwan.

1.4 Summary

Until 1989, the government adopted financial repression policy for growth promotion and economy stabilisation, which created a comparative advantage for Taiwan. The political democratisation begun in the late 1980s facilitated the financial deregulation for banking privatisation. During the liberalisation process in the 1990s, several external and internal challenges occurred and threatened the stability of Taiwanese banking system but it was the change of the government in 2000 that pushed an extensive reform of the financial sector. McKinnon (1973) and Shaw (1973) suggested that financial repression causes distortion and limitation on the banking system which restrict the efficiency and the size of the financial system. As a result, poor financial development reduces economic growth. With the evidence of the rapid growth in Taiwan during the 1970s and 1980s, the financial repression does not seem to have a harmful effect on its economy as McKinnon and Shaw claimed. However, the characteristics of asymmetric information and imperfect competition inherited from the repressed financial system do seem to have a long term negative impact on Taiwan's financial system especially under the heavy government intervention. Since 1949, the KMT controlled R.O.C government had ruled Taiwan uninterrupted for over fifty years and Taiwan's financial evolution had been highly interconnected with its political evolution (Zhu and Bao, 2000; Sato, 2002; Lim, 2009). This chapter pointed out the historical and political embeddedness of Taiwan's financial development. Hence, this fact is important to understand how the political and institutional inheritances shape its financial reform.

2   Literature review

Evolution of the financial system involves continual institutional changes for reform purposes. However, why is it that some governments can effectively reform policy to foster successful development while others fail to do so? Why have some countries been able to create and sustain institutions which are favourable to financial growth and what institutional qualities support the development rather than hinder it?

Exploring the differences in the degrees of financial development around the world has drawn attention to institutions as primary factors based on New Institutional Economics (NIE). NIE was created to explain the process of economic, political and social changes by understanding human incentives and intentions and the beliefs, norms and rules that they develop in pursuit of their goals (North, 2005). Institutions are considered as consisting of formal, informal institutions, and their enforcement characteristics. North (1990:4, 1991) defines 'formal institutions' as rules that human beings devise and 'informal institutions' as conventions and rules of behaviour.

A growing body of theoretical and empirical work has discovered that institutional qualities offer key explanations for persistent disparities in financial market development across countries. A considerable effort has been made to study the connections between financial development and formal institutional settings such as legal systems, creditors' protection, regulatory settings, information sharing institutions, and property rights institutions (La Porta et al., 1997b,1998; Levine, 1998; Jappelli and Pagano, 1999, 2000; Love, 2003; Wurgler, 2000; Galindo and Micco, 2001, 2004; Acemoglue and Johnson, 2005). The influence of informal institutional on financial development has been focused on social trust as a favourable resource which positively correlate to financial depth, efficiency and stock market development (Guiso et al., 2000; Calderón et al., 2001). Osili and Paulson (2004) found that the informal institutional norms cause resistance to changes when an individual faces different formal institutional frameworks. Although the effects of formal institutions on financial development are highly robust, there has been considerably little attention paid to the impact of informal institutions on financial development.

This thesis states that evolution of financial system involves a series of institutional changes for better development. According to NIE, it is the joint role of formal, informal institu-

tions and their enforcement characteristics that facilitate institutional changes. An efficient institutional change depends not only on sound reform policies, but also requires a set of compatible informal institutions to reduce the enforcement cost for implementing the changes to formal rules. The review of literature suggests that compatible informal institutions are those that have a high level of trust in the institutions, hence encouraging cooperative behaviours to facilitate the reform. Trust is particularly important for financial system because financial contracts themselves are trust intensive. Public confidence in a financial system is damaged when a poorly functioning financial system is evident and perceived as detraction from economic growth. The study argues that institutional performance is a major factor in affecting confidence in financial system. Therefore, trust in the institutions is not only required to facilitate reform policies, but also at the heart of the reform in restoring confidence in the system.

The aim of reviewing the literature relevant to trust, institutions and financial development is to determine which institutional qualities foster trust in the institutions that allow a smooth reform process. The finding is that governance is the decisive factor in building trust in institutions and good governance of financial system is perceived from institutional qualities of property rights protection, corruption prevention, and political stability.

This chapter starts by introducing NIE. Section 2.1 covers the evolution of NIE, the concept of transaction cost, and the characteristics of institutional changes. The focus is on the informal institutional constraints for institutional changes. Section 2.2 is to understand the importance of institutional support and trust for financial development by discussing the nature and fundamental problems of this industry. Empirical studies on formal institutional settings and influences of informal institutional on financial development are presented in section 2.3. Also in this section, governance as a decisive institutional quality for reform outcome is explained followed by studies on governance characteristics and financial development. Section 2.4 reinforces the informal institutional influences on financial reform by emphasising that how institutions are perceived is equally as important as how institutions are designed. The section also explains why property rights protection, corruption prevention and political stability are key institutional qualities for good governance of financial system. Section 2.5 concludes the chapter.

2.1 New Institutional Economics

The idea of NIE is that the main function of institutions is to save transaction costs being the costs incurred during transactions. Coase introduced the concept of transaction cost in 1937 to determine whether a transaction should be carried out in firms or in the market. In 1960, he advanced to make a crucial connection between transaction cost, institutions and neoclassical theory and argues that neo-classicists view markets are efficient regardless of the institutional arrangements and thereby ignore transaction costs. However, it is costly to transact in reality, thus institutions matter because an efficient institutional framework can help to reduce transaction costs. Unlike old institutional economics, NIE does not abandon neoclassical economic theory. What NIE rejects is the neoclassical assumption of perfect information and unbounded rationality and that transaction costs are insignificant and instantaneous. NIE assumes that individuals have incomplete information and limited mental capacity and because of this they face uncertainty about unforeseen events and outcomes, and incur transaction costs to acquire information. In short, NIE considers choices to be embedded in institutions; hence it has a much broader reach than neoclassical economics.

2.1.1 NIE evolution

The term NIE was introduced by Williamson (1975) as a generic term for a diverse group of already existing modern economic studies of institutions. Since then, NIE has grown rapidly over the last three decades. Richter (2005) studied the evolution of NIE and noted that the term has evolved from a generic to a standard one on the basis of the NIE conference issues and collective volumes between 1984 and 1997. He distinguishes two branches of those studies: a perfect rational and an imperfect rational one.[16] The imperfect rational branch includes the transaction cost economics of Oliver Williamson (1985) and the new institutional economic history of Douglass North (1986). Both approaches are rooted in Coase's insights into transaction cost, institutions and neoclassical theory in 1937 and 1960.

Both Williamson's and North's approaches analyse conditions of transaction costs and imperfect rationality. While the former is considered as a partial institutional analysis, the latter is seen as a full institutional analysis. Richter (2005) explains the difference as follows: Williamson's approach analyses "institutional governance" given the institutional environment and social embeddedness level, whereas North analyses the institutional environ-

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[16] Richter (2005) divides modern institutional economics into eight fields: (1) Property rights economics; (2) economic contract theory; (3) evolutionary economics; (4) constitutional choice; (5) collective action theory; (6) public choice theory; (7) transaction cost economics; and (8) new institutional economic history. The former six fields are classified as perfect rational NIE, the last two fields as imperfect rational NIE.

ment and its social embeddedness. Unlike Williamson, North does not assume the institutional framework as given but makes it an object of research and also seeks to consider the implications of any given institutional arrangements for economic behaviour.

To study the broader institutional framework that shapes the functioning of the financial system, this thesis follows North's approach. North states that NIE changes neoclassical economics from a static to a dynamic theory in a sense that institutions are never static, they change in response to new economic opportunities and advances in the division of labour (North, 1981). According to him, NIE evolved as a movement within the social sciences, especially in economics and political science, which unites theoretical and empirical research in examining the role of institutions in furthering or preventing economic growth. Based on NIE perspectives, the performance of a market economy depends upon formal and informal institutions and modes of organisation that facilitate private transactions and cooperative behaviour (Shirley, 2005).

2.1.2 Definitions of transaction costs and institutions

In economics and related areas, a transaction cost is a cost incurred because of inherent imperfections and inefficiencies in the system itself when making an economic exchange (Williamson, 1975). Four factors of economic behaviour and transactions determine the type and magnitude of transaction costs, as identified by Williamson (1975). They are opportunism, bounded rationality, small-number conditions, and uncertainty about market conditions. According to him, opportunism and bounded rationality increase the uncertainty of performance results, hence incurring additional costs. The presence of a small number of players for certain transactions is conceived as a higher level of asset specificity and considered to be more vulnerable to opportunism. Finally, transaction costs might be caused by the unpredictability of uncertain and complex market conditions. In the same article, Williamson introduced the generic term NIE and subsumed under it "aspects of mainline microtheory, economic history, the economics of property rights, comparative systems, labour economics and industrial organisation" (1975: 1).

Williamson (1985) applied the following formula to present transaction costs:
Transaction costs = Ex-ante cost + Ex-post cost + Additional losses

Where ex-ante cost is cost of negotiation, drawing up contracts, managing necessary logistics, ex-post cost stems monitoring transactions across markets, bonding and enforcing transactions, monitoring accounts receivable. Additional losses result from ineffectiveness of the chosen governance mode in allowing adaptation to unexpected contingencies.

A detailed description of institutions is provided by North (1991: 97) and outlines the general sense of how "institutions" should be understood as follows: "Institutions are humanly devised[17] constraints that structure political, economic and social interaction. They consist of both informal constraints (sanctions, taboos, customs, transitions and codes of conduct), and formal rules (constitutions, law, property rights). Throughout history, institutions have been devised by human beings to create order and reduce uncertainty in exchange. Together with the standard constraints of economics they define the choice set and therefore determine transaction and production costs and hence the profitability and feasibility of engaging in economic activity." To put it simply, institutions allow economic forces to operate efficiently and are the patterns of interaction that govern and constraint the relationships of individuals (North, 1993a and 2009). Menard and Shirley (2005:1) offer a general definition of institutions as "the written and unwritten rules, norms and other constraints that humans devise to reduce uncertainty and control their environment".

2.1.3 Institutional changes

In a world of pervasive uncertainty, human beings attempt to reduce uncertainty by learning and induce institutional changes constantly in response to new economic opportunities. If institutions are created by human beings to reduce uncertainty, institutional changes are induced by human beings to improve their competitive position to survive. The broad objective of NIE is therefore to develop a useful theory of institutional changes in order to understand economic progress. North (1990:84) describes how institutions change as follows: "Entrepreneurs of organisations induce institutional change by altering the rules (directly in the case of political organisations or indirectly by economic or social organisations pressuring political organisations), or by altering, deliberately and sometimes accidentally, the kinds and effectiveness of enforcement of rules or the effectiveness of sanctions and other means of informal constraint enforcement".

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[17] "It can be argued that institutions are man-made but not necessarily according to a pre-conceived plan. In particular, informal institutions are often "the result of human action" but not the execution of any human design, as Adam Ferguson (1767) observed some 250 years ago (quoted from Heering, 2005:170). One of the main tensions between formal and informal institutions stems exactly from a misinterpretation of the latter when designing the former.

In another article, North (1995) points out that institutional change is a result of continuous interactions between institutions and organisations[18] in the economic setting of scarcity. According to him, the opportunity set in the economy is defined by the standard constraints of economics and constraints imposed by human beings on human interaction. Such opportunities provided by the institutional matrix form the incentive structure of organisations and determine which organisations exist and which survive. Hence, actors of organisations induce institutional changes as they perceive new or altered opportunities in order to improve their and their organisations' competitive position.

However, it is important to note that the perceptions of maximum payoff that provide incentives to induce institutional changes are derived from the mental constructs of the players to interpret the information they received. How they interpret the information is a result of their cultural heritage, norms and beliefs formed by society. Therefore, it is not enough to understand the basic rules of the game or even customs, norms and habits to understand economic change and how to improve economic performance; it is necessary to understand what people believe and how they arrive at those beliefs (Davis and North, 1971). Evolution of institutions is shaped by what people believe and come to behave, hence it is important to study human behaviours in order to understand institutional changes. North (2009) reminds us that it is inaccurate to say that beliefs are institutions but they form the world and the people around us, hence makes up part of the institutional structure of a society.

Institutional change is driven and shaped by the learning process of humans, which makes it overwhelmingly incremental and path-dependent (North, 1995). It is incremental because radical changes would harm existing organisations and is therefore normally opposed by the organisations. It is path-dependent because the direction of the incremental institutional changes will be broadly consistent with the existing institutional matrix and governed by accumulated learning experiences of the entrepreneurs and members of organisations (North, 1995). Changing a set of informal institutions takes considerably much more time than changing a set of formal rules and regulations because of the path-dependency feature. Depending on the cultural heritage and specific historical experience of an economy, path-

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[18] North (1995) defines organisations as groups of individuals bound together by some common objectives. For example, trade unions and firms can be classified as economic organisations with common objectives of maximising collective welfare or profit. Another example is the political organisation, such as political parties and regulatory agencies that might have common goals targeting their re-election prospects.

dependence produces a wide variety of patterns of development across economies (North, 2005). To sum up, the factors that are predicted to influence institutional change, such as ideology, transaction costs, interest group behaviour and path-dependency have all contributed to the process of institutional changes (North, 1990; Dinar and Saleth, 2004).

2.1.4   Informal constraints on institutional changes

Due to the incremental and path-dependent characteristics, institutional change normally increases transaction costs. Khan (1995) refers to transaction costs as the costs of resistance to institutional change imposed on society by vested socio-economic interests. The resistance to changes can also be understood as informal institutional constraints. "A rule becomes institutionalised when actions taken by agents based on their subjective beliefs and expectations are mutually consistent over a period of time" (Aoki, 2001: 3). The observed reality created by their choices tends to confirm their beliefs, which are then reproduced as a guide for further actions.

For institutional changes to proceed efficiently, a set of compatible informal institutions is required to support third party enforcement and lower the enforcement costs of implementing changes of formal rules. As Raiser (1997:1) states: "Any process of rapid formal institutional changes must be content with the legacy of an inherited set of informal institutions that may or may not be efficient under a changing economic and social environment". Policy change of formal rules will only produce the desired result when the informal norms are complementary to that rule change and enforcement, which is either perfect or at least consistent with the expectation of those altering the rules (North, 2005). Thus, the magnitude of transaction costs in institutional change is determined not only by the soundness of reformed regulations but also the effectiveness brought upon by the cultural norms, which the change of them constitutes a new collective behaviour.

In this thesis, the effective cultural norms are considered as the norms that have trust embedded in the institutions.The interactions between formal and informal institutions contribute to the human learning process. The evolution of learning forms belief systems, affects how institutions are perceived, and forms trust in the institutions. Trust in institutions facilitates transformation process by encourages cooperative behaviours among economic actors. The role of trust is emphasised in an economic interaction model developed by Raiser (1997). He interprets the interaction between formal and informal institutions as an

interface between government and society. He explains the role accorded to this interface is partly a function of government's willingness to engage in policy dialogues and also crucially depends on the level of trust in government institutions. This allows us to infer that actions taken by agents based on their perceptions[19] and beliefs affect how a rule is institutionalised and highlight informal constraints on affecting outcome of institutional changes.

2.2 Financial system from NIE perspectives

A financial system comprises different types of financial markets and financial intermediaries. Financial markets perform the essential economic function of channelling funds from people who have a surplus of available funds, namely savers, to people who have a shortage of available funds, namely lenders (Mishkin and Eakins, 2003). Standing between the savers-lenders are the financial intermediaries such as banks, insurance companies, mutual funds, pension funds, and finance companies, which are institutions that help transfer funds from one to the other (Mishkin and Eakins, 2003).

Under the NIE concept, a financial system can be seen as the complex of institutions, instruments, norms and infrastructures aimed at reducing transaction costs associated with trading promises between agents who do not trust each other fully. In this respect, financial intermediaries act as bridges of trust between agents, and those intermediaries' efficiency can be measured by their ability to reduce the costs involved in bridging trust gaps (Bossone, 1999). For a financial system to function properly, trust in the system is therefore required to lower transaction cost, ensure efficient resource allocation and reduce system vulnerability (Fuchs and The World Bank, 2002).

This sections starts by explaining the role of financial intermediaries in minimising transaction costs. Next, the functions of banking intermediaries - the core of the financial system - are discussed to point out the problem of asymmetric condition in banking, followed by identifying the principal-agent problem caused by asymmetric information. The final section emphasises the importance of the institutional support and trust needed for the financial service industry.

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[19] Key to the choices that individuals make is their perceptions, which are a function of the way the mind interprets the information it receives (North, 1995).

2.2.1 Existence of financial intermediaries

Why do borrowers and lenders have to rely on intermediaries; why can they not come together without intermediaries? The presence of transaction costs in financial markets helps to answer this question. As previously mentioned, transaction costs were introduced by Coase (1937) as a theoretical framework to predict whether certain economic tasks would be performed by firms or by markets. Financial intermediaries play such an important role in the financial system as they have evolved to reduce transaction costs and allow smaller savers and borrowers to benefit from the existence of financial markets. According to Freixas (1997), at least two elements are required to explain the existence of financial intermediaries: (1) there must be some market frictions; (2) an intermediary must have advantages over other agents in dealing with these frictions. Market frictions explain the presence of transaction costs in financial markets. The most needed advantages from an intermediary in dealing with these frictions depend largely on its surrounding institutional environment. Consequently, the main function of financial intermediaries is to minimise transaction costs incurred when individuals or organisations conduct financial transactions. It is therefore helpful to gain an understanding of the cause of transaction costs in financial markets.

Transaction costs are the time and money spent in carrying out financial transactions, which mostly involves gathering information to make decisions. This is due to the information frictions that exist between agents demanding and supplying funds. If there was no friction, there would be no barrier between agents in making transactions and there would be no need to employ an intermediary to conduct the transaction. The cost of gathering information to make an accurate decision on a transaction can be expensive for both lenders and borrowers. Heffernan (1996) suggests four types of information that are involved in financial transactions. Search costs exist whenever two parties of a contract have to search out, obtain information, and meet and negotiate with each other. This cost does not necessary occur or is lower if the transaction is made through a bank. Verification costs also exist before the money is loaned out, and involve checking the validity of the information being provided by the borrower. After the transaction, there are monitoring costs to ensure the activities of the borrower do not endanger the possibility of returning the payment. If either of the contract parties breaches the contract, then enforcement costs are incurred to renegotiate the loan conditions or to recover the capital.

Financial intermediaries have evolved to reduce transaction costs, information costs in this case, and to help small savers and potential borrowers to save on expensive transaction costs. That is to say unless information costs associated with a transaction are lower when dealing with the individual lender or borrower, the individual will seek out a bank for its intermediary function to lower the costs.

2.2.2 Functions of banking intermediaries

At the core of the financial system are the banking intermediaries which provide payment systems, settlements arrangements, capital issuance and liquidity services. The traditional role banks have played in the economy is to act as intermediaries between depositors and borrowers, taking deposits and lending a percentage of these deposits to fee-based financial services. In the modern banking system, there exists a whole range of specialist banks that focus on niche markets and generalist banks that offer a wide range of banking and financial products. However, the differences in their functions do not alter the fundamental definition of banks performing an intermediary role in the economy by accepting deposits and granting loans.

The main functions of banking intermediaries are information production and liquidity services. As Heffernan (1996) suggests, there are two reasons why borrowers and lenders conduct transactions with financial intermediaries. First, the presence of information costs undermines the ability of a potential lender to find the most appropriate borrower, in the absence of a bank's intermediation. Second, borrowers and lenders have different preferences in respect of saving propensities and liquidity service. In the following paragraphs, the ways in which banks are able to perform these functions are explained.

(1) Information production function

The first function is information driven. Banking intermediaries play unique roles in producing the information necessary to lower transaction costs for individuals carrying out financial exchanges and resolving the problems of asymmetric information. However then, how do banks reduce the transaction costs on information production? The answer is threefold: economies of scale, repeated transactions and confidentiality services.

Economies of scale

There are substantial costs of information gathering before the transaction and monitoring

and enforcement of restrictive covenants. Banking intermediaries can substantially reduce transaction costs because they have developed expertise in lowering them and also because their large size allows them to take advantage of economies of scale. With regard to reducing transaction costs, Diamond (1984) proposed a theory of financial intermediation based on minimising the cost of monitoring information which is useful for resolving incentive problems between borrowers and lenders. According to this theory, the fundamental friction in the market is asymmetric information between borrowers and lenders. By delegating monitoring to an intermediary, investors as a group can save on monitoring costs. Therefore, one implication of Diamond's model is that banks are large and highly diversified financial institutions offering relatively safe investment opportunities. In other words, size does matter in the banking industry.

Repeated transactions

Arestis and Stein (2005) suggest that repeated transactions within an intermediary reduce search and information costs. As the cost of initial information gathering can be quite high for a new project, the intermediaries may offer the borrower a loan at a competitive rate given that there are prospects for repeated business in the future. If the project is successful and the borrower does come back to the same intermediary, the information gathering will decrease dramatically as the intermediary needs little update data for the same borrow in this round. This is beneficial to the borrower in terms of costs or the quick turnaround of a second loan. In addition to this, the repeated transactions can also take the form of multiple business transactions that a customer conducts with an intermediary.

Confidentiality services

In addition to the reasons mentioned above, Arestis and Stein (2005) observe that confidentiality services provided by banks also help to reduce transaction costs in producing information. In a competitive market, the success of a project critically depends upon the investors' ability to keep the details of the project secret from competitors. Confidential financing via banking intermediaries rather than doing so publicly through financial markets, such as issuing bonds, enables the entrepreneur to have funding without disclosing inside information and jeopardising the opportunity to capture the full benefits.

(2) Liquidity services function

The other important function of banks is to provide liquidity services due to the differences

in liquidity preference existing in the markets. After a contract has been set up, either borrowers or lenders may change their mind due to unexpected events and banks are able to offer payment, (or more generally, liquidity services) with lower costs to their customers than would be incurred in the absence of a bank intermediation. Banks are able to do so by pooling a large number of borrowers and savers. Heffernan (1996) believes that this helps to explain why banks are singled out for prudential regulation because there is a public good element to the service banks offer because claims on banks function as money and due to their payment services to the public.

2.2.3 Asymmetric information problems

The existence of financial intermediaries alleviates the problems associated with asymmetric information where one party has insufficient knowledge about the other party involved in transactions. Two types of problems associated with asymmetric information are adverse selection and moral hazard. Adverse selection is an asymmetric information problem that occurs before the transaction (Mishkin and Eakins, 2003). This refers to the situation where those who most actively seek out loans are those who know they are potentially unlikely to pay them back. Hence, parties that are the most likely to cause an undesirable outcome are the most likely to engage in the transaction. This increases the risk that a loan might turn out bad and lenders may decide not to make a loan at all even though there are good credit risks in the marketplace. Moral hazard arises after the transaction takes place when borrowers have an incentive to hide information and engage in activities that endanger the chance of them paying back the loan and therefore lenders may decide not to grant the loan (Mishkin and Eakins, 2003).

The low-cost advantage of producing information enables banks to identify firms as good or bad and prevent the problems of adverse selection and moral hazard resulting from asymmetric information. In addition to this, the key to banks succeeding in reducing asymmetric information problems is that they hold mostly non-traded loans, primarily granting private loans and not operating on the open market. The costs of information gathering can be high, thus free-rider problems arise in transactions conducted in open markets. Again, the financial intermediaries, particularly banks, have the ability to avoid these problems as they primarily make private loans. Free-rider problems in trade markets, such as stock and bond markets, indicate the great importance banks have in financing the activities of businesses by moving funds to firms.

Banking is information driven and exists to produce the information necessary to resolve information asymmetries in financial markets. However, this also means that banking intermediation itself in fact enjoys informational advantage creating other problems of asymmetric information, called principal-agent problem which is a particular type of moral hazard. It occurs when managers in control (the agents) act in their own interest rather than in the interest of the owners (principals) due to differing sets of incentives (Mishkin and Eakins, 2003). In the banking business, the principal-agent problem arises when the principal (shareholders and clients of a bank) delegates some authority to the agent (here, the bank) to act on their behalf. But the bank has more information about its own characteristics than the shareholders and clients and may lack the incentive to act in customers' best interests.

Since information production and liquidity services are their two main functions, the information transparency and the banks' asset management become main issues for a public to decide whether to trust a bank with their financial matters. The faith in its intermediary function and belief in the system is also based on the regulatory framework in which banks operate and the authorities which monitor banking operations on behalf of the customers. So there is the question of who monitors the bank, resolves the incentive problem and creates faith, belief and trust in the banking system? The answer lies in a supportive institutional environment, the aim of which is to establish a trustworthy system and enable financial intermediaries to perform their functions.

2.2.4   Trust in financial system

The trust issue is particularly important in the financial service industry since the service is about delivering promises to their customers for a good return, safety, liquidity and financial expertise. In a financial contract the lender transfers money to the borrower in the present expecting that the borrower will return it in the future with profit. This involves a great degree of trust and suggests that financial contracts themselves are trust intensive (Guiso, 2000). Trust is significant in making financial decisions because financial products are 'credence goods' par excellence; their quality can usually be assessed only a long time after they have been purchased (Spencer, 2000). This is why trust has a fundamental and ubiquitous role in financial exchange, a role that cannot be substituted fully by other control mechanisms (Andaleeb, 1992). Trust is therefore the underlying principle that makes financial markets function because before an individual is willing to risk their money in a

financial transaction, they need reasonable assurance that they will receive what they paid for (Bogle, 2009). For a financial system to function fully, participants (intermediaries and customers and providers of finance) must have sufficient trust in the system.

Based on the types of relationships among parties in an economic transaction, there are three forms of trust (Raiser, 1999). The first kind is 'ascribed trust' which is formed by the relationship among kinship groups and family members. The second type of relationship is between individuals who have known each other for a long time without sharing the loyalty through a specific group. Transactions in this case are repeated and trust is 'process-based'. Finally, 'extended trust' which is needed for economic exchanges to take place between largely anonymous individuals who enter into a transaction with only limited information about the counterpart's specific attributes. Where the former two types of trust are considered as 'particularised trust', the third type of trust is 'generalised trust' which is believed to be the key element of a modern economic system. Trust in institutions is believed to be a main source of generalised trust (Rothstein and Stolle, 2001). According to them, the degree of perceived fairness and impartiality of institutions responsible for the implementation of public policies serve as an important foundation for the building and maintenance of high levels of institutional trust which in turn spills over to influence generalised trust in society. Lu̇histe (2006) explains further that institutional trust depends on how much an individual trust other people generally, as well as on how well they believe the economic and the political system functions.

Trust in financial systems involves a number of features that illustrate the multi-level nature of trust. Citizens' trust in the financial system requires trust in individual staff as well as in financial organisations (particularised trust) and the underlying institutions of law and law enforcement (institutional trust). As Popper (1945) reminds us, construction of institutions involves important personal decisions and even the best institutions will always depend to a considerable extent on the person's involvement. These different levels of trust should support each other but institutional trust in the institutions is thought to be the main resource for creating trust in a financial system. Shapiro (1987) describes institution-based trust as the belief that a party has about the security of a situation because of guarantees, safety nets, and other structures. Gefen et al. (2003) defined institutional trust based on Shapiro (1987) as a sense of safety caused by impersonal structures. Institution-based trust

suggests that an organisation believes that impersonal structures are in place to support successful transactions (Pavlou, 2002).

2.3 Institutional quality and financial development

Previous discussions outlined the theoretical arguments. Firstly, performance of a market economy depends upon formal and informal institutions and modes of organisation that facilitate private transactions and cooperative behaviour (Shirley, 2005). Secondly, the trust issue is of particular importance in the financial service industry, and trust in the financial system stems from trust in the institutional environment in which it operates. This section covers empirical studies into institutional influence on financial development and identifies a gap in the existing research that this study attempts to address. Section 2.3.1 and 2.3.2 summarise the existing empirical research which deals with formal and informal institutional influence on financial development. While these studies provide evidence that institutional quality offers explanation for why financial market developments vary across countries, exactly which institutional characteristics promote financial development and why remain unsettled. Section 2.3.3 identifies governance as the decisive institutional quality for financial development.

2.3.1   Formal institutional influence

Over the past decade, researchers have conducted empirical research on financial development and institutional arrangements claiming that an adequate institutional set-up has a direct effect on the financial structure and hence performance. A synopsis of related studies is provided in Table 2-1.

La Porta et al. (1997b) studied a sample of about fifty countries by constructing indices which summarised several aspects related to creditors' protection and share holders' rights. They found that these indices are important to explain the credit market breath and stock market size. Their study also confirms a strong correlation between the role of law enforcement and the development of the financial sector. To further investigate the legal system and financial development, empirical findings by La Porta et al. (1998) suggest that in countries where the legal systems enforce private property rights, support private contractual arrangements, and protect the legal rights of investors, savers are more willing to finance firms and financial markets flourish. Levine (1998) has expressed a similar view by

confirming the causality between institutional variables such as law enforcement, legal origin,[20] and creditor rights and financial development.

Year	Authors	Institutional factors *and* Financial development	Findings
1997b and 1998	La Porta, Lopez de Silanes, Shleifer and Vishny	Creditor protection and share holders' rights *and* Size of stock markets	Credit or protection and shareholders' rights are important determinants of credit market breadth and stock market sizes.
1998	Levine	Regulatory settings *and* Depth of financial markets	Causalities established between law enforcement, legal origin and creditor rights institutional settings and financial development.
1999 and 2000	Jappelli and Pagano	Information-sharing institutions *and* Size of credit markets	Breadth of credit markets is directly related to information-sharing institutions.
1998 and 1999	Barth, Caprio and Levine	Regulatory restrictions *and* Financial structure	(1) The higher regulatory restrictions, the more fragile the financial system. (2) The higher participation of the public sector in the banking system, the weaker and more fragile systems.
2000	Love	Efficiency of the legal system *and* Financial constraints	Financial constraints are tighter where legal systems are faulty.
2000	Wurgler	Creditor rights *and* Credit allocation	The higher the creditor and shareholder rights, the more efficient credit allocation.
2001	Galindo and Micco	(1) Information-sharing institutions *and* Financial constraints (2) Credit right *and* Credit cycle	Stricter creditor rights regulations increase the breadth of the credit market and reduce the volatility of the credit cycle.
2005	Acemoglu and Johnson	Property rights institutions *and* Size of credit markets	The better property rights protection, the greater investment rate, hence the better developed credit markets.

Table 2-1 Institutional settings and financial developments

Source: Author's collection

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[20] According to La Porta et al. (1998), the legal systems can be classified into four families: English, French, German and Scandinavian.

To study the correlation between information sharing institutions and credit markets, Japelli and Pagano (1999) conducted a survey and systematically documented private and public information sharing arrangements in thirty-six countries. The finding is that consumer credit markets are broader in countries where credit bureaus operate, particularly if they have been operating for a long time. In 2000, Japelli and Pagano provided further explanations of why information sharing institutions, especially in relation to borrowers' characteristics, have important effects on credit market activities. Their arguments are that better information sharing institutions improve banks' knowledge of applications, and therefore (1) permit a more accurate prediction of their repayment probabilities, (2) reduce the informational rents that banks could extract from their customer, (3) operate as a device for disciplining borrowers, and (4) eliminate borrowers' incentives to become overly indebted.

Other studies have focused specifically on creditor rights and depth of credit markets. Wurgler (2000) analysed the role of institutions for the efficiency of credit allocation and found that countries with better creditors' and shareholders' rights protection tend to have more efficient credit allocation than those where regulation is weak. Galindo and Micco (2001) developed a model in which the asymmetry of responses of credit markets to shocks is linked to the institutional set-up using a panel of over fifty countries with data between 1990 and 1999. Their findings suggest that information-sharing institutions contribute to reducing financial constraints at the firm level and creditors' rights play an important role in explaining credit cycles. Acemoglu and Johnson (2005) used a multiple instrumental variables strategy and found strong support for the importance of property rights institutions in economic outcome, greater investment rates, more credit to the private sector relative to GDP and more developed stock markets.

Some analysts have attempted to draw evidences on the negative impact of high regulatory restrictions on financial development. Barth et al. (1998, 1999) gathered information on regulations that restrict the participation of financial institutions in securities real state or insurance market and found that higher regulatory restrictions create more fragile financial systems that are easily be hit by a financial crisis. Further, their study suggests that countries with higher participation by the public sector in the banking systems have weaker systems and are also more fragile. A study by Love (2000) investigated the impacts of legal origin of regulations, efficiency of the legal systems, risk of expropriation and corruption

on the degree to which firms are financially constrained. He found that tight financial constraints restrict efficient firm investment and reduce the level of financial development.

2.3.2 Informal institutional influence

Studies of the effects of informal institutional factors on financial development focus on trust as beneficial social capital for economic activities. For instance, Fukuyama (1995) argues that the level of trust inherent in a national culture can differentiate the economic development of a country by lowering transaction costs, which in turn can promote market efficiency and thus can lead to a more prosperous economy. Econometric tests of Fukuyama's idea have been provided by Knack and Keefer (1997), La Porta et al. (1997b) and others. In general, they use subjective indicators of trust for a sample of twenty-nine market economies and show that trust has a significant impact on aggregate economic activity. In particular, the study by Knack and Keefer (1997) indicates that the relationship between trust and growth is particularly strong in poor countries, which may be caused by their less developed institutional systems. Due to the lack of institutions for property rights security and reliability contract enforcements, parties involved rely on trust in people to fulfil the contract.

Direct links between trust and several indicators of financial development were established by Guiso et a1. (2000). In particular, they found that trust seems to matter the most when the level of education is low and law enforcement is weak, which is precisely the situation in many developing countries. Using a comprehensive dataset from the World Bank Group (WBG) covering fifteen years, Calderón et al. (2001) found that trust is correlated with financial depth, efficiency and stock market development. They have drawn attention to the point that trust is the main complement of formal institutions. That is, when a society has little respect for formal institutions, the development of informal institutions to help uphold the rule of law appears to become particularly crucial in a society. A study of informal institutional constraints on financial development was carried out by Osili and Paulson (2004) who studied the financial decision making between immigrants and the native-born in the United States when they face the same formal institutional framework in the United States. Their findings suggest that immigrants' financial behaviours are influenced by varied experiences with institutions in their home countries which determine their resistance level in participating in the U.S. financial market.

2.3.3 Decisive institutional quality: Governance

Studies accounted for different measures of specific institutional arrangements surrounding financial markets and have found evidence of the impacts of formal institutional settings on financial development. In terms of informal institutional influence, trust is confirmed as a valuable social capital in the facilitation of financial development. However, which institutional quality has decisive influence on trust and hence on financial development?

Answering this question, good governance is often identified as the key which promotes economic development (Kaufmann et al., 1999; Easterly and Levine 2002). Olson (1996) recognised that good governance is the decisive factor of institutions and policy mechanisms as background variables for productivity and productivity growth. Governance is believed to be the fundamental institutional quality which enhances economic development by creating trust in the institutions, hence encouraging cooperative behaviours. Granovetter (1997) categorised studies that support the positive impact of trust on economic development into two groups. The first category build on the notion that trust can lower transaction cost and the second category emphasises government performance and the quality of policy. The latter highlights the role of governing systems in creating trust in the institutions and promotes cooperative behaviours. An economic transactions diagram created by Raiser (1999) to explain the interactions between formal and informal institutions draws attention to the role of trust in government institutions for an efficient institutional setting. Furthermore, the influence of governance is explained by its role in reducing transaction costs of enforcing new policies in institutional changes. The size of transaction costs is determined by the form of governance which impacts on the enforcement of a system of laws and regulations that formally structure social interactions and economic exchanges (Raiser, 1997). When governance is weak, the transaction costs of enforcing new rules are high. By encouraging cooperative behaviour and establishing faith in government institutions, trust promotes economic development by facilitating institutional changes (Linders and Groot, 2005).

It should be noted that although government plays an important role in providing good governance, governance and government are not regarded as synonymous. Formal institutions are typically imposed by rulers, parliaments and bureaucracies and the outcome of their actions is governance. According to the United Nations Economic and Social Commission for Asia and the Pacific (2009), governance can be defined as the process of deci-

sion-making and the process by which decisions are implemented or not implemented. Kaufmann, Kraay and Mastruzzi (1999) further defined governance as the traditions and institutions by which authority within a country is exercised. According to them, it includes the process of governments being selected, monitored and replaced; the capacity of the government to effectively formulate and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them.

Governance institutions are needed to support financial activities and the financial system can not function well in their absence. Researchers who have studied governance characteristics and financial development have pointed to the relation between the governance system and the fragility of financial markets. Rajan and Zingales (1998a) found that financial markets governed by relationship-based systems can function as a powerful substitute for contracts when contracts are poorly enforced and capital scarce. However, they do face higher risks of inefficiency and corruption. After conducting empirical research on ninety economies, Francis (2003) discovered that governance can act as means of reducing financial fragility and that the likelihood of a banking crisis and financial volatility are strongly linked to the institutions, rules, and laws that govern the financial environment.

2.4 Governance and financial reform

Reform[21], actions to improve a system, an organisation or a law, must involve making changes to institutions. It is relatively straightforward to change formal institutions by altering the written rules that govern financial systems, but changing informal institutional constraints that manifest themselves in culture and norms of behaviour is much more challenging. Changes made to formal rules cannot deliver the deserved results until the rule is institutionalised. Policy makers therefore are confronted by the problem that policy changes can only alter the formal rules but not the accompanying norms.

Ongoing discussions highlight governance's role in creating trust in institutions and encouraging cooperative behaviour. This way, good governance lowers the enforcement cost for implementing the changes to formal rules and institutionalising new rules. Institutions can be a source of trust between actors, particularly governance institutions; they create

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[21] Reform as a noun in the Oxford Encyclopedic English Dictionary (1991) defines as (1) the removal of faults or abuses, and (2) an improvement made or suggested.

trust and trust in return shapes institutions. How well the governance institutions perform will also influence how institutions are perceived by actors and how they come to trust it. Governance that determines the way economic agents interact and how they react to reform policies offers key explanations for the varied experiences of financial reform across countries. Good governance is therefore considered to be the main institutional quality required for reform measures to meet their desired purposes. This section identifies the most influential institutions governing economic activities and affecting how governance quality is perceived in financial systems.

In terms of economic governance, it is argued that property rights institutions which frame the incentives for the use of resources are regarded as pre-requisites. The better property rights are defined and protected, the better a society realises its economic potential. Shirley (2005) states that the institutional framework that supports a market economy includes two distinct and not necessarily complementary sets of institutions: (1) those that foster exchange by lowering transaction costs and encouraging trust, and (2) those that influence the state and other powerful actors to protect private property and persons rather than expropriate and subjugate them. Teraji (2008) believes that property rights are important to make an economic system work and are a motivating force that determines economic productivity. Dixit (2009) has expressed a similar view stating that economic governance is the structure and functioning of legal and social institutions that support economic activities and economic transactions by protecting property rights, enforcing contracts, and allowing collective actions to provide physical and organisational infrastructures. Discussions on economic governance point towards property rights protection as the first quality to look at with regard to good governance of financial systems. The second institutional quality to consider is corruption prevention which is believed to be a fundamental problem of governance and a violation of property rights. The final institutional characteristic to review is the perception of political stability since no governance institution is able to perform its functions in an unstable political environment. Throughout this study, these three institutional qualities are the focus of attention in an investigation which looks at governance impacts on financial development and reform.

2.4.1   Property rights protection

The foregoing discussions of governance point out the importance of property rights institutions for economic activities. Property rights are the rights to use a good or assets, to earn

income from, and to transfer or exchange assets and resources (Libecap, 1989; Heering and Pfirrmann, 2002). Property rights institutions determine incentives for the use of resources and serve as a means of reducing uncertainty by establishing a stable structure for human interactions. The more exclusive property rights are to individuals and groups, the greater the incentives to maintain the value of the assets. When economic resources are insecure, people typically have to pay transaction costs to enforce their claims on such resources. Hence, one of the important roles of property rights is influencing efficient resource allocation (Claessens and Laeven, 2003).

As reviewed earlier in Section 2.3.1, the positive impact of property rights protection on financial development has been established in many studies (La Porta et al., 1998; Japelli and Pagano, 1999, 2000; Wurgler, 2000; Galindo and Micco, 2001; Acemoglu and Johnson, 2005). These studies confirm that countries where the legal systems provide better property rights protection have more efficient credit allocation, and better developed credit and stock markets. In fact, La Porta et al. and Acemoglu et al. state clearly that property rights institutions have a first-order impact on financial development. Tressel et al. (2008) share similar views, arguing that better property protection leads to better banking reform, hence leading to financial development. Furthermore, more exclusive property rights increase the incentives to improve the value of the assets by investment (Alston and Mueller, 2005). Country level studies show that less secure property rights are correlated with lower aggregate investment and slower economic growth (Knack et al., 1995; Mauro, 1995; Svensson, 1998; Acemoglu et al., 2005, 2008).

A property right also typically conveys the right to contract with other parties by renting, pledging, or mortgaging a good or asset, or by allowing other parties to use it (Barzel, 1997; Alchian and Demsetz, 1972). Property rights in the financial service industry can be understood as lenders' or borrowers' rights to contract financial intermediaries by entrusting them to invest their assets or provide them with capital access. An institutional system which enforces private property rights, supports private contractual arrangements, and protects the legal rights of investors and savers provides a well-defined loan policy to ensure that credit allocation is efficient and that potentially all agents in the economy can access financial sector loans provided they qualify regarding their refunding capacity.

Another interpretation of property rights is that they protect assets against actions by the government. This interpretation sees property rights as a judicial function of the state and enforcement of property rights is a police function of the state (Menard and Shirley, 2005). Acemoglu and Johnson (2005) state specifically: "property rights institutions are the institutions which protect citizens against expropriation by the government and powerful elites". In this way, it determines the interaction between individuals and the government including the political elites who control the government.

The perception of property rights institutions governing financial systems can be observed in two areas. First, banks' loan policies which determine a financial system's credit allocation. A well-defined loan policy prescribes an organisation's risk tolerance and provides the parameters for managing those risks. As a result, it helps to enable banks to maintain sound asset quality and channel credits to the agents with the highest potential. Second, how well citizens are protected against expropriation of the financial system by government and powerful elites.

2.4.2   Corruption prevention

The structure of a financial system creates long chains of agency relationships which makes the principal-agent problem the main one to be solved in the financial industry. In addition to the previously mentioned incentive problems which arise when the principal (shareholders and clients of a bank) cannot observe and/or have imperfect information about the agent's (the bank) action. The principal-agent problem also arises for regulators and politicians because regulators and politicians are ultimately agents for voter-taxpayers (principals). The problem occurs because the agent (a politician or regulator) does not have the same incentive as the principal (the tax payer) to minimise costs to the economy (Mishkin and Eakins, 2003). The principal-agent problem leads to opportunism, fraud and corruption.

Corruption normally refers to political corruption which is defined as an illegal (or barely legal) behaviour by political elites to manipulate the affairs of state for private gain (Uslaner, 2004). The citizens' consciousness of political corruption affects confidence in government institutions which can be either harmful or beneficial to their support of the regime and the regime's legitimacy. Corruption is an important quality to consider when studying how governance of a financial system is perceived for two reasons. One, corruption is

perceived to exist when the most important institutions governing financial system (that is property rights), are seen to be violated. Opper (2004) explains corruption from a property rights perspective, saying: "the clarity, structure and protection of property rights are central determinants for efficiency in all types of interpersonal transactions, whereas incomplete or ill-defined property rights give rise to diverse forms of illicit economic behaviour such as looting, rent-seeking activities and corruption". When property rights institutions do not constrain elites, these elites are more likely to violate the property rights of individual producers and expropriate their income or assets (Acemoglu and Johnson, 2005). The second reason is that corruption is considered a fundamental problem of governance. Hellman et al. (2000: 4) claim that "corruption is a symptom of fundamental institutional weaknesses. It thrives where states are too weak to control their own bureaucrats, to protect property and contract rights, and to provide the institutions that underpin an effective rule of law".

Scholarly articles on corruption can be broadly classified into two categories: those which suggest corruption is an obstacle to development and those which suggest corruption fosters development. For example, Mauro (1995) observes that corruption lowers investment, thereby lowering economic growth. Aidt (2009) takes a critical look at these positions and finds evidence that corruption has little average effect on the growth of GDP per capita and is likely to hamper long term development. On the other hand, Ebben and Vaal (2009) explain why corruption can in some cases foster development. Their work looks at corruption as part of the institutional setting of a country and found that corruption may be conducive to growth in situations where institutions are not well developed. In this particular case, the positive effects of corruption on the working of the institutional systems outweigh the negative direct effects of corruption on growth. That is to say that only under the circumstance of an under-developed institutional environment is there the possibility that corruption can facilitate development. Generally speaking, corruption is considered to have negative impacts on development, which is the view adopted in this study.

2.4.3 Political stability

Political stability is another important institutional quality which contributes to good governance because a country's capacity and willingness to build and maintain institutions for successful financial development depend largely on its relative political stability. Kaufmann et al. (2003) described the perception of political instability as the perceived likeli-

hood that the government in power will be destabilised or overthrown by possibly unconstitutional violent means. Efforts of well-planned policies can fail because the unstable political environment may undo whatever benefits better policies are designed to provide. Evidence of political instability acting as a strong impediment for economic development has been fundamentally established (Alesina and Perotti, 1993, 1996; Rodrik, 1999).

Francis (2003) studied the causality between political stability and financial development and claims that political stability reinforces the existing set of property rights whereas instability erodes them. He explains that when government stability is high, there is certainty which brings with it a dimension of security of property rights. Conversely, when stability is low, the security of property is reduced because the probability of a change in government is raised. Accordingly, political stability alleviates agency problems and reduces the likelihood of fragility in the financial system. Roe and Siegel (2009) have drawn attention to the fact that political instability may have critical connections with financial backwardness. Their empirical findings confirm that variations in political stability have a significant, consistent, and substantial impact on debt and stock market development.

Political instability quite plausibly impedes a nation from building institutions or undermines such institutions' effectiveness even if built. Only in a stable political environment is a designed institutional framework for conducting reforms able to perform its function and achieve its desired results.

2.5 Summary

A special focus on informal institutional influence on reform concludes confidence in financial systems stems from governance which has decisive influence on trust in institutions and hereby determine reform outcome. Three key points drawn from the literature review are followings. Firstly, cultural norms which have trust embedded in institutions support changes on formal institutions. The study looks at the impacts of informal institutions on enforcing policy reform and points out that trust in institutions is key to efficient institutional change. This is because trust is credited with reducing the cost of enforcing agreement and making credible commitments across time and space and determining the degree of success of the reform action. Hence, for institutional change to achieve its desired results, it relies on the soundness of reformed regulations as well as the effectiveness of cultural norms. Furthermore, incremental and path-dependent characteristics of institu-

tional changes shape reform outcome. Individuals and organisations adapt to the changes through learning, and this then forms a new belief system, which is the way humans perceive how the system works and how it should work. That is to say, a reform rule only becomes institutionalised when actions taken by agents based on their subjective beliefs and expectations are mutually consistent over a certain period and the changing of which constitutes a new collective behaviour. Therefore, when studying a country's financial reform achievements, it is necessary to understand what people believe, and hence the way they behave, and how they arrive at those beliefs and behaviours. Simply understanding the current rules or norms and habits is not enough to understand the transformation process and how to improve it. For reform to succeed, it is important to know how institutions have evolved to where they are now and how formal and informal institutions interact to shape reform outcome. Finally, the study identifies governance as a key institutional factor which affects trust levels in institutions and decides the cost of enforcing regulations by encouraging or discouraging cooperative behaviours. The review of literature suggests that property rights protection, corruption prevention and political stability are the key institutional qualities deciding perception of governance in financial system.

The analytical framework set out in this chapter is used to study Taiwan's financial reform. Instead of studying objective institutional settings regarding these, the research studies how these three institutional qualities have been perceived and how they affect financial development. The focus is on how perceptions of governance qualities have evolved to where they are now and how they shape the response of political and economic actors to reform policies in the financial sector. Understanding the influence of informal institutional constraints on the reform process helps us to predict the impact of formal institutional changes and making appropriate policy recommendations. This study offers a step in this direction.

3   Approach and methodology of the study

Evolution of the financial system involves continual institutional changes to reform the system for a better one. However, institutional changes do not always proceed smoothly to achieve their desired results and foster successful development. The aim of this thesis is to discover the factors that facilitate or hamper a government's capabilities in enforcing reform policies. The research is designed to answer the main question *how do informal institutional constraints shape financial reform?* Based on New Institutional Economics (NIE), this study claims that institutions contribute to diverse reform experiences and emphasises the influences of informal institutional norms on enforcing reformed policies. A supportive informal institutional norm fosters trust in the institutions which comes from good governance. Good governance encourages cooperative behaviours, reduces enforcement costs, and hence ensures a smooth reform process. The finding of the study is that property rights protection, corruption prevention and political stability are the institutional qualities which can affect the perception of governance and hence of the financial system.

This chapter provides details of the study's methodology, data sources, and an explanation of the chosen data and the data analysis techniques. The chapter also covers a review of the methodologies applied in similar studies. It starts with an introduction to the structure of the thesis which consists of three components: theoretical framework, quantitative research and qualitative research. This includes a detailed description of research process and procedures. Section 3.2 describes how the data were obtained and the methods chosen for quantitative and qualitative research are explained. Section 3.3 provides justifications of the research design by explaining the choices of data sources and the mixed strategies of quantitative and qualitative research. It explains how these two methods complement each other and how both are essential to answer different types of questions. This section also contains reviews of empirical studies in the same field.

3.1 The structure of the thesis
This thesis consists of three parts:

(1) Theoretical framework which is primarily concerned with 'theory building' that forms a foundation for the analysis of the project. The core argument is that financial reform performance is constrained by information institutional norms. Three main points drawn from

the conceptual theoretical framework are; that compatible informal norms with trust in the institutions support reformed policies; that path-dependent characteristic of institutional change is highlighted to understand how reform experience is shaped; and most importantly, trust in the institutions springs from governance which is determined by qualities of property rights protection, corruption prevention and political stability.

(2) Quantitative research examines the influence of institutional factors on trust in the banking system at a cross-country level. The aim is to establish the relationship between institutional qualities indicators and the financial trust indicator. It is also to confirm governance as being main determinants of deciding level of trust in the financial system.

(3) Qualitative research which applies the analytical framework set out in the theoretical part and draws on empirical evidence from quantitative research to form the grounds for an empirical investigation into Taiwan's banking development and recent reform from an institutional perspective. The development is divided into three periods: 1949-1988 post-war institutional development for the banking sector, 1989 - 2000 banking privatisation, and the 2001-2004 recent reform. The historical evolution offers insights into the way the banking sector has been formed and its inherited institutional culture which helps to understand how governance qualities shaped its reform experience.

Figure 3.1 illustrates the structure of this thesis and the following sections elaborate upon the three main parts of the study.

Institutional Quality

Deciding factor: Governance

Build or damage trust in the financial system

Reducing enforcement cost by encouraging or discouraging cooperative behaviours

Smooth or hinder financial reform process

Chapter 2
Theoretical framework

Achieve or underachieve financial development

Chapter 4 Identify key factors determining institutional quality

Bribery and Corruption

Risk of Political Instability

Personal Security and Private Property

Governance

Quantitative analysis:
Cross-sectional studies

Chapter 5: Historical path of institutional development: Post war: 1949-1988

Chapter 6: Banking privatisations: 1989-2000

Aim: To discover how governance institutions evolved and how they shaped financial development

Chapter 7: Institutional barriers and financial reform: 2001-2004

Aim: To examine impacts of institutional persistence governance on reform measures

Quantitative analysis:
Country case study:Taiwan's financial reform

Figure 3-1 Thesis structure [22]

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[22] Three chapters which do not appear in the figure are also present: Chapter 1 (Financial system in Taiwan), Chapter 3 (Methodology) and Chapter 8 (Conclusion).

3.1.1 Theoretical framework

The theoretical framework of this thesis is based on NIE. The concept of NIE is that economic agents use resources and play games on the basis of decision rights which are defined, allocated and reallocated by various types of devices, in particular contracts, organisations and institutions (North, 1991). For any market economy that is promoting economic growth, it is important to consider the environment of the industry and its surrounding social and political contexts (Haggard and Kaufman, 1992) in order to appreciate the role of institutions for long term economic growth.

The core argument of this study is that informal institutions constrain institutional behaviours and affect how actors interact with reform policies. The conceptual theoretical framework has three main points. First, informal institutional influence is as important as formal institutional rules because a formal institutional reform is only achievable with a supportive set of informal institutions. Institutions change constantly in response to new economic opportunities hence evolution of the financial system involves continual institutional change for reform purposes. The key element of supportive informal institutions is trust which encourages cooperative behaviours to facilitate the reform process.

Second, the path-dependent characteristics of institutional changes affect interactions among agents and shape reform experience. It is relatively straightforward to change formal institutions by altering the written rules of society, but changing the informal institutional constraints that manifest themselves in culture and norms of behaviour is much more challenging due to its path-dependent nature. The interactions between formal and informal institutions contribute to the human learning process which has evolved over time. This in turn forms our belief system, affects how institutions are perceived, and determines levels of trust in institutions. Therefore, it is necessary to study how people perceive institutions and how they arrive at those perceptions and whether they are amended along with the reforming process.

Third, institutional qualities of property rights protection, corruption prevention and political stability determine governance which fosters trust in institutions. When searching for the decisive importance of good institutions for successful performance of an economic system, governance is often indentified as the main concept (Olson, 1996). Governance impacts on the enforcement of a system of laws and regulations that formally structure so-

cial interaction and economic exchange (Raiser, 1997). When governance is weak, the cost on enforcing the new rules is high and vice versa. In the view of NIE, governance structure should be developed to reduce uncertainties and transaction costs by specifying property rights and enforcing contracts (North, 1990). The review of the literature suggests that property rights protection is found to be the primary quality of good governance. The second quality is corruption prevention. Corruption is a fundamental problem of governance which can be reflected as a perception that property rights have been violated. The third quality is political stability because a stable political environment is a key element which is required for any institution to perform properly.

3.1.2 Quantitative research

The literature suggests institutional influences on financial development and addresses the crucial role trust plays in a functioning financial system. The study claims that institutional performance is evaluated by objective mechanisms/formal institutions as well as subjective perceptions/informal institutions. While many studies confirm the relationship between institutional settings and financial development, only a few have been conducted to establish the link between subjective views on institutional quality and financial development. One objective of the present quantitative research is to establish institutional quality's influential role on financial development by ascertaining its correlation with the level of trust in the financial system. Another objective is to validate that governance is the key institutional factor which alters the level of trust in the financial system.

The data collected are used to study two propositions formed according to the above objectives. To study *Proposition 1* - Residents' trust in banks is affected by their *perceptions of the institutional environment* in which banks operate - the data are used in a discriminate analysis to identify the key discriminators in classifying countries' residents' trust in their banking systems. The objective is to examine the correlation between trust in the banking system and institutional quality and to identify key institutional qualities which alter the level of trust in the financial system. To study *Proposition 2* - Resident's trust in banks is more strongly related to *subjective perception of institutional quality* than to *objective measures of banking development.* The data are used in cross-sectional studies to see if there is a relationship between banking development indicators and the banking trust indicator. This is done to compare the impacts of institutional indicators and financial indicators on trust in the financial system.

3.1.3 Qualitative research

While the statistical study is able to discover the pattern between institutional qualities and trust in the financial system, it cannot explain how institutional quality affects financial development. The purpose of the qualitative component of the study is to demonstrate how governance as the key element of institutional quality impacts on financial development by altering the trust in the system. Over the past five decades, Taiwan has achieved rapid economic growth and has successfully transformed from an agricultural society to a technology-oriented industrialised society. Correspondingly, its financial system went through a transformation in the process of economic development and the government's efforts have focused on implementing a process of financial liberalisation since the end of the 1980s. In the 1990s, Taiwan's financial system was transformed from a controlled to a liberalised system and from state-dominated to private banking. However, at the same time, it faced a banking crisis. The examination of Taiwan's banking development from an institutional perspective serves the purpose of understanding the impact of institutional persistence in its development. In particular, the focus is on the explanatory power of governance quality for Taiwan's slow pace of banking reform. The qualitative research includes three chapters to understand Taiwan's historical banking development, to investigate the causes of its banking crisis in the late 1990s, and to study the influence of governance quality on reform achievements.

3.2 The research method

This section covers the data collection and research techniques applied in this study. There are two broad categories of data: primary and secondary. The former is collected through the methods of surveys, meetings, focus group discussions, interviews that involve direct contact with the respondents. By contrast, the latter is existing data that have been collected by other researchers, governments or organisations. This thesis employs mainly secondary data for quantitative and qualitative research; it compiles and assesses the data and documents relevant to the subject of this study.

3.2.1 Data collection

There are three sets of databases used in the quantitative part of the study: (1) institutional variables, (2) a trust indicator for the financial system, and (3) financial development indicators. Based on data availability, fifty countries were chosen as the sample for this empirical part of the investigation. First, the source for institutional variables is the World Com-

petitiveness Yearbook 2005 produced by the Institute for Management Development (IMD) which provides survey results for fifty-five countries. Second, a trust indicator for the financial system is taken from the survey results of the 'soundness of banks' section of the WEF's Global Competitiveness Report 2005-2006. The survey question asked: "do you think banks in your country are one = insolvent and may require a government bailout, seven = generally healthy with sound balance sheets". The survey was carried out in 117 countries where about 10,000 senior executives were asked to give scores between one and seven. The final set of data - financial development indicators - includes *return on assets* and *return on equity,* commonly used for measuring banking profitability, and three indicators of intermediation efficiency, *net interest margin*, *overhead cost* and *cost-income ratio*. To measure the market structure of the banking system a *concentration ratio* is used. Finally, the bank *Z-score* is used as an indicator of banking stability. The indicators were taken from the World Bank Group based on a study conducted by Beck, Demirguc-Kunt, and Levine (1999). The study introduces a new database of indicators of financial development and structure for 137 countries and for all years since 1990. All seven indicators are constructed from raw bank level data from the BankScope database as unweighted averages across all banks of a country for a given year.

Data collected for the qualitative study on Taiwan's financial development are mainly documentary materials which include primary and secondary material including newspaper articles, journal articles, books, reports, working papers and official government documents. In addition to this, exploratory interviews were conducted with some of Taiwan's high-level banking managers in March 2005. However, the interviews were not conclusive due to the sensitivity of the subject and were only used as illustration to support other observations. The statistical information regarding financial institutions in Taiwan comes from the Ministry of Finance and from the dataset of the IMD World Competitiveness Yearbook. These two sources provide background information about Taiwan and details related to its financial industry. In addition to this, the Worldwide Governance Indicators dataset constructed by the World Bank Group provides the information for examining the impact of governance quality on Taiwan's financial reform.

3.2.2   Analytical approaches

The quantitative part of research used cross-sectional statistical analysis. Statistical technique of discriminate analysis is applied to analyse *Proposition 1:* Residents' trust in banks

is affected by their *perceptions of the institutional environment* in which banks operate. Discriminate analysis is a statistical technique used to test whether the group membership is associated with statistically significant mean differences of a combination of predicators. In this study, it was applied to a set of institutional factors to identify those that have significance for categorising countries based on the level of trust in their banking system. The purpose was to see if institutional factors can be used as discriminators to separate countries with different levels of trust in the banking sector. The results from discriminate analysis also reveal which institutional factors are superior discriminators. The model for discriminate analysis is as below:

$$Y_{fc} = a + W_1 X_{1fc} + W_2 X_{2fc} + W_3 X_{3fc} + \ldots\ldots W_{36} X_{36fc}$$

Where, $Y_{fc} =$ the *trust-in-banks* score of discriminate function f for country c

a = the intercept

W_i = the discriminate weight for independent institutional variable i for country c

X_i = institutional variable i for country c

To study *Proposition 2* - Resident's trust in banks is more strongly related to *subjective perception of institutional quality* than to *objective measures of banking development.* The analytical procedure involves three steps with two statistical techniques: scatter diagrams and regression analysis. In Steps I and II, scatter diagrams were used to explore the pattern between the trust indicators and financial indicators. After that, regression analysis was applied to examine the relationship between the trust indicator and financial variables. To quote Kazmier and Pohl (1984), "regression analysis is the procedure by which an algebraic equation is formulated to estimate the value of a continuous random variable, given the value of another quantitative variable". This method sets up a simple linear relation between them, which fits a straight line through the set of observed data. If the line is upward sloping it means that the independent variable has a positive effect on the dependent variable. If the line is downward sloping there is a negative effect. The steeper the slope, the stronger the effect the independent variable has on the dependent variable. In Step III, two regression models were constructed to compare the correlations between the banking trust indicator and institutional indicators (subjective views) with financial development indicators (hard data). The objective is to examine empirically which set of indicators has the greater influence on the level of trust in banking systems. The models are written as fol-

lows:

$$(Y)' = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + \ldots$$

Where, $(Y)'$ = regression estimate value of *trust- in- banks*

α_0 = constant

$\alpha_{1\ to}\alpha_i$ = coefficient of the chosen institutional (Model 1) / financial variables (Model 2)

$X_{1\ to}X_i$ = the value of the chosen institutional (Model 1)/ financial variables (Model 2)

The qualitative research is a case study of institutional reform in financial service industry within the national context of one country - Taiwan. A case study is more than simply conducting research on a single individual or situation. This approach has the potential to deal with simple as well as complex situations. Baxter and Jack (2008) write that qualitative case study is an approach to research that facilitates exploration of a phenomenon within its context using a variety of data sources. According to them, this ensures that "the issue is not explored through one single lens, but rather a variety of lenses which allows for multiple facets of the phenomenon to be revealed and understood" (2008: 544). In our case, the in-depth knowledge of Taiwan allows the relevant details of a narrative to be constructed at a certain time and space into a standardised form so that it can be meaningfully compared with other studies. The case study of Taiwan's financial development enables us to answer 'how' and 'why' institutions differentiate financial development across countries.

3.3 Justification of research design

The previous section listed the main data sources for the quantitative analysis and named the World Competitiveness Yearbook of the IMD as the key data source. The next section explains why the IMD database is an appropriate choice for this study and also the reasons why combining quantitative and qualitative approaches is suitable. In addition, the methodologies used in similar studies in the area will be reviewed.

3.3.1   Data source

Secondary data is used in this study because the subject of this thesis is on national institutional context. The primary research data might have been proven ineffective to be collected by individual researcher within this course of research. Secondary data offers benefits of employing high quality data in analysis because (1) sampling procedures are often rigorous, (2) great depth and breath of data available, and (3) data collection process is informed by

expertise and professionalism that may not available to smaller research projects (Bryman, 2004).

The main data source for the quantitative component of this thesis is the World Competitiveness Yearbook 2005 published by the IMD. The survey results were utilised to establish that trust in banks relies greatly on perceptions of their surrounding institutions. The thirty-six institutional indicators selected from the IMD database are to capture the perceptions of the institutional environment in which a financial industry operates. Adopting North's definition of institutions as humanly devised constraints that structure political and social interaction (North, 1991), two indicator groups were chosen to represent the political and social interaction in an institutional environment. Besides, a third indicator group - infrastructure and resource - was included to reflect North's claim that infrastructure and technology influence the institutional framework by determining the costs and benefits of compliance with a set of formal and informal rules (North, 1981). Based on North's definition of institutions, indicators were selected to represent the perceptions of institutional quality as regard to: (1) political interactions, (2) social interactions, and (3) infrastructure and technology (see Appendix 1).

Although there are alternative datasets of institutional variables available from the World Values Survey, the WEF and the World Bank 'Doing Business' surveys, this study uses the World Competitiveness Yearbook of the IMD as the main data source for the following reasons. The data coverage of World Values Survey across countries and time is very limited. Therefore, it is not helpful in gauging country performance over time when identifying the effects of institutional factors. As for the WEF, their indicators are very similar to IMD. The Competitiveness Report from WEF published annually covers 131 countries using 126 criteria. However, their data are only available in printed editions[23] and to obtain a sufficient database for this study would have been more expensive, without significantly improving the quality of the research. Finally, the World Bank 'Doing Business' survey is a dataset provided by a project at the World Bank with several partners, including several universities and other institutes. This data set is very similar in scope to the IMD's but only portrays opinions and observations of private companies. Hence, it is less appropriate for industrial-level research like this study which needs to include views from private and public companies.

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[23] Data of The Competitiveness Report from WEF is now available to view online from year 2005 onwards which does not cover our analysis period.

3.3.2 Mixed research strategy

This thesis combines quantitative and qualitative research strategies. Where quantitative research tends to bring out a static picture of social life, qualitative research is more processual which provides a sense of the process (Bryman, 2008). This is known as a mixed method research in which a researcher combines quantitative and qualitative research techniques, methods, approaches, concepts, or languages into one analysis (Johnson and Onwuegbuzie, 2004). In this study, a preliminarily quantitative analysis was undertaken to prepare the ground for in-depth qualitative research. Quantification is performed to examine the correlations between institutional indicators and the trust indicator. It is valuable in uncovering regularities and it is often the identification of such regularities that allows a processual analysis which views social life in terms of process (Bryman, 2008). However, correlation as such does not reveal the direction of causation.

A narrative case study explains why and how a particular institutional quality influences the public's trust in a financial system. According to Yin (2003), a case study design should be considered when: (a) the focus of the study is to answer 'how' and 'why' questions, (b) you cannot manipulate the behaviour of those involved in the study; (c) you want to cover contextual conditions because you believe they are relevant to the phenomenon under study, or (d) the boundaries are not clear between the phenomenon and context. This study seeks to discover the interactions between organisational actors and how they shape institutional change. A case study was chosen because the subject is the decision making of financial organisations and their actors when undergoing a financial reform. The case needs to consider the historical background of the financial industry and, more specifically, the way the banking sector was formed. It was in this setting that decision making skills were developed and utilised. It would be impossible to understand why government administration and banks react and interact to reform policies in certain ways without considering the context within which these activities occur. As Aoki (2001: 3) observes: "institutional arrangements can be diverse across economies even if they are exposed to the same technological knowledge and are linked through the same markets. Thus, we need to rely on comparative and historical information to understand why particular institutional arrangements have evolved in one economy but not in others". This mixed methods research used qualitative data to illustrate and enhance quantitative findings. Building upon quantitative findings, documentary analysis of the qualitative research seeks to understand the patterns found in the quantitative results. This mixed methods design offers strengths from both re-

search strategies and complements the results from empirical statistical research with in-depth case study.

3.3.3 Methodology reviews of similar studies

For both the quantitative analysis and the case study, the country is the unit of analysis in this research. There are two major reasons for this choice. First, the research is designed to answer the question *how do informal institutional constraints shape financial reform?* The task of this research question is to discover explanations for the variation in financial reform achievements across the world. The country is an appropriate unit of analysis because development of a financial system depends greatly on institutions that operate at national level such as the rule of law. Second, a large body of institutional research on finance has used countries as the unit of analysis, for example the classic study by La Porta, Lopez de Silanes, Shleifer and Vishny (1997), *Legal determinants of external finance* and their following studies. Several studies have used single or multiple country analysis to investigate variations in financial development including, Levine (1998), Japelli and Pagano (1999 and 2000), Barth, Caprio and Levine (2000), Love (2000), Wugler (2000), Galindo and Micco (2001, 2004), Acemoglu and Johnson (2005), and Roe and Siegel (2008).

In terms of research approaches, studies on financial development and institutional arrangement can be broadly divided into three groups. First, studies that applied a qualitative approach by forming an analytical framework based on literature to demonstrate the impact of institutions on financial development, for example, Raiser's (1997) works on addressing the role of informal institutions in financial development, and Meagher's (2000) case study about financial sector governance in Hungary's market transition.

Another group of studies focused on statistical evidence; that is, a quantitative approach to empirically establish the relationship between financial indicators and institutional factors. Among them, the most applied statistical method is regression analysis wherein an indicator of financial development is the dependent variable and several institutions' variables are used as independent variables in order to determine the causality between financial development and the chosen institutional factors. For instance, La Porta et al.'s studies (1997b, 1998) constructed indices summarising several aspects related to credit protection, share holders' rights and law enforcement to explore their impact on credit market breadth and stock market size. Using the same statistical technique, Levine (1998) and Barth et al.

73

(1998, 2000) confirmed the link between legal determinants, regulatory systems, ownership environment indicators and banking development. Wurgler's (2000) study used a simple specification for the efficiency of capital allocation which he regresses against financial system data. The finding is that developed financial markets, as measured by the size of the domestic stock and credit markets relative to GDP, are associated with a better allocation of capital. To extend the findings of regression analysis, Love (2001) used structural equation models of investment to utilise firm-level data and took advantage of cross-country variations to establish the link between legal system and financial constraints. In an attempt to unbundle the broad cluster of institutions' influence on economic performance, Acemoglu et al. (2005) established a simple reduced-form model to highlight how differences in contracting and property rights institutions affect financial and economic outcomes.

Finally, several authors have conducted analyses using both quantitative and qualitative research. This approach can be found in Jappelli and Pagano (1999, 2000) who investigated the relationship between information sharing institutions and the size of the credit market. Their study is mainly a systematic document analysis with support from regression analysis based on questionnaires. Guiso et al. (2001) showed for the case of Italy that societal capital is a main determinant of financial development and, based on the work of Knack and Keefer (1997), also reported cross-country regressions showing that the ratio of stock market capitalisation to GDP is significantly determined by trust.

The present study employs the third approach - mixed method research - which is appropriate for this investigation because it better fits the research questions addressed. The quantitative research statistically simplifies the relation between institutional factors and the trust indicator for the financial system. It uses discriminate analysis to indentify the key institutional factors encouraging trust in the financial system and follows the tradition of using regression analysis to study the degree of influence of institutional quality on perceptions of financial soundness. Qualitative research, on the other hand, takes into account the path-dependent development of the financial system; hence it enables a contextualised understanding of institutional characteristics. In this way, the in-depth case study complements the results from the empirical statistical research.

4   Quantitative research: Institutional qualities and trust in banks

This chapter reports the findings of a quantitative analysis which form the basis for an empirical investigation into Taiwan's financial development and reform experience undertaken in later chapters. The analysis is dedicated to the overarching research question posed in this thesis: *how do informal institutional constraints shape financial reform?* The conceptual theoretical framework formed in Chapter 2 is that (1) the key element of supportive informal institutions for an effective reform is trust in institutions, (2) reform experience is shaped by path-dependent characteristics of institutional change, and (3) institutional qualities of property rights protection, corruption prevention and political stability, determine governance which fosters trust in institutions. In addition, the crucial role trust plays in a functioning financial system is emphasised. The study claims that trust in financial systems depends on perceptions of its institutional environments. The objective is to establish institutional quality's influential role on financial reform performance by ascertaining its correlation with the level of trust in the financial system. Another objective is to validate that governance is the key institutional factor which alters the level of trust in the financial system. The last objective is to compare the influence of institutional qualities on levels of trust in banks with information from banks' balance sheets. Financial ratios of banks are commonly used to examine banks' performance and considered as indicators for measuring banking soundness.

Trust has been established in many studies as a beneficial social capital for financial development. For example, Calderón (2001) found a link between trust and financial depth and efficiency as well as stock market development. Guiso's (2000) study revealed that a measure of trust was positively linked to several financial development indicators such as ratio of stock market capitalisation to GDP and the number of listed companies per million of population. While generalised trust facilitates financial transactions for better financial development, do development indicators in return encourage trust in the financial system and as a result positively influence reform outcome? To achieve these objectives, two propositions are formed:

Proposition 1: Residents' trust in banks is affected by their *perceptions of the institutional environment* in which banks operate.

Proposition 2: Resident's trust in banks is more strongly related to *subjective perception of institutional quality* than to *objective measures of banking development.*

To study *Proposition 1*, a stepwise discriminant analysis (DISCRIM analysis hereafter) is applied to a cross-sectional dataset. The basic concept underlying DISCRIM analysis is to determine whether groups differ with regard to the mean of a variable, and then to use that variable to predict group membership. In our case, there are four groups of nations with different levels of trust in their banks and a set of indicators of institutional quality have been selected as predictor variables. If the means of any institutional quality indicator for the four groups are different, we can say that this particular institutional quality allows us to discriminate between nations with different levels of trust in their banks. We find that the three indicators which best separate nations' levels of trust in banks are *bribery and corruption*, *risk of political instabilities* and *personal security and private property.*

To study *Proposition 2,* the analysis involves three steps with two statistical techniques: scatter diagrams and regression analysis. In Step I, the scatter diagram is used to explore the pattern between trust indicators and banking development indicators. Step II applies regression analysis to examine the relationship between the trust indicator and development indicators. In Step III, two regression models are established to compare the correlation between the trust indicator and development indicators with the correlation between the trust indicator and institutional indicators. The findings confirm that the latter have much stronger relationships with the level of trust in banks than the former.

4.1 Part 1 - Trust in banks: Institutional influence

In the first part of the quantitative research, DISCRIM analysis is applied to analyse *Proposition 1:* Residents' trust in banks is affected by their *perceptions of the institutional environment* in which banks operate. A sample of fifty countries was selected and divided into four groups according to their levels of trust in banks. On the other hand, thirty-six institutional indicators are chosen to represent the quality of the institutional environment for banks in the selected countries. The aim of this analysis is to see if institutional qualities can be used as indicators to discriminate between countries based on the levels of trust in their banks. If the answer is yes, the next question is, which institutional qualities contribute most?

There are three approaches designed to predict group membership, the dependent variables, from a set of independent variables: discriminant analysis, logit analysis and logistic regression (Tabachnick and Fidell, 2007). Logit analysis is used when independent variables are all discrete while logistic regression is used when independent variables are a mix of continuous and discrete and/or are poorly distributed. Discriminant analysis is used when all independent variables are continuous. In this study, independent variables, institutional qualities, come from an opinion survey where respondents were asked to score relevant characteristics between one and ten. The scores are continuous. Therefore, DISCRIM analysis is appropriate.

The purpose of DISCRIM analysis is primarily to predict membership in two or more groups. Mathematically, DISCRIM analysis calculates whether group membership is associated with statistically significant mean differences on a combination of predictors and whether predictors can be combined to reliably predict group membership. According to Kinnear and Gray (2008), there are three types of DISCRIM analyses - standard (direct), sequential, and statistical (stepwise). The former two methods are used when higher priorities are assigned to some predictors. When there is no reason for assigning some predictors higher priority, the stepwise procedure is used. As the predictors in this study were chosen to present the overall institutional environment with the aim of finding the decisive factors, there is no a priori reason to assign certain predictors higher priority. For this reason, stepwise DISCRIM analysis is applied. The analytical procedure for studying *Proposition 1* is as follows.

First, the stepwise DISCRIM is applied to fifty countries separated into four groups based on the levels of trust in their banking systems to see if institutional indicators act as valuable discriminators between the four groups of nations. During the statistical procedure of stepwise DISCRIM, the most correlated predictor variable is selected first then the next highest correlated predictor variables are selected in descending order. This way, stepwise DISCRIM helps to identify the importance of institutional variables based on their influence on trust in banks. Another important output of DISCRIM analysis are the discrimination functions, also known as classification functions. The functions identify the dimensions along which groups differ, hence can be applied to predict group membership. Next, boxplots are designed to see the distribution ranges of the key institutional variables found in DISCRIM analysis for the four groups. This technique is particularly useful to understand

how the values are distributed for each group and if there are sufficient differences between the groups to support statistical significance (Hair et al., 1998). Boxplotes are used as a graphical device to understand the extent and character of differences between the four groups according to the key institutional variables found in DISCRIM analysis.

4.1.1 Statistical technique and data collection

The statistical procedure for stepwise DISCRIM analysis is a process of adding or removing variables from the analysis at each step according to their value of Wilks' Lambda (Λ) which is the ratio of the within-groups variance to the total variance[24]. Lambda varies from zero to one, with zero meaning group means differ, and one meaning all group means are the same. In other words, it is the proportion of the total variance in the discriminant score that is *not* explained by differences among groups (George and Mallery, 2005). Hence, the smaller the lambda value, the larger the difference in group means. The larger the difference in group means, the better the predictor as a discriminator to separate groups. A value of Λ is associated with an *F*-value and *p*-value that indicates the level of statistical significance in the discrimination between groups.

The selection rule of stepwise DISCRIM analysis is based on minimising the Wilks' Lambda after each new variable has been entered into the regression equation (George and Mallery, 2005). The order of entering variables into the analysis depends on its value of Λ based on a designated criterion of *F*-value for inclusion. In this study, the statistical criteria was set up as 3.00 for minimum partial *F*-value to enter and 2.71 as maximum partial *F*-value to remove. This means that any variable with an *F*-value greater than 3.00 will enter the equation and any variable that reduced the *F*-value to below 2.71 when included will be removed from the equation. The procedure enters variables into the discriminant equation according to their Λ value one at a time until all variables that qualify for entry have been included into the equation. The smaller the value of Λ (the largest *F*-value), the earlier the variable enters the analysis, and the better the variable performs as group discriminator. Discriminant functions, another output of DISCRIM analysis, are linear combinations of the predictors which separate group centroids. These functions serve as projections of the data on to the dimensions that best separate or discriminate between groups.

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[24] Wilks' Lambda is calculated as the ratio of the within-groups sum of squares to the total sum of squares.

In DISCRIM analysis, there are grouping variables which determine group membership and predictor variables which predict group memberships. In our case, the grouping variable is a trust-in-banks indicator whilst predictor variables are institutional qualities. The data source for the grouping variable is the World Economic Forum's (WEF) Global Competitiveness Report 2005-2006 that covers 117 countries. Predictor variables come from the World Competitiveness Yearbook 2005 produced by the Institute for Management Development (IMD) that provides survey results for fifty-five countries. Subject to data availability, a sample of fifty countries was selected for the analysis.

The grouping variable is based on a survey result of 'soundness of banks' asking the question: "Do you think banks in your country are one = insolvent and may require a government bailout, seven = generally healthy with sound balance sheets". The survey was carried out in 117 countries where around 10,000 senior executives were asked to assign scores between one and seven. The country's means of those scores can be interpreted as indicating the levels of trust the respondents have in banks based on two assumptions. From a lenders' point of view, soundness of banks serves as an indication of the potential level of risk involved with entrusting banks with their deposits and investments. From a borrowers' point of view, whether banks can provide the capital and means of settlements promised to support their business or personal expense depends on how sound banks operate. As discussed in Chapter 2, one of the banks' main functions is to meet lenders' and borrowers' different preferences in respect of saving propensities and liquidity services, both of which require the bank to be sound. Based on the scores, a ranking of 'soundness of banks' was made. The higher the ranking, the healthier the respondent perceived the country's banking system to be. According to their rankings, the chosen fifty countries were divided into four groups. Group 1 is the highest ranking group with nations ranked between 1st and 25th. Groups 2 and 3 have nations ranked between 26th and 50th, 51st and 75th respectively. The last group with the worst ranking includes nations ranked between 76th and 117th (Table 4-1).

In terms of the predictor variables, thirty-six variables were taken from the World Competitiveness Yearbook 2005. It contains a comprehensive annual report on the competitiveness of nations where a panel of 4,000 executives from fifty-five countries were asked to score relevant questions between one and ten according to their experience in their own countries. The variables represent perception about the institutional environment in which banks op-

erate. The selection is made according to North's (1991) definition that institutions are humanly devised constraints that structure political and social interaction. First, a group of twelve variables were chosen to represent perceptions of institutional qualities reflecting political interaction. A second group of ten variables were chosen to reflect social interaction. According to North, infrastructure and technology determine the cost of implementing institutions; thus, a final group of fourteen variables were chosen to represent the institutional qualities regarding available infrastructure and resources (see Appendix 1 for list of variables).

Group number	Soundness of banks' ranking	Number of members	Member countries
1	1st and 25th	22	Austria, Australia, Belgium, Canada, Chile, Denmark, Finland, France, Hong Kong, Iceland, New Zealand, Ireland, Luxembourg, Netherlands, Norway, Singapore, Spain, South Africa, Switzerland Sweden, United Kingdom, USA
2	26th and 50th	10	Brazil, Colombia, Estonia, Germany, Greece, Israel, Jordan, Malaysia, Portugal, Slovak Republic
3	51st and 75th	11	Czech Republic, Hungary, India, Italy, Korea, Mexico, Poland, Romania, Slovenia, Taiwan, Thailand
4	76th and 117th	7	China, Indonesia, Japan, Philippines, Russia, Turkey, Venezuela

Table 4-1 List of selected countries and their group membership[25]

4.1.2 Discriminant variables

A stepwise DISCRIM analysis was undertaken using thirty-six institutional variables as predictors of membership in the four groups. To start, a descriptive statistics was produced. Of the original fifty cases, none is excluded from the analysis showing no missing or out-of-range group code (See Appendix 2: Analysis case processing summary). Next, a one-

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[25] The counter-intuitive case of Germany demonstrates that the answer to the survey depends greatly on the subjective definition of 'bank soundness' and that, in turn depends on expectation. In this table, Germany is ranked 39th whilst Switzerland is ranked 1st. However, when taking bank Z-score (a measure for bankruptcy) from Beck et al., (2008) to statistically compare these two countries' banks soundness, Germany scores 4.34, only slightly worse than Switzerland's 4.59. Germany's low score for perceived bank soundness could be explained by the difference between expectation and perception. A high expectation can translate into a low perception of the soundness of a banking system if its actual performance is worse than expected That is to say; perception is a relative concept that is formed by the difference between expectation and performance rather than by performance as such.

way analysis of variance - also known as ANOVA analysis - was conducted to see if the institutional variables each on its own suggests a reflection of group difference in terms of the level of trust in banks. The analytical procedure was based on a comparison of two estimates of variance. One estimate comes from difference among scores within each group, the 'within-group' variability. The second estimate comes from difference in group means, the 'between-groups' variability. The estimates of variance were compared via *F*-test which indicates whether ratio of between-groups variance to the within-group variance[26] is significantly greater than one. If the variance between the groups is greater than the variance within the group, the *F*-ratio is greater than one. The greater the *F*- ratio is, the larger the difference between the groups. The associated *p*-value statistically tests significance of the *F*-ratio[27]. According to the results (see Appendix 2: Tests of Equality of Group Means), all these differences are significant with *p*-values < 0.05, except the following variables which have *p*-values > 0.05 and indicate their weak discriminant validity for trust in banks.

1 Skilled labour

2 Attitudes toward globalisation

3 Flexibility and adaptability

4 Need for economic and social reforms

5 Values of society

6 Communications technology

After that, a process of entering and removing variables from a regression equation was performed aiming to minimise Wilks' Lambda and discover the strongest discriminant indicators. The order of entering variables into the analysis depends on the value of Λ based on the designated criterion: *F*-value level > 3.00 for inclusion and *F*-value < 2.71 for removal. Table 4-2 shows which variables were entered (or removed) along with the value of Λ and the associated probability levels.

As can be seen from the table, *bribery and corruption* has the smallest variable Wilks' lambda (0.308) and largest *F*-value (34.388). It was entered at step 1 as the most important indictor to separate the groups. At steps 2 and 3, *risk of political instabilities* and *personal security and private property* with Wilks' Lambda of 0.254 and 0.204 respectively were

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[26] Between groups variance is calculated as the ratio of between-groups sum of squares divided by its degrees of freedom. Within groups variance is calculated as the within-group sum of squares divided by its degrees of freedom.

[27] *P*-value reveals whether there is a statistically significant difference between the means of the four grouping variables' means for each predictor variable.

entered. The final variable that qualified for inclusion (*F*-value > 3.00) was *foreign highly-skilled people* with Wilks' Lambda of 0.161.

Variables Entered [a,b,c,d]

| Step | Entered | Wilks' Lambda | | | | | | | |
| | | Statistic | df1 | df2 | df3 | Exact F | | | |
						Statistic	df1	df2	Sig.
1	Bribery and corruption	.308	1	3	46.000	34.388	3	46.000	.000
2	Risk of political instability	.254	2	3	46.000	14.787	6	90.000	.000
3	Personal security and private property	.204	3	3	46.000	11.004	9	107.235	.000
4	Foreign highly-skilled people	.161	4	3	46.000	9.433	12	114.059	.000

At each step, the variable that minimizes the overall Wilks' Lambda is entered.

   a. Maximum number of steps is 72.

   b. Minimum partial F to enter is 3.00.

   c. Maximum partial F to remove is 2.71.

   d. F level, tolerance, or VIN insufficient for further computation.

Table 4-2 Variables entered

Note that, at each step, the variable that minimised the overall Wilks' Lambda was entered. A change in lambda's value when a variable was left in or taken out was recorded. The significance of the change in Λ when a variable was entered was obtained from the *F*-test. In our case, variables entered to minimise the Λ in the first four steps are significance with *p*-value = 0.000 < 0.05. Following the order of entrance, the most important variables in predicting group membership are discovered to be:

1st: *Bribery and corruption*

2nd: *Risk of political instabilities*

3rd: *Personal security and private property*

4[th:] *Foreign highly-skilled people*

Next, Table 4-3 displays the correlations between the four selected variables and their contributions to the regression. The column labelled 'Tolerance' is a redundancy detection which examines the level of contribution of a variable by measuring the linear dependency between one variable and the others. The higher the level of linear dependency between this variable and the others, the smaller the contribution this variable has to the analysis. The tolerance level of a variable is defined as one minus the square of the multiple correla-

tion coefficients between this variable and all other independent variables already entered in the equation (Kinnear and Gary, 2008). Hence, the smaller the tolerance of a variable, the more redundant this variable's contribution is to the regression.

Variables in the Analysis

Step		Tolerance	F to Remove	Wilks' Lambda
1	Bribery and corruption	1.000	34.388	
2	Bribery and corruption	.674	7.542	.381
	Risk of political instability	.674	3.242	.308
3	Bribery and corruption	.448	11.782	.367
	Risk of political instability	.481	5.140	.275
	Personal security and private property	.322	3.608	.254
4	Bribery and corruption	.417	13.366	.312
	Risk of political instability	.471	4.390	.211
	Personal security and private property	.307	4.374	.211
	Foreign highly-skilled people	.869	3.739	.204

Table 4-3 Variables in the analysis

Since *bribery and corruption* was the only predictor entered at Step 1, it provides the absolute contribution to the analysis (tolerance = 1). Although it has remained relatively important in steps 2, 3, and 4, the level of contribution has gradually decreased at each step. All variables entered in the first four steps have accepted tolerance levels (> 0.001)[28]. Among the four variables, *personal security and private property* appears to have higher linear dependence (tolerance = 0.322) with other variables which might indicate its lower contribution to the analysis. On the other hand, *foreign high-skilled people* shows little relation (tolerance = 0.869) to other variables. The 'F to remove' in this table is used to test the significance of the decease in discrimination should that predictor be removed. The statistical criterion set up for a variable to be removed is $F < 2.71$, and none of the variables entered in the equations was removed. The 'F to remove' value changes as each new variable was allowed to enter. The table 'variables not in the analysis' (see Appendix 3) is complementary data to Table 4-4; it shows the process of entering and removing variables. The 'variables not in the analysis' shows that there were no more variables that could be entered after the fourth round.

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[28] The accepted tolerance level is > 0.01 because if the tolerance of any of the variables in the regression equation is equal to zero or very close to zero, then the variable will not be entered into the equation.

4.1.3 Discriminant functions

Previous analysis identifies *bribery and corruption*, *risk of political instabilities, personal security and private property* and *foreign highly-skilled people* as the four main predictor variables. The discriminant function interprets the pattern of differences among these selected predictors as a whole in order to understand the dimensions along which groups differed. The purpose is to reduce the original dataset to a linear combination of discriminating predictor variables and to examine how well the linear equation predicts group membership. To determine the optimal combination of variables which provides the greatest overall discrimination between groups, canonical analysis is used.

From the four variables selected and the data held within them, SPSS distilled three discriminant functions. First, the strength-of-relationship statistics and significance were calculated. Table 4-4 shows the percentage of the variance accounted for by each discriminant function and how many of them (if any) are significant (see the 'Sig' column in Table 4-5).

Eigenvalues

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	3.950[a]	94.1	94.1	.893
2	.236[a]	5.6	99.7	.437
3	.013[a]	.3	100.0	.111

a. First 3 canonical discriminant functions were used in the analysis.

Table 4-4 Summary of Canonical analysis

Wilks' Lambda

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1 through 3	.161	82.072	12	.000
2 through 3	.799	10.102	6	.120
3	.988	.563	2	.755

Table 4-5 Wilks' Lambda

The eigenvalue, also called the *characteristic root* of each discriminant function, measures the amount of the variation explained by each function (Garson, 2008). It gives the variance of a linear function of the variables and indicates the relative discriminating power of the discriminant functions. The first column in Table 4-4 displays the eigenvalue for each function. In the second column these eigenvalues are converted into the percentage of variance accounted for. The table shows that Function 1 accounts for 94.1% of the between-

groups variance compared to the second and third functions, which account for only 5.6% and 0.3%. The first discriminant function has the largest and most important explanatory power, the second has the next most important and so on, accumulating to 100% for all functions. Canonical correlation in the last column was squared to obtain the effect sizes for the discriminant functions. It measures the association between the groups formed by the dependent and the given discriminant function. When canonical correlation is zero, there is no relation between the groups and the function. The larger the canonical correlation, the higher the correlation between the functions and the groups. Therefore, the effect sizes for functions 1, 2 and 3 are $(.893)^2 = .797$, $(0.437)^2 = .191$ and $(0.111)^2 = .012$, respectively. The variability and effect size indicate that Function 1 is much more valuable in determining group differences than the other two. Table 4-5 displays the significance test result for the three discriminant functions. In our case, the overall Wilk's Lambda, $\Lambda = 0.16$, X^2 (12, N=50) = 82.01, p-value < 0.01. This test is significant at the .05 level and indicates that there are differences among groups across the four predictor variables in the population. In the second and third row, the results report $\Lambda = 0.80$, X^2 (6, N = 50) = 10.11, p-value > 0.01 and $\Lambda = 0.99$, X^2 (2, N = 50) = 0.56, p-value > 0.01 respectively. Both tests are insignificant at the .05 level and indicate that overall Wilks' Lambda becomes insignificant after removing function 1. Hence, only the first discriminant function is used.

Next, the results display how those discriminant functions can be expressed in linear combinations of discriminating (independent) variables, such that L = b1x1 + b2x2 + ... + bnxn + c, where the b's are discriminant coefficients, the x's are discriminating variables, and c is a constant (Table 4-6).

Canonical Discriminant Function Coefficients

	Function		
	1	2	3
Bribery and corruption	.777	.468	-.290
Personal security and private property	-.571	-.041	.904
Risk of political instability	.380	-.835	-.351
Foreign highly-skilled people	.335	.464	.096
(Constant)	-4.456	1.426	-2.653

Unstandardized coefficients

Table 4-6 Canonical discriminant function coefficients

Earlier the Wilks' Lambda tests suggested that among the three discriminant functions produced from stepwise DISCRIM analysis only function 1 is significant. Bearing in mind

that only the first function is important, the only linear combination of predictors which separates groups can be written, where (*Trust-in-banks*)' is the predicted value of the actual *trust-in-banks*:

(*Trust-in-banks*)' = -4.456 + *bribery and corruption* x (0.777) + *personal security and private property* x (-0.571) + *risk of political instability* x (0.380) + *foreign highly-skilled people* x (0.335)

The coefficients of the equation indicate the relative importance of each predictor variable and what is their relationship with the dependent variable. It is clear from the size of the values for these betas that *bribery and corruption* and *personal security and private property* make a larger contribution to function 1 than *risk of political instability* and *foreign high-skilled people*. Among the four of them, only *personal security and private property* has a negative relationship with the dependent variable which appears to be odd. A possible explanation of this counter-intuitive feature is suggested below where the relationship between *trust-in-banks* and *personal security and private property* will be investigated furthered in a graphical analysis.

Finally, the accuracy of function 1's classification of the cases in our sample is shown in Table 4-7. The row represents actual group membership and columns represent predicted group membership.

Classification Results [a]

			Predicted Group Membership				
		Group	Rank 1-25	Rank 26-50	Rank 51-75	Rank 76 or above	Total
Original	Count	Rank 1-25	20	2	0	0	22
		Rank 26-50	1	8	1	0	10
		Rank 51-75	0	3	4	4	11
		Rank 76 or above	0	1	2	4	7
	%	Rank 1-25	90.9	9.1	.0	.0	100.0
		Rank 26-50	10.0	80.0	10.0	.0	100.0
		Rank 51-75	.0	27.3	36.4	36.4	100.0
		Rank 76 or above	.0	14.3	28.6	57.1	100.0

a. 72.0% of original grouped cases correctly classified.

Table 4-7 Classification results

The results show that 90.9% of cases in the group rank 1-25 was correctly classified to their original belonging group, 80% for group rank 26-50, 36.4% for group rank 51-75 and 57.10% for group rank 76 and above. It seems that the higher ranked the group is, the higher the probability that it will be correctly classified. A possible explanation is that the weaker the banking system, the stronger the possibility that there are more underlying factors influencing the whole financial system that are not accounted for. However, the result might also simply reflect the fact that the higher ranking group has a larger sample size; hence the chances of cases being correctly classified are higher. Overall, based on the discriminant function developed from DISCRIM analysis, 72% of original group cases were correctly classified.

4.1.4 Graphical interpretation of findings from DISCRIM analysis

It is found from stepwise DISCRIM analysis that *bribery and corruption*, *personal security and private property, risk of political instability* and *foreign highly-skilled people* are main discriminators with respect to the level of trust in banks. While the former two indicators appear to make large contributions in separating the groups, the influence of the latter two remained to be confirmed. The following visual presentations are displayed to examine how well the produced functions and selected indicators separate the four groups with different levels of trust. Figure 4-1 displays a scatter plot where each country's discriminant score[29] is represented as a point and the mean score for each group (centroid) is shown as a square labelled with the group names. The coordinates of the country's score were computed by equations, functions 1 and 2, which are marked on the horizontal and vertical axes respectively.

It is obvious that the horizontal distances between the group centroids are greater than the vertical ones. This means that function 1 discriminates the four groups effectively where group 1 has the highest centroid value and group four has the lowest. It is noticeable that function 1 clearly differentiates groups 1, 2 and 3 showing clear horizontal distance between these centroids while the smaller horizontal distance between groups 3 and 4 indicates fewer differences. The graphical analysis confirms that function 1 is able to discriminate the groups well because the difference between groups is clearly seen. As for function

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[29] Discriminant score is computed based on function 1: *Trust-in-banks* = -4.456 + *bribery and corruption* (0.777) + *personal security and private property* (-0.571) + *risk of political instability* (0.380) + *foreign highly-skilled people* (0.335). Function 2: *Trust-in-banks* = 1.426 + *bribery and corruption* (0.468) + *personal security and private property* (-0.041) + *risk of political instability* (0.835) + *foreign highly-skilled people* (0.464).

2, the vertical distances between the groups are very small and indicate less group separation, which supports its non-significant result from the DISCRIM analysis.
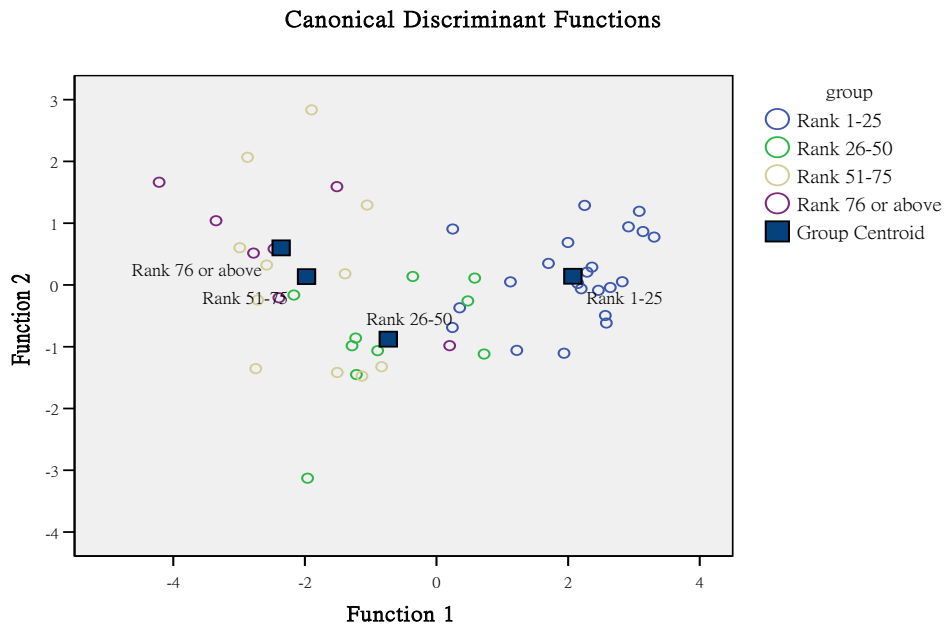
Figure 4-1 Canonical discriminant functions

Next, four boxplots were produced to visualise the distributions of the four discriminant indicators and see how well each variable individually can be used as a single variable to discriminate the groups. In each boxplot, we used grouping indicators as the X-axis and the four identified discriminant indicators, one at a time, as the Y-axis to provide a vehicle to display the distribution of the data. In each boxplot, the top and bottom of the box indicate that 75% and 25% of the distribution fall within this range with the line in the box representing the median (50th percentile).

Figure 4-2 displays boxplots for *bribery and corruption* by groups and shows a clear difference between the four groups. The higher the level of trust in banks, the higher the *bribery and corruption* score,[30] meaning that fewer people believe that bribery and corruption exists in their economy. When using this indicator to separate the groups, two nations, no 41 South Africa and no 24 Japan, fell outside the inner boundaries and were considered as outliers. South Africa scores relatively low on *bribery and corruption* compared with other

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[30] Survey question for *bribery and corruption*: participants were asked to score the statement, "Bribery and corruption do not exist in your economy." The higher the score, the more the respondent agrees with this statement, indicating that people think there is less bribery and corruption in the economy.

countries in the same ranking group, 1-25. Japan shows the opposite case with comparably better control over bribery and corruption compared with countries in the same ranking group, 70 or above.
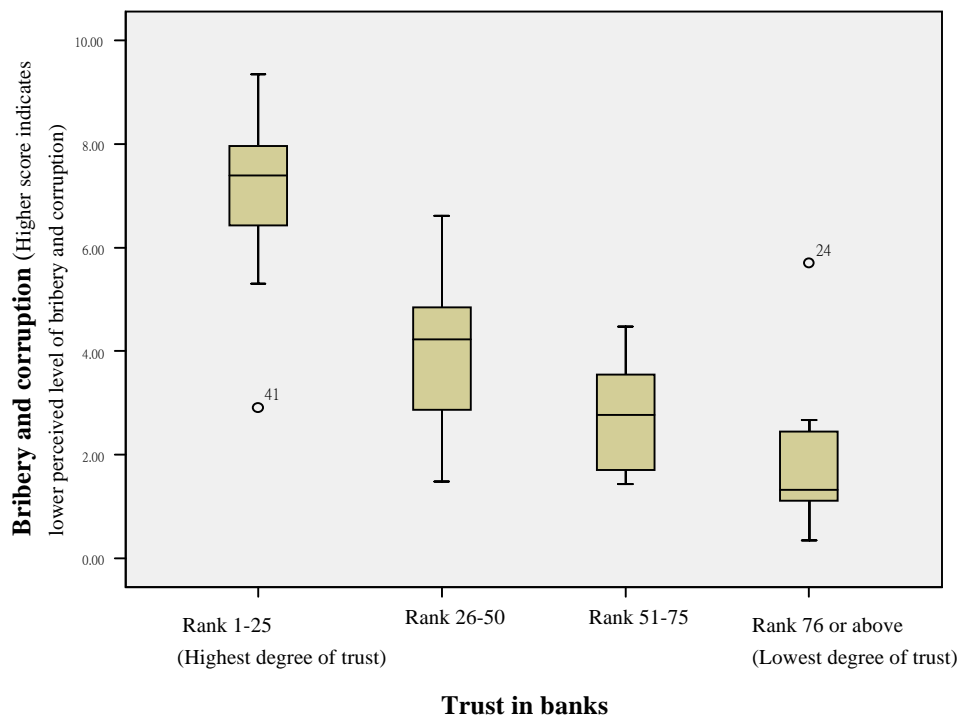
Figure 4-2 Boxplots for *bribery and corruption* by groups

Figures 4-3 and 4-4 are the boxplots produced when used the next two factors in order namely *risk of political instability*[31] and *personal security and private property*[32] separately as single discriminators. The boxplots appear to have systematic structures again, although the degree of differentiation between the groups is obviously lower than with *bribery and corruption.* In both cases, there is a positive relation between the *trust-in-banks* indicator and the discriminators. As in Figure 4-2, nation 41 is an outlier in both Figure 4-3 and 4-4 suggesting that although there is a high level of trust in the banking system, the public's perception of political stability and personal security and property rights is not as good as for other nations in the same *trust-in-banks* ranking group.

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[31] Survey question for *risk of political instability*: participants were asked to score the statement, "The risk of political instability is very low." The higher the score, the more the respondent agrees with this statement.
[32] Survey question for *personal security and private property*: participants were asked to score the statement, "Personal security and private property are adequately protected." The higher the score, the more the respondent agrees with this statement,
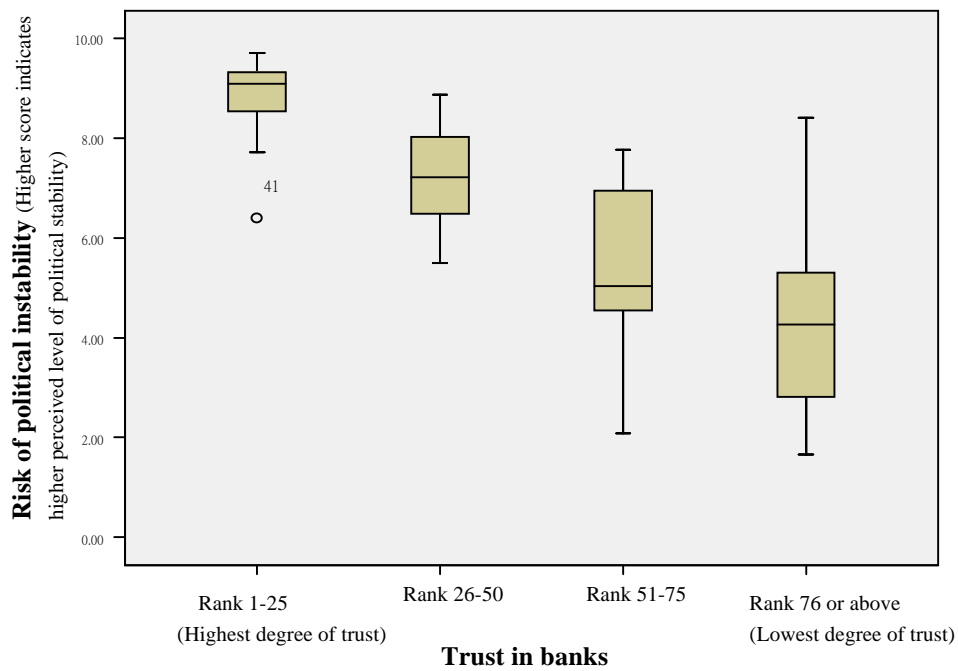
Figure 4-3 Boxplots of *risk of political instability* by groups
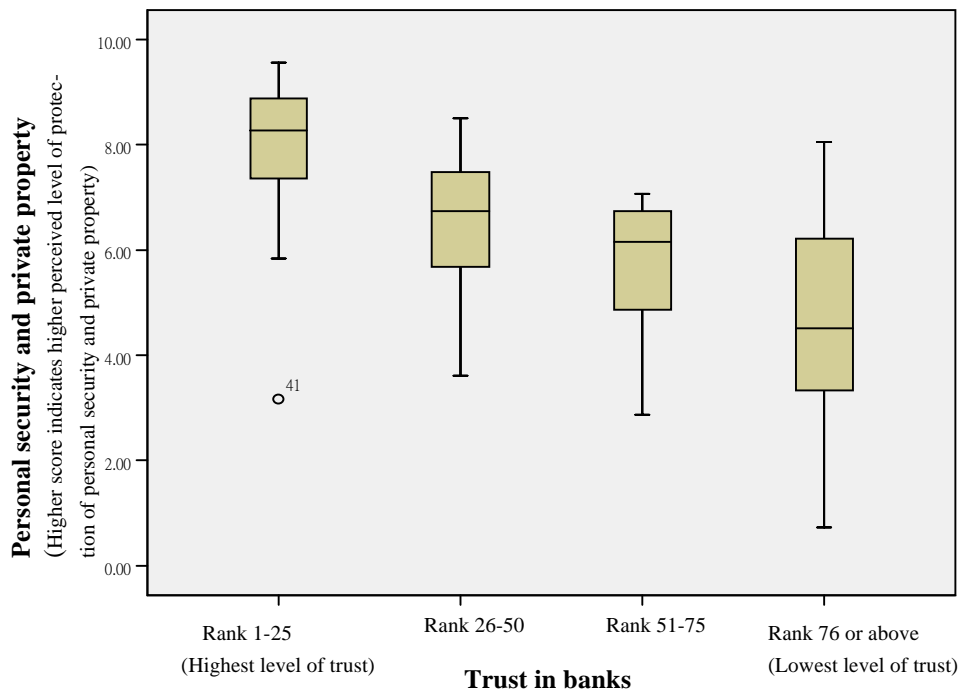
Figure 4-4 Boxplots of *personal security and private property* by groups

Figures 4-2, 4-3 and 4-4 have all identified case number 41, South Africa, as an outlier which appears to be more than 1.5 box lengths below its grouping box. This means that although this specific country has considerably lower scores on *bribery and corruption, risk of political instabilities, personal security and private property,* its ranking on *trust-in-banks* remains in the top group, ranked 1-25.

In the earlier analysis, discriminant function 1 was discovered to be the best linear combination to predict group membership associated with countries' levels of trust in banks. In the equation (see Section 4.1.3, page 86), only *personal security and private property* is observed to have negative coefficient indicating a negative relationship with *trust-in-banks.* Here the boxplot ascertained a positive relationship between *trust-in-banks* and *personal security and private property*. A possible explanation for their negative relationship found earlier is that trust can exist at different levels and there may be tradeoffs between them. There is trust in the state, trust in institutions and trust in individuals. The present indicator can be perceived as trust at state level since property rights protection is a judicial function of the state and enforcement of property rights is a police function of the state (Menard and Shirley, 2005).Under the influence of other institutional factors, property right protection as trust in a higher state level can have irrelevant or even adverse effect on trust in banks at institutional level. For instance, in the equation, *bribery and corruption* (generally considered as trust in politician institutions) has the highest coefficient of 0.777 implying a significant impact on level of trust in banks, which might undermine the influence of property right protection. Based on the graphical analysis, the finding remains solid that *personal security and private property* as an individual factor relates to *trust-in-banks* positively and strongly.

The last boxplot - Figure 4-5 - shows the relationship between the score for *foreign highly-skilled people*[33] and the level of trust in banks.

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[33] Survey question for *foreign highly-skilled people* score: participants were asked to score the statement, "Foreign highly-skilled people are attracted by the business environment of your economy." The higher the score, the more respondent agree with the statement.
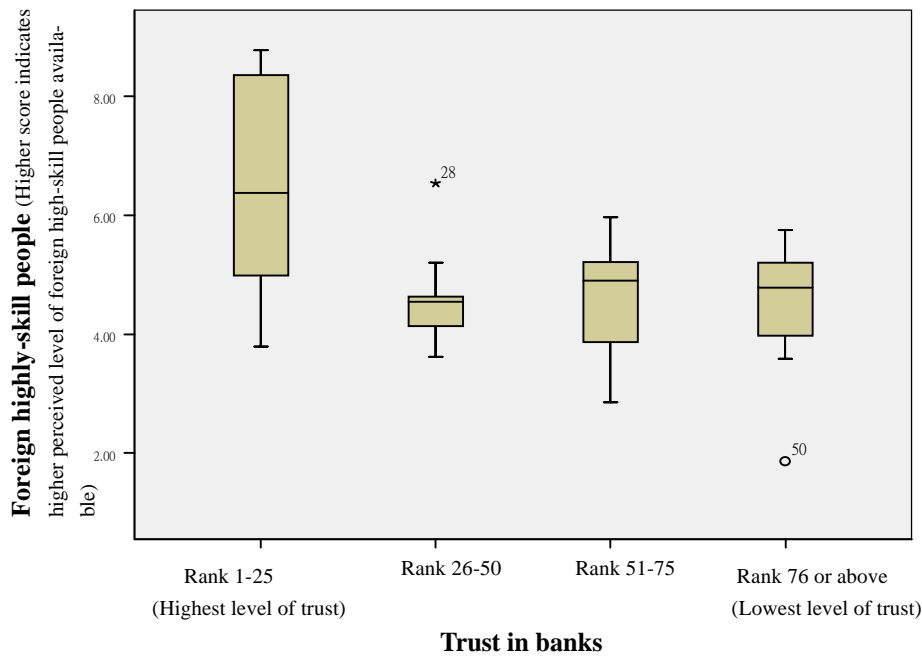
Figure 4-5 Boxplots of *foreign highly-skilled people* by groups

First, the distribution does not appear to differ between the four groups. In addition to this, there is no consistent relationship between grouping indicators and discriminators. Although the top rank, 1-25, does have the highest median value, the median values of *foreign highly-skilled people* in group 26-50; 51-75 and 76 or above fall into the same range and this makes it difficult to distinguish one group from another based on this predictor alone. Exceptional cases which fall outside the inner boundaries are case no 28, Malaysia, and no 50, Venezuela. Malaysia appears to attract more foreign highly-skilled people than nations with the same level of trust in banks, while Venezuela seems to be less attractive for skilled foreign people compared with other nations in the same group.

It is worth noting that Taiwan's group membership was not predicted correctly by the discriminant function 1. Taiwan's is actually a member of group 3, for which 'soundness of banks' ranks between 51 and 75. However, it was classified as group 4 - ranking 76 and above - by function 1. Taiwan scored 4.48 on *bribery and corruption* which is considerably higher than the group average 2.73. Its score on *personal security and private property* is 6.63 which is also higher than the group mean of 5.59. Taiwan's membership was downgraded to group 4 due to its comparatively low score for *risk of political instabilities*. It

scored 3.23 on this indicator which did not even fall into the lowest 25 % portion of the distribution in its group (Figure 4-3).

In short, Part 1 of the analysis established institutional quality's influence on trust in banks and identified *bribery and corruption*, *risk of political instabilities* and *personal security and private property* are the key discriminators. The variable *foreign highly-skilled people* is ruled out as a valuable predictor from the following analysis as it is the weakest discriminator and shows little evidence of its discriminate ability in the graphical analysis.

4.2 Part 2 - Trust in banks: Institutional qualities versus financial indicators

In this second part of the quantitative research, analysis was applied to explore *Proposition 2:* Resident's trust in banks is more strongly related to *subjective perception of institutional quality* than to *objective measures of banking development.*

As explained earlier, the trust indicator in this analysis is based on the survey question: "Do you think banks in your country are one = insolvent and may require a government bailout, seven = generally healthy with sound balance sheets". This question reflects the public's confidence in banks by testing their perception of how sound the banks' balance sheets are. Indicators calculated from balance sheet data are often used as objective measures of banking performance. They provide relevant information on soundness of banks because they are measures of the banking sector's policies and operations in monetary terms and the strength of its structure. One of the important agendas in financial reform is financial transparency which promotes a widespread availability of relevant, accurate and comparable information about financial institutions (Rhyne, 2002). A bank's balance sheet in particular is often examined when reviewing the outcome of a financial reform. However, do these indicators have direct impact on public confidence in the banking system? Are improvements in balance sheets reflected in higher levels of trust in the banking system? This section compares the correlation between the trust indicator and development indicators with the correlation between the trust indicator and institutional indicators.

The analytical procedure in Part 2 can be divided into three steps. In Steps I and II, scatter diagrams were produced to discover whether there is a pattern between trust indicators and development indicators. Then, a regression analysis was applied to establish whether there

is a linear relationship between them. In Step III, three institutional indicators identified in the DISCRIM analysis were used to form regression model I, whilst significant development indicators found in Step I were used for regression model II. The purpose of comparing these two models is to see how well development indicators explain trust levels in banks when compared with institutional indicators.

4.2.1 Statistical techniques and data collection

Two statistical techniques applied in this analysis are scatter diagrams and regression analysis. Scatter diagrams are produced to give a graphical presentation of the relationship pattern constructed with one set of variables on the horizontal axis (the x axis) and the other set of variables on the vertical axis (the y axis). However, a graphical analysis can only tell if there is a pattern between two variables, it can not tell whether the relationship is significant or not. Regression analysis follows the scatter plots in this investigation to gain a further understanding of the relationship between the variables. It is a statistical procedure which develops a linear equation that estimates mathematically how two variables are related (Kazmier and Pohl, 1984). In a regression equation, the variable being predicted is called the dependent variable and the variable (or variables) being used to predict the value of the dependent variable is called the independent variable(s). A simple linear regression involves one independent variable and one dependent variable and the relationship between the variables is approximated by a straight line. This technique uses seven development indicators one at a time as independent variable and trust indicator as dependent variables. The equation can be presented as follows:

(*Trust-in-banks)'* = $\alpha_0 + \alpha_1 X_1$

α_0=constant

α_1=coefficient of the chosen financial development variables

X_1=the value of the chosen financial development variables

In the second step of the analysis involving two or more independent variables, multiple regression analysis, the relationship between the variables is approximately curvilinear (Kazmier and Pohl, 1984). Here, multiple regression analysis was employed to produce two regression models by using development indicators and institutional indicators as two sets of independent variables to see their comparative effect on the same dependent varia-

ble: *trust-in-banks*. The two models can be written as follows where (*Trust-in-banks*)' is the predicted value of the actual *trust-in-banks*:

Model 1 - Influence of institutional qualities:

(*Trust-in-banks*)' = α_0 + α_1 x *(bribery and corruption)* + α_2 x *(personal security and private property)* + α_3 x *(risk of political instability).*

Model 2 - Influence of banking development indicators:

(*Trust-in-banks*)' = α_0 + α_1 x *(financial indicator 1)* + α_2 x *(financial indicator 2)* + α_3 x *(financial indicator 3)* +....

In terms of data collection, the same sample countries and time period (year 2006) used in the DISCRIM analysis were used here, with the exception of data for Iceland due to the unavailability of its banking development indicators. Hence, forty-nine countries were studied in this second part of the quantitative research. Three groups of variables were required for the analyses: (1) *trust-in-banks* indicator, (2) institutional indicators - *bribery and corruption*, *risk of political instabilities* and *personal security and private property*, and (3) banking development indicators. The first two variable groups are the same as the ones applied in the DISCRIM analysis. The third group, a new dataset, is explained in detail below.

The banking development indicators were taken from Beck, Demirgüç-Kunt, and Levine: A new database on financial development and structure (updated version in November 2008). The dataset is originally from their work in 1999 when they introduced a new database of indicators of financial development and structure for 137 countries for the years since 1990. Before this dataset became available, financial analysts and researchers relied on a few indicators of the banking sector and the stock market using data from the International Monetary Fund's International Financial Statistics and the International Finance Corporation's emerging market database. The new database provides a wider range of source indicators of size, activity and efficiency for a much broader set of financial institutions and markets. Most importantly for this study, this database provides bank-specific data from which to construct indicators of profit performance, efficiency and market structure for commercial banks. Over the years, the original dataset has been updated and expanded to cover 175 countries. For this regression analysis, seven bank development indicators were selected. The indicators were calculated mainly from income statements and

balance sheet data of commercial banks from the Bank Scope Database provided by the international rating agency, Fitch IBCA. All of the indicators were constructed from raw bank level data taken from the database, as un-weighted averages across all banks of a country for a given year.

The first two indicators are *return on assets (ROA)* and *return on equity (ROE)* commonly known for measuring banking profitability. *ROA* is defined as profit to assets which is an expression of the rentability for the entire banking activity. The assets rentability measures the effect of management capacity to use the financial and real resources of a bank in order to generate profit. It is appreciated that the *ROA* indicator is the most exact measure of banking activity due to the fact that it expresses directly the result accordingly to banks' management performance. *ROE* is defined as profit to equity. It is the most significant indicator for profit, which was used to measure the banking management in all its dimensions. It also offers an image over the way to use the capitals brought by shareholders and the effect of their retainer in bank's activity.

The next three indicators which provide measures of intermediation efficiency are *net interest margin,* bank *overhead cost* and *cost-income ratio*. *Net interest margin* is defined as the accounting value of a bank's net interest revenue as a share of its total assets. It measures the difference between interest income and interest expense as a percentage of total assets. As discussed in Chapter 2, one of a bank's primary intermediation functions is to issue liabilities and use the proceeds to purchase income earning assets. If the bank is able to raise funds with liabilities that have low interest costs and is able to acquire assets with high interest income, the net interest margin will be high and the bank is likely to be highly profitable. Bank *overhead cost* is defined as the accounting value of a bank's overhead costs as a share of its total assets. *Cost-income ratio* is defined as operating cost in relation to operating income which is commonly used to estimate a bank's net value.

The last two variables *concentration ratio* and banks' *Z-score* are used as indicators for the market structure of the banking system and banking stability respectively. *Concentration ratio* equals the ratio of the three largest banks' assets to total banking sector assets. Unlike other industries where market share is calculated as the amount of total sales of products by a company in a particular market, banking services/products can not be calculated in this way. Instead the respective share of assets is calculated. The *concentration ratio* is

commonly used as an indicator of competitiveness of the banking sector. The final variable – *Z-score* – is calculated as the ratio of *ROA* plus capital-asset ratio to the standard deviation of *ROA*. It is a numerical measure that is used to predict corporate bankruptcy. According to Beck et al. (2009), if profits are assumed to follow a normal distribution, it can be shown that the *Z-score* is the inverse of the probability of insolvency. Thus a higher *Z-score* indicates that the banking system is more stable.

4.2.2   Step I: Scatter diagrams

Before regression analysis is applied, scatter diagrams are constructed with an individual development variable on the horizontal axis and the *trust-in-bank* indicator on the vertical axis. This enables us to observe the data graphically and to draw preliminary conclusions about the possible relationship between the variables. According to their pattern, the scatter diagrams were grouped into two categories: Group 1 with no clear pattern and Group 2 with a pattern of points. Development variables of *ROA*, *cost-income ratio* and *Z-score* fell into Group 1 (Figure 4-6).
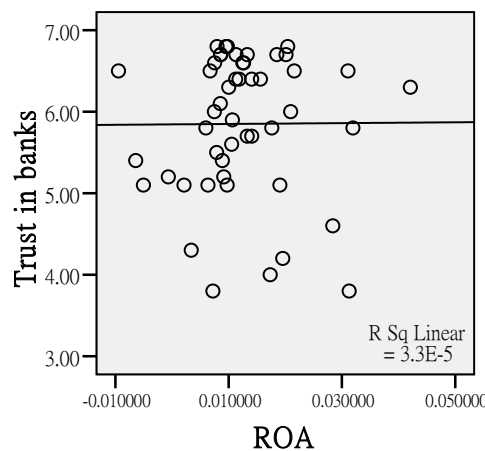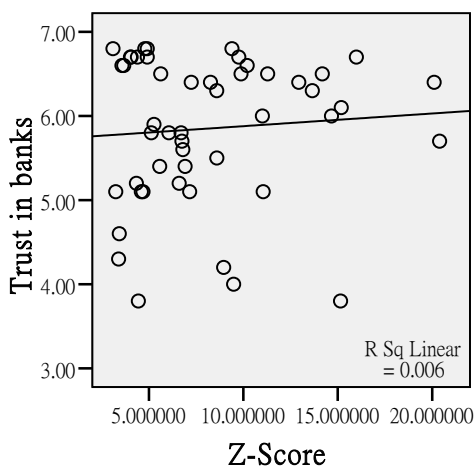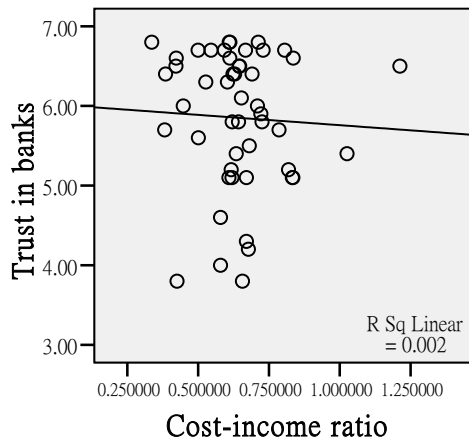
Figure 4-6 Scatter diagrams of *trust-in-banks* against *ROA*, *cost-income ratio* and *Z -score*

The lines in each diagram represent trend lines which provide an approximation of the relationship. As can be seen from Figure 4-6, points are randomly scattered over the grid and there seems to be no pattern in these three diagrams. The trend lines are almost horizontal which indicates a weak relationship between two variables. It is very likely that there is no relationship between the *trust-in-banks* and *ROA*, *cost-income ratio* and *Z- score*.

In Group 2 (Figure 4-7), there are variables *ROE, net interest margin, overhead cost and concentration ratio*.
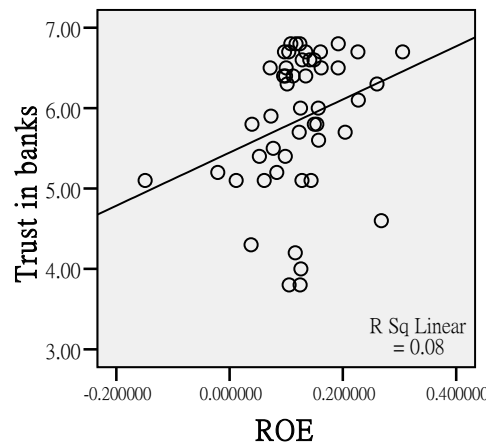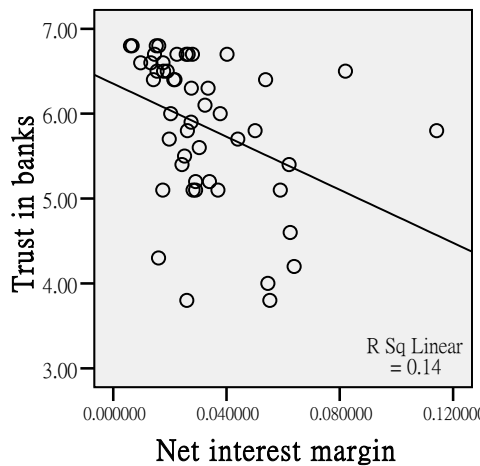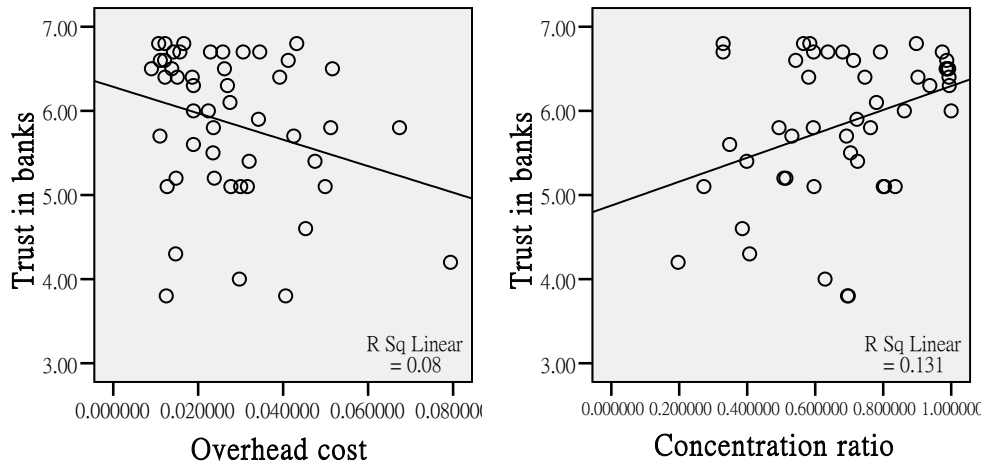
Figure 4-7 Scatter diagrams of *trust-in-banks* indicator against *ROE*, *net interest margin*, *overhead cost* and *concentration ratio*

As shown on Figure 4-7, there seems to be a linear relation between *trust-in-banks* and these four variables. The relationship is not perfect as all points are not on a straight line. The general pattern of the points and the trend line suggest that the overall relations between *trust-in-banks* and *ROE* and *concentration ratio* are positive. This is to say, the higher the profitability indicator - *ROE* -, the greater the trust in banks. Also, the more concentrated the market structure, the higher the level of trust in banks. The bottom panel depicts a negative relationship where *trust-in-banks* tends to decrease as bank *overhead cost* and *net interest margin* increase. Bank *overhead cost* and *net interest margin* are two indicators of efficiency where the lower the indicator, the more efficient the banking system. The scatter diagrams show that *trust-in-banks* is negatively linked with these two indicators which imply that the more efficient the system is, the higher the trust in that system.

4.2.3 Step II: Simple regression analysis

Following the scatter diagrams, a simple linear regression approach was applied to gain further understanding on the relationships between *trust-in-banks* and each development variable. For the regression models, *trust-in-banks* was used as the dependent variable and seven development variables were taken one at a time as independent variables. Table 4-8 listed the results of the seven regression models.

	ROA	ROE	Net interest margin	Overhead Costs	Concentration ratio	Cost-Income Ratio	Z-Score

R-Value	.006	.283	.374	.282	.362	.047	.077
R^2	.000	.080	.140	.080	.131	.002	.006
Adjusted R^2	-.021	.061	.121	.060	.113	-.019	-.015
F-value	.002	4.095*	7.631**	4.068*	7.110*	.105	.281
p-value	.969	.049	.008	.049	.010	.748	.598
Constant	.012	-.020	.084	.057	.146	.693	5.853
Unstandardized Coefficients Beta	6.46E-005	.024	-.009	-.005	.093	-.009	.395

*p <0.05 (marginally significant differences detected between variable categories).

**p <0.01 (significant differences detected between variable categories).

*** p<0.00 (highly significant differences detected between variable categories).

Table 4-8 Simple linear regression results for seven development variables

The first three rows in Table 4-8 - R value, R^2 and adjusted R^2 - are the measures of the goodness of fit for the estimated regression equation. R values show that *ROE, net interest margin, overhead costs,* and *concentration ratio* have higher correlation with *trust-in-banks* than *ROA, cost-income ratio* and *Z-score*. By squaring the value of the correlation coefficient, another useful statistic is obtained - R^2 which tells what proportion of the variability of the dependent variables is explained by the regression model. Accordingly, *ROE, net interest margin, overhead cost* and *concentration ratio* appear to explain 8%, 14%, 8%, and 13.1% respectively of *trust-in-banks* while close to zero percent change in *trust-in-banks* was explained by *ROA, cost-income ratios* and *Z-score*. The adjusted R^2 shows that when applied to another set of data from the same population, *ROE, net interest margin, overhead cost* and *concentration ratio* are able to explain 6-12% of variability in *trust-in-banks*. However, negative figures appear for *ROA, cost-income ratios and Z-score*.

The *F*-value is obtained by dividing the mean square regression by the mean square residuals. It is designed to demonstrate the strength of association between variables (George and Mallery, 2005). The associated *p*-value is the probability that measures the likelihood that the *F*-value could occur by chance. A significance test of $p < 0.05$ is the most commonly accepted indication that *F*-value is statistically significant. In Table 4-8, the *F*-value provides significance test for the overall model. Since there is only one independent variable for each model, the result of the *F*-test also represents the significance of the chosen independent variable. It can be seen that *ROE, net interest margin, overhead cost* and *concentration ratio* are significant variables in explaining changes in *trust-in-banks* (marked with

a bolder frame). The other three variables with insignificant *p*-values > 0.05 suggest that there is no linear relationship between these three indicators and *trust-in-banks.*

Another main output from regression analysis are the estimated regression equations. According to the values of the regression coefficient and constant given in Table 4-8, the four significant models can be written as the following equations:

(*Trust-in-banks*)'=-0.020 + 0.024 x (*ROE*)

(*Trust-in-banks*)'=0.084 – 0.009 x (*net interest margin*)

(*Trust-in-banks*)'=0.057– 0.005 x (*overhead cost*)

(*Trust-in-banks*)'=0.146 + 0.093 x (*concentration ratio*)

Where (*trust-in-banks*)' is the predicted value of the actual *trust-in-banks.* The equations reveal the positive correlations between *trust-in-banks* and *ROE* and *concentration ratio* and negative correlation between *net interest margin* and *overhead cost*.

The findings from Steps I and II are twofold. First, *ROE, net interest margin, overhead cost* and *concentration ratio* contribute significantly to explaining *trust-in-banks* whereas *ROA*, *cost-income ratio* and *Z-score* do not appear to be related to *trust-in-banks.* Second, the value of *trust-in-banks* increases when the values of *ROE* and *concentration* increase. In contrast, the value of *trust-in-banks* decreases when the values of *ROE* and *concentration* increase. This was confirmed both from scatter diagrams (Figure 4-7) and estimated regression equations. However, the relationships between these four development variables and *trust-in-banks* are not obvious in the scatter diagrams. Regression analysis also suggested that although there is a significant relationship between the variables, these variables do not really explain the model. The small R^2 values from regression analysis indicated that only 8%, 14%, 8%, and 13.1% of the variance in observed *trust-in-banks* is explained by *ROE, net interest margin, overhead cost* and *concentration ratio* respectively. The purpose of analysis from these two steps is to identify significant development indicators related to the *trust-in-banks* indicator in order to compare the strength of their relationship with institutional indicators by constructing two multiple regression models in Step III.

4.2.4   Step III: A comparison between two multiple regression models

The DISCRIM analysis from Part 1 identifies *bribery and corruption, personal security and private property,* and *risk of political instability* as main decisive indicators for level of

trust in banks. In the first two steps of Part 2 of the analysis, *ROE, net interest margin, overhead cost* and *concentration ratio* were found to be significantly related to *trust-in-banks*. In the next section, two multiple regression models were constructed to compare the degree of the relationships between *trust-in-banks* and development indicators with institutional indicators.

Table 4-9 presents regression results for Models 1 and 2. In both cases, *trust-in-banks* was taken as the dependent variable while institutional variables and development variables were taken as the independent variables in Models 1 and 2 respectively.

By comparing the two models, it can be seen which set of independent variables best explains trust in banks. First, the 'variables' section indicates whether a variable is statically significant in explaining the dependent variable. All three institutional variables in Model 1 appear to contribute significantly to *trust-in-banks* with their p-value < 0.05. *Bribery and corruption* (p-value $= 0.003 < 0.01$) and *risk of political instability* (p-value $= 0.004 < 0.01$) show higher significance than *personal security and private property* (p-value $= 0.047 < 0.05$). In Model 2, only *net interest margin* appears to be a significant variable (p-value $= 0.036 < 0.05$) while the other three variables with p-value > 0.05 did not appear to contribute significantly to the model.

	Model 1 - Trust indicator and institutional indicators			Model 2 - Trust indicator and development indicators			
	Bribery and corruptions	Personal security and private property	Risk of political instability	ROE	Net interest margin	Overhead cost	Concentration ratio
Variables							
Coefficients α	0.193	-0.154	0.215	3.031	-19.194	6.431	0.963
t-value	3.197**	-2.037*	3.036**	1.956	-2.161*	0.542	1.829
P-value	0.003	0.047	0.004	0.057	0.036	0.591	0.074
Model Summary							
R Square	0.620			0.302			
Adjusted	0.596			0.238			
F-value	25.049 ***			4.750**			
P-value	0.000			0.003			

*p <0.05 (marginally significant differences detected between variable categories).

**p <0.01 (significant differences detected between variable categories).

*** p<0.00 (highly significant differences detected between variable categories).

Table 4-9 Multiple regression results for Model 1 and Model 2

Another important result is the estimated regression equations. Based on the coefficients of variables, the two models can be expressed as the following estimated equations:

Model 1 - Trust indicator and institutional factors:

(*Trust-in-banks*)' = α_0 + 0.193 x (*bribery and corruption*) – 0.154 x (*personal security and private property*) + 0.215 x (*risk of political instability*).

Model 2 - Trust indicator and development indicators:

(*Trust-in-banks*)' = α_0 + 3.301 x (*ROE*) – 19.194 x (*net interest margin*) + 6.431 x (*overhead cost*) + 0.963 x (*concentration ratio*).

The 'model summary' section reveals how well these two sets of independent variables explain their dependent variable - *trust-in-banks*. Both models appear to be significant but Model 1 has a higher significance level at 0% (*p*-value = 0.000 < 0.00) than Model 2 with a significance level at 1% (*p*-value = 0.003 < 0.01). In Model 1, the set of institutional variables explain 62% of changes in *trust-in-banks* while the set of financial variables explain only 30% of that variability. When using these two models on other sets of data from the same population, the set of institutional variables explain 59.6% of the viability of *trust-in-banks* whereas the set of financial variables explain only 23.8% of these changes.

4.3 Summary

The findings of the Part 1 DISCRIM analysis shows that *bribery and corruption* is the strongest discriminator for predicting group membership associated with trust in a country's banking system. The other two valuable discriminators are *risk of political instability* and *personal security and private property* whereas *foreign highly-skilled people* is the weakest one. Using these four discriminating predictor variables, DISCRIM analysis found that differences between groups categorised by the level of trust in banks can be expressed by only one linear combination - function 1. This linear equation appears to be a strong discriminant function which explains 94.1% of the difference between the four ranking groups. When using this linear equation to predict group membership, 72% of the original group cases were correctly classified. Although *foreign highly-skilled people* was original-

ly identified as a possible discriminator, the graphical analysis showed little evidence of its discriminant ability. This variable was eliminated as a factor in affecting public's confident level in banks. Overall, Part 1 of the analysis supports the notion that institutional qualities have a significant explanatory power with regard to how well the banking system is perceived, particularly in terms of three aspects: *bribery and corruption, risk of political instability* and *personal security and private property*. Furthermore, the three identified discriminating indicators validate the point that governance is the fundamental institutional quality which affects confidence levels in financial systems. As concluded in Chapter 2, property rights institutions which determine the incentive for using resources are regarded as pre-requisites for good economic governance. Corruption is a symptom of fundamental institutional weaknesses (Hellman et al., 2000) and a sign of fundamental problems in governance. Political stability is a vital quality for good governance as no institutions can perform their function in an unstable political environment. The findings allow us to infer that *Proposition 1* - Residents' trust in banks is affected by their *perceptions of the institutional environment* is valid.

The second part of the analysis compares the strength of the relationship between the *trust-in-banks* indicator and financial measures of banking development with institutional indicators. The findings suggest that the influence of development indicators on the level of trust in banks is considerably weaker when compared with institutional factors. The financial ratios either fail to predict trust in financial systems or are not consistently robust in doing so but institutional quality predicts trust in financial systems systematically. However, it should be noted that the limited range of financial indicators applied in the statistical analysis may have contributed to the insignificance. Financial indicators used here are from Beck and Kunt's (2008) database. In their original database, an array of indicators was constructed to measure the size, structure, efficiency and stability of banks across countries. Unfortunately, the dataset does not cover every indicator for all the countries studied in this paper. For example, Taiwan's data is missing in most of the banking indicators because it is not a member of the Organization for Economic Cooperation. Therefore, the selection of financial indicators was restricted to those available for our sample countries. In addition, the lower level of significance produced by the regression between development indicators and the trust indicator for banks may be due to the relatively small values of development indicators. Although limitations of development indicators might have affected the results, the difference in lead of significance between institutional indica-

tor and development indicators are sufficient to support *Proposition 2*: Resident's trust in banks is more strongly related to *subjective perception of institutional quality* than to *objective measures of banking development.*

This quantitative part of the study confirms that trust in banks is strongly related to institutional qualities especially in three governance dimensions. While generalised trust is considered to be positively related to financial development indicators, the development indicators were not found to be as influential as institutional qualities in affecting residents' confidence level in banks. This is because trust in banks does not only refer to what banks can do (which is reflected in banks' balance sheets), but also to what banks are willing to do. As Popper (1945) reminds us, construction of institutions involves important personal decisions and even the best institutions will always depend to a considerable extent on the person's involvement. According to him, "institutions are like fortresses; they must be well designed *and* well manned" (1945:126). This applies, for instance, to the willingness of banking staff to provide service and the willingness of government to execute sound policies. Trust in banks involves a number of trust features that illustrate the multi-level nature of trust. While the different levels of trust should support each other, institutional trust is thought to be the main resource for creating trust in financial systems. This study claims that trust in financial systems is built on public perceptions of the institutions which reflects the degree of perceived fairness and impartiality in the institutions responsible for the implementation of public policy (Rothstein and Stolle, 2001). Institution-based trust encourages organisations/individuals to believe that impersonal structures are in place to support successful transactions (Pavlou, 2002).

This thesis claims that governance is the deciding factor in institutional qualities which foster trust in banks. Governance quality shapes financial development and it is a key factor in deciding the outcome of a financial reform. While the statistical findings were able to discover the pattern between governance and trust in the financial system, they were not able to show how it influences financial development and reform. The following chapters use Taiwan's banking sector as a qualitative case study, the purpose of which is to demonstrate path-dependent characteristics of governance in shaping Taiwan's banking reform. The governance features discovered along with its banking development are taken into consideration when investigating the impacts of institutional persistence on Taiwan's financial reform in 2001.

5 Historical path of institutional development: Post-war 1949-1988

The review of literature supports the view that financial reform is a process of institutional change and trust building in institutions is at the heart of the reform. Three important insights gained from the theoretical study are the followings: (1) informal institutional norms which have trust embedded in the institutions support formal regulatory reforms to achieve their designed outcomes; (2) incremental and path-dependent characteristics of institutional change shape the reform outcome. Therefore, it is essential to study how the perceptions and beliefs of institutions evolved with the financial development in order to understand their impacts on reform performance; (3) three aspects of governance qualities are particularly crucial to financial service industries namely property rights protection, corruption prevention, and political stability. The statistical research in Chapter 4 validated these arguments identifying *personal security and property rights*, *bribery and corruption*, and *risk of political instability* as determining institutional qualities for the levels of trust in banks. While the quantitative findings were able to establish the pattern between governance indicators and the trust indicator in banks, the question of how they interrelate is now the one to be considered. Based on the analytical framework developed in literature review and evidence from quantitative research, a case study of Taiwan's financial reform is carried out to demonstrate how governance qualities and their path-dependent characteristics influence reform achievements. The period of time studied is 1949-2004; post-war until the first phase of financial reform ended.

In this thesis the development of Taiwan's financial system is broadly divided into three phases: financial repression 1949-1988, financial liberalisation 1989-2000, and the first stage of reform between 2001 and 2004. In this chapter, the historical path of institutional governance development in Taiwan's banking sector between 1949 and 1988 is studied. Chapter 6 looks at the changes in institutional governance which were brought in with banking privatisation between 1989 and 2000. These two chapters look into the institutional governance which has evolved over time with banking development. Special focus is placed on three governance dimensions - property rights protection, corruption prevention and political stability. As the institutional behaviours are path-dependent, these two chapters provide an understanding of how the institutional behaviours were developed so the impact of institutional persistence on financial reform can be studied in Chapter 7.

The chapter is organised as follows. Section 5.1 investigates development of financial institutions and credit allocation policy in two stages: (1) 1949 and the 1950s, (2) the 1960s to 1988. Section 5.2 discusses the three aspects of governance qualities. Factors which pushed financial deregulation are listed in Section 5.3. Section 5.4 summarise the chapter.

5.1 Early development stage: 1949-1988

Financial repression[34] was implemented by the government during the post-war period. The KMT had strong views on keeping the financial system under control. The most commonly cited reason for this is the KMT regime's fear of financial crisis or hyperinflation which was perceived as a primary cause for their defeat on China (Hsieh, 2007; Cheng, 1993). Therefore, the political elite of the KMT regime viewed the formation of private indigenous economic power as a challenge to their hegemony in Taiwan. Another reason was regime survival. When the KMT led R.O.C. government relocated to Taiwan, the majority of the population was native Taiwanese and only 15% of the population consisted of KMT expatriates from China (Chu and Lin, 2001). Being a foreign government, the KMT restrained the formation of large local capital and institutions by nationalising the financial system, complemented by other measures such as dismantling of the indigenous landlord class through land reform, and conversion of Japanese property into state-owned enterprises. Due to the security commitment made by the U.S. with Taiwan, a main financial resource for the KMT ruling government was economic aid from the U.S. which accounted for 40% of Taiwan's GDP between 1950 and 1965 (Cheng, 1993).

Taiwan's economy suffered severe damage after the Second World War. In the early 1950s, the financial stability was the priory of the government's financial policy, in the late 1950s self-sufficiency of national finance was taken into account. To help Taiwan's economic recovery, import substitution based on labour-intensive light industries lasted from 1950 through to 1962. The nation's economic development strategy has shifted from import substitutions to export based industrialisation[35] since the 1960s. With export industries taking off, the interest rate and capital funding became important. The termination of U.S. financial support in the 1970s led the government to raise capital from other resources and ex-

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[34] Financial repression is defined as government-directed programmes that provide lending to targeted sectors, activities, classes of firms or individual companies in quantities and at interest rates not provided by existing financial institutions acting independently of government guidance (Haggard et al., 1995).

[35] Export promotion includes incentives such as rebates on custom duties and commodity taxes on imported raw materials, tax exemption and allowing retention of foreign exchange earning to be used for importing raw materials and machinery (Shea, 1994).

pand the financial sector. By the 1980s, the financial policy was designed to cover all the issues mentioned above and responded to an increasing demand for financial deregulation. There has been a deregulation of foreign exchange policy but the regulations on domestic transactions remained strict. With the ending of one-party authoritarian rule in 1988, Taiwan's political democratisation process started and brought along financial liberalisation which took its financial system into another era.

In a nutshell, Taiwan's post-war financial industry was developed mainly for political reasons to keep control of financial resources and to retain macroeconomic stability. During this time, the Taiwanese authorities frequently intervened in the financial system, either formally or informally. Shea (1994) listed the four interventionist policies adopted by Taiwan's government during this time: (1) Government ownership of banks; (2) Strict entry regulations; (3) Interest rate control; and (4) Selective credit rationing policies.

5.1.1   Reconstruction of the existing banks: 1949 and the 1950s

A well-functioning financial sector had already developed in Taiwan under fifty years of Japanese colonial rule and was reorganised upon Taiwan's decolonisation in 1946. When the KMT regime retreated to Taiwan in 1949, it reorganised all the financial institutions that had existed during the Japanese occupation of Taiwan and reconstructed the financial system. The main actors in the financial system were:

The Central Trust of China

The state-owned Central Trust of China was originally established by the KMT government in China in 1934 to deal with a broad range of financial institutions such as insurance underwriting, securities dealing and underwriting, merchant banking, external trading and other special tasks assigned by the government (Yang, 2006). The head office was relocated from Shanghai (in China) to Taipei (in Taiwan) following the KMT regime's move in 1949.

The Bank of Taiwan

The Bank of Taiwan, originally the Taipei branch of the Bank of Japan, was first established as the central bank of Taiwan during Japanese rule to assist the economic development. After the take-over by the KMT regime, the Bank of Taiwan took on a more central role performing the functions of a central bank, issuing currency, managing the business of

the national treasury and serving as the lender of last resort. It was also the largest commercial bank which accounted for one-third of total bank deposits and lending in the 1950s (Chang et al., 2005). Before the Central Bank of the Republic of China (also known the Central Bank of the China, CBC) was re-established as the central bank in 1961, the Bank of Taiwan was the nerve centre of the sector with dual function as a commercial bank and a central bank. It was governed by the Taiwan Provincial Government[36] until 1998 when governance was transferred to the Ministry of Finance (MOF). The duty of issuing New Taiwan dollars was transferred to the CBC in 2001 (Bank of Taiwan, 2009).

Principal banks

The KMT administration nationalised three commercial banks: the Taiwan Industrial Commercial Bank (renamed as the First Commercial Bank in 1951), the Hua-Nan Commercial Bank and the Chang-Hwa Commercial Bank. These three major commercial banks looked after the financial business for industrial and commercial development. For small and middle market businesses in local areas, the administration formed a Land Bank and a new Cooperative Bank in 1946. The former was based on the colonial Dai-Ichi Kangyo Bank and aimed to assist businesses in the agricultural sector. The latter was reconstructed and expanded from the original colonial Cooperative Bank and meant to serve local commerce. While the Land Bank played a significant role in the land reform, the Cooperative Bank acted as a central bank for cooperative associations to help small and middle market businesses with a focus on the fishing and farming sectors. In the early years in post-war Taiwan, the six provincial-owned banks (Bank of Taiwan, Land Bank, Cooperative Bank, First Commercial Bank, Hua-Nan Commercial Bank, and Chang-Hwa Commercial Bank) became famous as the locomotive for Taiwan's financial markets development (Yang, 2006).

Local banking institutions

The lack of capital in the post-war economy and the state controlled banking system left very limited capital access available for the private sector. Overshadowed by the state sector, the private sector was barely visible on the periphery of the financial sector, only ac-

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[36] Taiwan was made a separate province of Imperial China in 1887 but the title was abolished when it became a Japanese colony in 1895. After Japan's surrender in 1945, the R.O.C. (ruled by the KMT) obtained control of Taiwan. When the R.O.C. government was relocated to Taipei in 1949, the provincial administration remained in place under the claim that the R.O.C. was still the government of all of China. The issue of its overlapped inefficiency with the national government was addressed in 1997 following major regulatory changes to modify the system. By December 1998, the provincial administration had been greatly streamlined (Taiwan Provincial Government, 2011).

tive in credit cooperative and mutual loans and savings associations (Cheng, 1993). The credit cooperatives had served local commerce and have existed since 1910. The eight local mutual loans and saving associations were established between 1948 and 1952 due to the increasing private mutual saving associations. To meet the capital demand from private business and individuals, the informal financial sector appeared in the system and took over a large market share that resulted in Taiwan's dual financial system.

As can be seen from Table 5-1, the number of state-owned and provincial banks remained at seven with minimal increase in the number of branches throughout the 1950s.

Year	State-owned banks	Provincial banks		Credit Co-operatives	Farmers' Fishermen's Co-operatives	Mutual loans and savings associations	
		Head offices	Branches			Head offices	Branches
1949	1	6	208	71	86	5	36
1953	1	6	231	74	288	8	76
1958	1	6	235	78	288	8	76

Table 5-1 Number of banks in the 1950s

Source: Yu and Wang (2005)

Compared with the central banking system, the number of financial institutions at grass-roots level increased massively. The number of credit cooperatives increased from seventy-one to seventy-eight while the number of farmers'/fishermen's cooperatives increased from eighty-six to 288. The local cooperatives were developed as an instrument for the KMT to extend their power into suburban areas. Under the Japanese regime, a great majority of the native Taiwanese elite, who were not allowed to have positions in the central banking system, were active in those local financial institutions. To avoid rebellion by the native Taiwanese, the KMT came up with a special political design to assert its power in regional cities, namely local factions. The KMT regime nurtured more than one local faction in each constituency as its representatives in local elections in order to cooperate with local elites and keep them under control. On one hand, the KMT regime gained the local factions' loyalty by offering them franchises of local businesses such as farmers' credit associations. On the other hand, the local factions returned the favour by contributing election

funding to the KMT party (Chu and Lin, 2001). This peculiar election culture planted the seeds for local credit associations' serious bad loan troubles.

Credit allocation in the 1950s

In the 1950s, the principal function of the financial sector was to support the import of capital goods. Import substitution helped to nurture infant industries until they were ready to face international competition (Maguire, 1999). The authorities imposed strict exchange controls and adopted multiple exchange rates, tariffs and quotas to make a negative impact on exports.[37] During this time, private enterprises were encouraged to import raw materials, semi-finished products and machinery to produce consumer goods which could replace imports in the domestic market, thereby establishing a firm foundation for the development of those industries producing everyday necessities. Lending by national banks went mostly to the state-owned sectors for social investment and expansion of state-owned enterprises (SOEs). Banks were more timid in lending to the private sector for fear of rekindling inflation. The loans issued by the Bank of Taiwan and other commercial banks were to SOEs or import substitution industries with favourable interest rates. However, the lending policy was not the major instrument for import substitution industrialisation; that was the allocation of foreign exchange. The loanable funds in the banking system at that time were not yet significant with most of the deposit being from the government or U.S.'s economic aid. Other than issuing loans to support targeted industries, foreign exchange transactions and financial transactions in the banking sector were very limited.

5.1.2   Establishment of new banks in the 1960s

Cheng (1993) summarised four new aspects to Taiwan's financial sector in the 1960s: (1) the reopening of the central bank; (2) the establishment of specialised financial organisations for industrial development; (3) the limited entry of foreign banks; and (4) the controlled expansion of the private financial sector.

Central bank restored in 1961

The CBC was restored[38] in 1961 subordinated to the president. The head of the Bank was appointed by the president for a term of five years. Insulated from legislative power and

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37 A multiple exchange system consists of an official exchange rate and several informal parallel rates. The average level of tariffs for the 1950s was about 47% (Maguire, 1999).
38 The bank was inaugurated in Canton, China in 1924 and relocated with the R.O.C. government from China to Taipei in 1949. In 1961, the bank resumed its operations there (Central Bank of R.O.C., 2003b).

the MOF, the bank was primarily entrusted by the president with the task of ensuring financial stability. Although assistance in economic development was also listed as a goal of the bank, financial stability was the priority among all tasks.

Postal savings system and specialised banks

For deposit institutions, first, the postal savings system which was introduced by the KMT regime in China in the 1930s resumed operations in Taiwan in 1962. Then three special banks – Bank of China, Bank of Communication and Famers' Bank , initiated in China were reopened in the 1960s as state-owned banks. Each of these specialised banks was assigned a specific task with a different loan policy to assist economic, industrial and agricultural development respectively (Cheng, 1993). For instance, the main task of the Bank of China was to manage foreign exchanges and international transactions whilst the Bank of Communication was established as a development bank and assigned the task of supplying long to medium term loans to industry. The Farmers' Bank was assigned loan policies to assist agricultural specialisation.

Foreign bank branches

To promote exports and gain access to international capital markets, five foreign banks were admitted. These were Dai-Ichi Kangyo from Japan, City Bank, Bank of America and American Express Bank from the United States, Bank of Bangkok from Thailand and Philippines Metropolitan Bank. These foreign bank branches were under strict regulations. For example, they were only allowed to take term deposits for a limited total amount.

Banks established by overseas Chinese

The Overseas Chinese Commercial Bank and Shanghai Savings and Commercial Bank were the first two private banks licensed in Taiwan. They were allowed entry because of their expertise, overseas trade links and, most importantly, their political ties with the KMT. Despite the request from domestic capitalists for private participation in the banking sector and the criticisms of state monopoly banks, the government did not respond to the appeals. It restored its own banks originally established in China to draw political support and to facilitate trade with overseas China (Cheng, 1993).

Financial developments relevant to the banking sector

Other than deposit-taking financial institutions, the China Development Corporation was

established as a developmental institution using equity participation from major banks and the private sector to promote new enterprises (Cheng, 1993). Finally, a stock market was created in 1962 to facilitate the supply of capital but unfortunately this capital market remained miniscule and speculative.

Credit allocation in the 1960s

Since the 1960s, Taiwan's economic growth promotion strategy has shifted from import substitutions to export based industrialisation. The second phase was the external orientation phase that lasted from 1962 to 1980. Government had to make changes to the foreign exchange policy, interest rates and tariffs. The multiple exchange rate system was unified between 1958 and 1961 with a fixed exchange rate system (Maguire, 1999).[39]

Bank credit that previously went to SOEs now went primarily to short-term export financing. Export financing was universal, not industry-specific, and automatic, extended to any firm with export-shipping documents (Shea, 1994). Allocation of bank credit became the primary capital source for investment especially after the termination of U.S. aid. The export financing policy was first introduced by the Bank of Taiwan in 1957, expanded by the central bank and nearly all commercial banks in 1962 and also supported by local branches of foreign banks after 1978. Compared with export financing, the amount of development financing through the specialised bank, Bank of Communication, was disappointing. The promised development fund did not materialised because SOEs were never diverse (Cheng, 1993). The Bank of Communication, which originally was assigned a task of supplying long to medium term loans to industry to assist its development, did not function as a development bank but rather as an ordinary bank and had to compete with commercial banks for short-term deposits in the 1960s.

5.1.3   Rapid expansion of banks in the 1970s and 1980s

At the turn of the 1970s, KMT authority continued to expand the banking sector and allowed more foreign bank branches in to respond to the crisis of international legitimacy. Correspondingly, major amendments were made to the Banking Act in 1975 to strengthen the regulatory framework. The Banking Act was originally enacted in 1931 and had only been modified three times in the following forty years. Since 1975, there have been fre-

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[39] The exchange rate was fixed to the USD. On 1 June 1961, a basic Official Rate of NTD40.00 per USD was established (The Chinese University of Hong Kong, 2000)

quent amendments of the Banking Act but not always for the benefit of strengthening the banking system. In general, the banking sector remained a state-monopoly with limited permits given to the private sector for political reasons. A new aspect for the banking sector in the 1970s was the entry of specialised banks for the small and medium enterprises (SMEs) sector[40] which was considered to be one of the main drivers for Taiwan's economic miracle to happen in the 1970s.

The Bank of China renamed as China International Commercial Bank

The Bank of China was privatised to an independent private institution and renamed as China International Commercial Bank to escape possible confiscation by the Chinese Communist regime but remained under control by the state.

Banks established by overseas Chinese

A special permit to initiate a new bank, the United World Chinese Commercial Bank, was launched by overseas Chinese in 1972 to collect support for the KMT regime which was suffering from diplomatic setback.

Specialised banks for small and medium enterprises (SMEs)

To give local capitalists their due share in the banking sector and to promote SMEs, the Taiwan Mutual Loans and Saving Company, previously controlled by provincial governments, was transformed into the Taiwan Medium Enterprise Bank (TMEB) in 1976 whereas the other seven private and local companies of this genre were turned into regional medium-sized enterprise banks between 1977 and 1979. Although there was a suggestion that these regional banks be recognised as all purpose citizens' banks to serve regional communities, the government decided to keep them as special purpose banks which only served the industrial and business community.

Financial developments relevant to the banking sector

Six permits were given for indigenous capitalists to create trust and investment companies (TICs) complementing the commercial banking sector for longer-term investment. These TICs however turned out to be a problem rather than a solution as what TICs were allowed

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[40] The definition of SMEs in Taiwan has evolved since 1967. According to Taiwan's Small and Medium Enterprise Administration (2010), the definition of SMEs in 1982 was: (1) In manufacturing, a paid-in capital under NTD 40 million (USD1.21million) and total assets amount not exceeding NTD 120 million (USD3.63million). (2) In the construction, mining and quarrying industries, a paid-in capital under NTD40 million (USD1.21million). (3) In commerce, transport services and other services, an annual operating revenue under NTD40 million (USD1.21million).

to do was never clear. In the end, TICs competed with banks for short-term funds and provided lending to speculative activities, notably real estate and often to the enterprise associated with the owners of TICs.

By the late 1970s, economic technocrats were again calling for an industrial upgrading and the financial sector underwent another round of restructuring but only partly to pursue the new industrial policy. In 1979, the Export-Import Bank was formed to promote high-credit risk exports and the Bank of Communication was decommissioned as a development bank. In 1982, TMEB was assigned as a development bank. However, these two development banks did not deliver their functions and continued to be evaluated by the same criteria as other commercial banks. More permits were given to foreign banks in the early 1980s, only not for the purpose of industrial development but for political reasons. Their presence in Taiwan was due to government's attempt to expand non-political ties with other countries after the U.S. withdrew its formal recognition in 1979 (Cheng, 1993). In summary, licenses for financial institutional expansion between the 1960s and 1980s were primarily issued to state-owned banks and sometimes to foreign bankers and overseas Chinese owned banks but rarely to indigenous capitalists.

Credit allocation in the 1970s

In the 1970s, export based industrialisation remained the economic growth promotion policy and assisting financing of export was the banks' key loan policy. In 1978, the government abandoned the fixed foreign exchange rate system and adopted managed foreign exchange (Braaten, 2010). Development financing became active in the 1970s with major sources from government's budgetary support and from postal savings. The development fund was allocated by the government to the Bank of Communication and the China International Commercial Bank who, supported by their own capital, would supply long-term loans for industry and exports. These policy loans however were absorbed by SOEs engaged in the Ten Major Construction Projects. As a result, SOEs became very dependent on bank credit lines and the relation between SOE and state-owned banks became tighter. Two other types of policy loans for the private sector were targeted at small and medium size entrepreneurs and the agriculture sector. Although the value of loans to SMEs remained small, the credit support for SMEs was hence institutionalised. Moreover, the new agriculture policy to maintain a living standard comparable with the urban standard made Taiwan's rural credit cooperatives one of the richest types of institutions in the country.

Credit allocation in the 1980s

With the further injection of budgetary support, the development fund became very active after 1982. Its size reached NTD 30 billion in 1988. The deposits from postal savings have been routed to the four development banks: Bank of Communication (40%), Land Bank (25%), TMEB (25%) and Farmers' Bank (10%) (Yu and Wang, 2005). The Land Bank and the Farmers' Bank continued to assist the task of renovating the agriculture sector and the other two banks were to support industrial upgrading. The credit policy was more specific and included two components: (1) new credit facilitates for strategic industries[41] which promoted industrial upgrading; (2) new credit facilities for key 'industries'[42] which were necessary for further economic growth. This loan facility was primarily for big enterprises. The preferential medium- and long-term low interest loans were offered to 'strategic' and key industries through the Bank of Communication. The interest rate difference between the strategic loans and the prime rate was around 1.75–2.75% (Smith, 1997). Finally, a new loan facility for upgrading 'strategic' small and medium-sized firms was available in 1982. A low-interest development loan for SMEs was established with an amount of NTD 16 billion; 25% of this amount was financed by the development fund and 75% was financed by the TMEB.

5.2 Analysis of governance qualities

Under financial repression, the state monopolised the financial sector, controlled interest rates, reserve requirement ratio and substituted the market mechanism by selective credit allocation. During this time, banks were rigidly controlled by the government that was unwilling to deregulate interest rates to improve the efficiency of state-owned banks or privatise the banking sector until the changeover of the president in 1988. Chen and Hsu (2005) describe the characteristics of the banking sector as the pillar of Taiwan's financial system with a principal function of allocating credits to targeted industries to promote economic growth. The following sections study governance qualities observed in Taiwan's post-war banking system. First quality to look at is property rights protection and the reasons are twofold. For one, property rights institutions ensure that credit allocation is efficient and that potentially all agents in the economy can access financial sector loans when

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[41] The Taiwanese government identifies strategic industries as 'industries that have to grow at an accelerated pace in order to promote improvements or breakthroughs in the present industrial structure'. The selected products were drawn from the mechanical, information, and electronics industries, biotechnology, and materials technology (Smith, 1997).

[42] The Taiwanese government identifies key industries as being 'indispensable to continued economic growth' and which included the purchase of automated equipment, domestically produced machines and pollution prevention equipment, the production of exports and the development of new products (Smith, 1997).

they qualify. This determines how well banks perform their main function of allocating resources efficiently (Fuchs, 2002). When the right over using economic resource is insecure, people typically have to pay transaction costs to enforce their claims on such resources. Furthermore, loan policy fundamentally influences banks' asset quality because it describes the organisation's risk tolerance and provides the parameters for managing those risks. A well-defined loan policy relies on institutions which enforces private property rights, supports private contractual arrangements, and protects the legal rights of investors and savers. Here, the banks' loan policy is focused when discussing governance function of protecting property rights. The second governance quality to consider is corruption prevention. As explained in the literature review, property rights protection is an important element for good economic governance and corruption is a sign of a violation of property rights. Governance mechanisms of corruption control ensure an upright banking system. Finally, political stability is the last governance dimension to be reviewed since a country's capacity and willingness to provide institutions for a well functioning banking system greatly rely on its relative political stability.

5.2.1 Property rights protection

Government used selective credit allocation to support industries which promote economic growth. The banks' main function during this time was to assist selective credit rationing and their main customers were SOEs or large enterprises. There are two characteristics of bank loan issuing during this period. First, medium- and long-term loans were in short supply due to the strict banking regulations. Second, there were preferential loans to target industries and large enterprises. The criticisms of this loan policy are that collateral was emphasised rather than the profitability or productivity of the borrowers; that public enterprise and larger firms were favoured over private and medium and small firms; and that export industries were privileged to obtain preferential loans compared with import industries or the non-tradeable sector (Shea, 1994). Under such loan issuing practices, the banks' credit allocation functioned poorly. This is evident from: (1) the active informal credit market. It is believed that the more backward a country's financial system, the more developed is its underground financial system; and (2) high national savings due to the lack of a satisfactory credit rating system to support investment activities.

5.2.1.1 Active informal credit market

This preference of bank financing to manufacturing industries was found to be unrelated to the order of production growth rates of manufacturing industries, suggesting that the financial institutions have not allocated loans according to the growth potential of industries (Smith, 1997). An example can be seen in credit allocation to the SMEs sector. The SMEs sector in Taiwan boomed during the 1970's and was considered to be the prime mover of Taiwan's rapid development at the time (Liu, 1998; Ernst, 1998). However, the poorly structured financial systems and conservative practices of bank loan issuing did not provide adequate aid to the SMEs. SMEs accounted for 98.9% of the total number of enterprises, 78.4% of total employment, 40.3% of total sales value and 69.7% of Taiwan's manufacturing exports by 1987 (Yang, 1996). However, only 19.8% of loans from regulated financial institutions went to SMEs in 1976 with an increase to 35.1% in 1987 (Table 5-2). As a result, SMEs had to rely heavily on informal financial markets to receive capital funding. In addition to this, consumption finance was completely neglected and consumers were left to seek capital from informal financial markets.

	1976	1981	1987	1976-1981	1982-1987	1976-1987
Domestic banks	20.7	30.2	36.8	27.8	33.5	30.7
General banks	19.7	26.1	31.8	24.0	28.4	26.7
State owned	2.1	4.2	7.7	3.8	5.2	4.5
Provincial owned	23.8	32.4	37.3	30.1	33.8	31.9
Private owned	10.7	12.2	15.8	13.2	15.1	14.2
Specialised banks (Medium and Small business banks)	56.8	78.0	74.4	71.2	77.7	74.7
Public owned	56.8	77.9	75.4	70.9	79.3	75.1
Private owned	-	78.2	73.1	78.4	75.5	76.7
Foreign banks	9.1	3.6	8.9	5.8	4.3	5.0
Total	19.8	27.4	35.1	26.0	31.6	28.8

Table 5-2 Lending from formal financial institutions to SMEs (as a % of total loan)

Source: Lin and Pang (1995)

Under such a loan policy, larger firms have found it easier to obtain financing from financial institutions, while the smaller the asset scale of a firm, the greater the dependence on kurb market finance - private channels for loans (Yang and Shea, 1999). The lack of capital access for private and medium-small firms and consumers created a great demand in underground finance and contributed to an active kurb market and Taiwan's financial dualism market (Table 5-3).

Year	Financial institutions	Money Market	Kurb Market
1965	55.8	n.a.	44.2
1970	62.4	n.a.	37.6
1975	70.0	n.a.	30.0
1980	55.0	8.9	36.1
1981	52.8	11.7	35.5
1982	53.4	13.4	33.2
1983	54.9	14.3	30.8
1984	54.7	15.1	30.2
1985	51.7	13.3	35.1
1986	50.6	8.4	41.0
1987	56.2	6.7	37.1
1988	63.3	6.3	30.4

Table 5-3 Sources of domestic borrowing by private enterprises, 1965-1988(%)

Source: Central Bank of R.O.C. (2003)

5.2.1.2 High national savings

The distortions in resource allocation can also be inferred from the high saving rates. Taiwan had one of the highest saving ratios in the world in the late 1980s (Shea, 1994). Government figures reveal that the share of gross domestic savings in Taiwan's GNP has risen steadily from 14.9% between 1951 and 1960 to 21.1% between 1961 and 1970. It grew again to 31.9% between 1971 and 1980 and rose further to 33.3% between 1981 and 1990 (Table 5-4).

There are many reasons for Taiwan's high savings rate such as growth rate in real GNP, a stable price level and large government savings.[43] Furthermore, government's policy of high real rates of interest on deposits, and tax exemption for interest income on most bank deposits has also contributed to this high rate of saving. For instance, the highest interest rate set on short term deposit was 16.2% in the 1980s with the lowest interest rate set at 5.5% (Hsieh, 2007). In addition to the vigorous saving promotion by financial institutions, a high rate of return from convenient informal financial systems was another factor which contributed to Taiwan's high national savings. It might be argued that the high savings were due to the absence of a social welfare system, an underdeveloped consumer credit

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[43] Government savings accounted for 21% of national savings and 20% of government current revenues over the period 1951-1990 (Shea, 1994).

system and low accessibility to consumer financing (Maguire, 1999). Higher savings should provide more funds for investment purposes. However, the lack of a satisfactory accounting system that allows effective credit rating has led the government to follow an investment policy guided by caution and risk avoidance.

Period	Gross domestic investment	Gross domestic savings	Net Foreign borrowing [*]
1951-1960	16.08	14.91	1.17
1961-1970	21.89	21.07	0.82
1971-1980	30.48	31.85	-1.37
1981-1990	22.26	33.28	-11.02

* Data in this table are simple averages of annual data. a. Net foreign borrowing is gross domestic investment (column 1) minus gross domestic savings (column 2)

Table 5-4 National savings, investments and net foreign borrowing (as a % of GNP)

Source: Directorate-General of Budget, Accounting and Statistics, R.O.C. (1991)

As can be seen from Table 5-4, the investments in Taiwan have been financed entirely out of domestic savings with the investment ration falling sharply in the 1980s. Reasons for the falling investment rate include rising labour costs, environmental considerations, unavailability of land and social and political unrest (Shea, 1994).

5.2.2   Corruption prevention

From the very beginning of the KMT's authority, there existed a structural symbiosis between party and state. The party relied on the resources and coercive power of the state to preserve its institutional prerogatives and to squash any attempt to form opposition (Chu and Lin, 2001). As a result, the KMT party was able to allocate financial resources and facilitate funding through the state's financial system. From a political economic perspective, the corrupt dealing can be interpreted as individuals rationally opting for corruption when, given their preference, the institutional system of incentives and opportunities makes such activity profitable (Porta and Vannucci, 2004). The problems which are inherent in the incentive structure of a state-dominated banking sector are bureaucratic state-owned banks and risk-taking local private banks. The former encourage rent-seeking behaviour in state-owned banks whereas the latter use extralegal methods to obtain loans.

5.2.2.1 Bureaucratic state-owned banks

Under strict regulations and control by the government, the state-owned banks in Taiwan functioned more like pawnshops than like modern financial institutions. The very conservative lending policy by the state-owned banks was a result of: (1) very limited freedom in banking operation due to restrictive regulations; (2) personal liability for the bad loans made by individual bank officers; and (3) insufficient information from clients when issuing loans (Cheng, 1993). Without a reliable credit checking system and strict punishment of banks for bad loans, the loans issued by banks mainly depended on collateral provided by the loan seeker and the size of the enterprises. The preferences for issuing loans were SOEs, then big enterprises and finally small and medium-sized enterprises, with consumers rarely receiving credit. On one hand, big enterprises and SOEs became very dependent on bank credit. On the other hand, state-owned banks rely on these enterprises for their loan business. This formed tight relations between state-owned banks, the KMT ruling government, SOEs and big enterprises. Together with the serious legal penalties for bankers who make excessive bad loans, these factors were to blame for state-owned banks' conservative practices with respect to loan issuing (Maguire, 1999).

The conservative practice does not mean that there was no rent seeking behaviour; where there is credit allocation, rents are inevitable. Rents can be captured by a bank or banker through forced compensatory deposits requested from a loan guarantee. According to the size of the kickbacks, rents can also be captured and split between bank officers and loan recipients. Rent-seeking, however, does not necessarily mean non-performing loans. Some risk-adverse bankers were corrupt but because they collected kickbacks from firms with collateral, the size of non-performing loans in Taiwan's banking sector remained small until the late 1990s when the estate market collapsed. The reciprocal relation between banks and state/big enterprises was established and a close link between the KMT party and the banking sector was formed.

5.2.2.2 Risk-taking local private banks

Under state-dominated finance, there was not much space left for private financiers. In the banking sector, local capitalists only gained permits for urban credit cooperatives and local medium-sized business banks before banking privatisations in 1989 (Table 5-5).

Period	Institutions	Number
1909 -	Credit cooperatives	7
1948 - 1952	Mutual loans and savings	17
1961 - 1963	Insurance companies	7
1971 - 1972	Trust and investment companies	7
1976 - 1978	Bills exchange companies	3
1977 - 1979	Existing MLSs turned into local medium-sized business banks	7

Table 5-5 Entry into the financial sector by local capitalists, 1909-1979

Source: Cheng (1993:75)

Those who were allowed to enter the banking sector did their utmost to expand their business to compete with state-owned banks and often went beyond what they were licensed for. Except for Mutual Loans and Savings, owned by political cooperative, Taiwanese elites at the provincial level and above, the other areas of financial activity opened to private financiers all experienced problems at a later stage (Cheng, 1994). In particular, the scandals associated with credit cooperatives were serious and even at risk of promoting a financial crisis at one point. The political liability and connection of the credit cooperative to the KMT regime was responsible for most of the scandals in rural credit cooperatives and became a threat to Taiwan's banking system. This problem was not tackled until the change of ruling party in 2001.

5.2.3 Political stability

The third aspect to reviewing governance capacity is political stability because no designed institutions are able to perform their functions in an unstable political environment. The two governance aspects discussed above, property rights protection and corruption control, depend largely on relative political stability. Ever since the R.O.C. government relocated from China to Taiwan in 1949, Taiwan-China relations have been a main issue in maintaining Taiwan's political stability. Another issue which potentially threatens Taiwan's political stability is the conflicts between the Chinese immigrants[44] and native Taiwanese. The former issue led to Taiwan's political isolation from the global community and the lat-

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[44] This refers to China-born KMT members and a million troops followed the KMT's relocation from to Taiwan (Chu and Lin, 2001).

ter caused racial division. The issue of racial division remained untouched under KMT rule for fifty years until the change of government in 2000.

5.2.3.1 Political isolation

During the Cold War years, the R.O.C. government based in Taiwan and the P.R.C. government based in China both claimed sovereignty over all of China and Taiwan, and each attempted or threatened to use force to resolve the sovereignty issue. In the 1970s, China began to employ the One-China policy and during this time the KMT regime led R.O.C. government lost its seat at the United Nations to the Chinese Communist led P.R.C. government. Since then, China has been oppressing Taiwan in the international arena and isolating it from the global community. The crisis of international legitimacy caused the KMT authority to crumble and jeopardised further development in Taiwan. While the world recovered from the war, and the global political situation became more stable, Taiwan has begun a long term stand-off with China. In response to China's One-China principle, the government of Taiwan maintained minimum contact with China and employed the 'three no's' policy - no contact, no negotiation, and no compromise. The relationship between Taiwan and China remained deadlocked which increased uncertainty and political struggle for Taiwan.

5.2.3.2 Racial divisions

The conflict between the Chinese immigrants and the native Taiwanese was a problem when the R.O.C. government relocated to Taiwan and has remained an issue ever since. Under fifty years of Japanese rule, Taiwan experienced a protracted period of stable social and economic development and, as a consequence, was more modern than most of China. The native Taiwanese had inherited a different social, political and cultural structure than the Chinese immigrants. The social, political and cultural gaps between the two groups were huge. When the KMT party relocated to Taiwan, 85% of the inhabitants were native Taiwanese and the other 15% of the population were the Chinese immigrants (Chu and Lin, 2001).The KMT party took over the island without a carefully-prepared retrocession plan as Taiwan was only a sideshow to their grander effort to recover all of China after the war. The ruling government paid little attention to merging the two groups and solving their differences.

To make matters worse, the new administration formed under the KMT's regime was staffed by its loyal followers from China. To consolidate state power, harsh measures were introduced to control and mobilise party members, the military, the bureaucracy, the youth, the farmers, and the workers. The discriminated treatment resulted in conflicts between Chinese immigrants and native Taiwanese. One of the most grievous tragedies which happened in Taiwan's post-war history was the 228 Massacre. On 28 February 1947, a single event of police brutality sparked an island-wide popular uprising and transfigured a latent Taiwanese nationalism into a burgeoning independence movement.[45] This incident has imprinted a strong mark in Taiwan's history. The tragic event had a profound and lasting effect on the Taiwanese people, however for a long time it was the biggest political taboo which people could neither publicly discuss nor research. The Democratic Progressive Party (DPP) was launched illegally after this incident with principles of strong advocacy of human rights and distinct Taiwanese identity (Democratic Progressive Party, 2009). The tragic event was resurrected during the political democratisation of the 1990s. During the election of Taiwan's president in 2000, it became an open discussion representing Taiwan's repressive past. The abrupt ending of colonial rule turned the world upside down for the native Taiwanese in the island who found themselves completely left out of the political and economic system. In the financial sector, the native Taiwanese were only active in grass-roots organisations.

5.3 Pressures for financial deregulation in 1989

The negative consequence of state ownership and control of the banking sector have been major themes of public policy debates in Taiwan throughout the post war period. The financial liberalisation was called upon to privatise the state-owned commercial banks, lift the ban on new domestic entry into the banking sector and establish the regulations for the privatised banking sector. Advocates of financial liberalisation in Taiwan came from the domestic indigenous capitalists, neoclassical economists and technocrats. Technocrats urged the divestment of state-owned banks to finance industrial upgrading of the private sector. Liberal economists also proposed the deregulation of interest rates to improve the efficiency of state-owned banks. In addition, pressure for deregulation also came from the U.S. and other foreign countries. Finally, the change in political and economic climate also

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[45] An incident of police brutality against the native Taiwanese led them to rebel against the government. The KMT government responded with a harsh military crackdown. Thousands of native Taiwanese, including numerous well-educated and well-respected social elites, were persecuted and purged. Many lives were also lost as a result of internal strife among faction-based security and intelligence organs during the crackdown (Kerr, 1965).

contributed greatly to the banking liberation which took place in 1989. These factors are elaborated upon in the sections below.

5.3.1 Demand from domestic capitalists and economists

After a good decade of rapid economic growth, the private sector clearly dwarfed the public sector in industrial production. The KMT regime made efforts to keep indigenous capitalists under control and prevent their entry into the domestic banking sector due to its distrust of these people. Pre-1987, when the Taiwanese state was the dominant economic actor, the business community was organised in a number of ways to cope with the changing and risky economic and political environment. The most powerful organisations in the business community were conglomerates - multi-purpose business groups which were formed from extended family members as well as investors. These business groups not only shared capital and personnel but also connected with other groups through interlocking directorships. Leaders of these business groups often assumed positions in city councils, provincial assemblies, the national assembly, and party organisations (Numazaki, 1986). The conglomerates with strong political connections and financial resources grew rapidly in the mid-1980s and pushed hard for entry into the banking business.

5.3.2 Pressure from foreign capital

At the end of the 1980s, private capital in Organisation for Economic Co-operation and Development countries were transferred to the developing world through institutional investors, including insurance companies, pension and retirement funds, and mutual funds. The underdeveloped and highly regulated financial markets in East Asia thus faced enormous pressure to open up (Lee, 2004). The pressure from foreign capital pushed the Taiwanese government to open the protected sectors for foreign capital to participate.

5.3.3 Trade surplus

Despite rapid export expansion in the 1960s and 1970s, by the early 1980s the Taiwanese economy was facing a number of structural pressures. Under government's foreign exchange control, the increasing trade surplus enlarged the foreign reserve and incurred higher costs for holding the great amount of foreign reserve. The trade surplus was about NTD 360 billion in 1981 and increased to NTD 5,650 billion in 1986. Trade surpluses increased sixteen times in six years, the value of the NTD (against the USD) dropped from 37.79 in 1981 to 35.45 in 1986 and further to 28.12 in 1988 (Table 5-6).

Year	Trade surpluses	Foreign reserve	Exchange rate (NTD/USD)	Money supply	
				M1b	Growth rate
1981	36,217	244,388	37.79	451,560	13.79
1982	97,797	354,561	39.86	459,410	1.74
1983	181,425	554,086	40.22	545,114	18.66
1984	262,430	771,169	39.32	621,501	14.01
1985	341,483	1,168,666	39.80	675,988	8.77
1986	565,176	1,649,063	35.45	895,616	32.49
1987	561,443	1,981,955	28.50	1.311,063	46.39
1988	377,967	2,062,838	28.12	1,705,743	30.08

Table 5-6 Trade surpluses, foreign reserve and money supply. Unit: NTD million

Source: Directorate-General of Budget, Accounting and Statistics, R.O.C. (1991)

The rising trade surpluses did not only place heavy upward pressure on the exchange value of the NTD; pressure from the U.S. to open markets in financial areas after the Plaza Accord[46] forced Taiwan to change its policies on foreign exchange and regulation (Hsieh, 2007; Chen and Hsu 2005).

5.3.4   Change of political economic atmosphere

Within the KMT party, there was a split between the Taiwanese populists and Chinese bureaucrats who held different views on financial policy. The former echoed the liberalised economists view with regard to opening up the financial system while the latter held firm views on financial control and restricted entry into the banking sector. Since the KMT took over government in 1949, Taiwan had been under one-party authoritarian rule; leadership of the KMT transferred from Chiang, Kai-Shek to his oldest son Chiang, Ching-Kuo in the late 1960s. A succession crisis loomed after Chiang, Ching-Kuo's deteriorating health became public knowledge in 1985. During the last few years of his tenure, he initiated a series of political reforms to prevent a future deeper crisis, including nominating Lee, Teng-hui, a Taiwanese native, as the vice president and his official successor in March 1984. The death of Chiang Ching-Kuo in 1988 hastened the breakdown of one-party authoritarian rule. The first Taiwan born leader, Lee-Deng-hui, chaired the KMT and assumed presidency. He led the Taiwanese populists within the KMT to collude with local political factions to challenge the dominance of the Chinese bureaucrats (Chen and Hsu, 2005). Such dra-

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[46] The Plaza Accord or Plaza Agreement was an agreement between the governments of France, West Germany, Japan, the U.S. and the United Kingdom, agreeing to depreciate the USD in relation to the Japanese Yen and German Deutsche Mark by intervening in currency markets (Funabashi, 1988).

matic change of the political atmosphere in the late 1980s made the entry of private capital into the banking system possible.

In addition to this, the change of economic climate also contributed to the push for financial liberalisation. As Taiwan's comparative advantage in labour cost declined over time, capital-intensive industries, service industries, and later knowledge-based industries began to replace the old labour-intensive industries as the source of Taiwan's economic vitality. According to Chen and Hsu (2005), the economic reconstruction pushed the majority of Taiwan's labour-intensive sector to move out to search for cheap labour. Information technology industries began to actively raise funds from the domestic capital market and the market price of electronics stock reached a high. The whole market began to overheat in the 1990s.

5.4 Summary

Until 1989, Taiwan had a financially repressive system where government maintained artificially low interest rates and used preferential credit schemes to allocate financial resources. This system gave the government the ability to efficiently direct domestic savings to banks and productive investment projects in the presence of financial market failure. By correcting market failure problems, financial repression helped Taiwan to improve the efficiency of its financial system and to increase economic growth. McKinnon (1993) commented on the success of Taiwanese financial repression, stating that a high real interest rate is the key to improving the efficiency of capital markets. However, it was also the stability of price levels that kept Taiwan from any major financial collapse and hence promoted its financial development and output growth.

While the financial system successfully fulfilled its missions on maintaining a stable macroeconomic environment, it was not developed as a sound financial system. Instead, it was developed under the preference of the ruling regime and its structure fully reflected the KMT leadership's obsession with two political objectives: (1) maintaining a stable macroeconomic environment; (2) guarding against the rise of big indigenous financiers (Cheng, 1993). The political elites in the government have been carefully guarding their dominance in the financial sector by controlling entry to that sector. Chen and Hsu (2005) summarise three characteristics of the financial repression in Taiwan before its liberalisation started in the late 1980s: (1) on one hand, finance played the supporting role for the national indus-

trial policy. On the other hand, the state had to tame the financial beast to weaken its subverting potential by controlling its full fluidity. (2) The banking sector with controlled credit allocation played the supporting role in Taiwan's financial system. (3) The weakness of the capital market led most households to choose bank deposits as the main saving investment even when the official interest rates were low.

Governance features in the banking sector were observed in three areas. *First*, institutional quality in terms of property rights protection was observed in bank loan policy and credit allocation functions. Although the financial system had a good record of stimulating and mobilising domestic savings, the active informal financial market and high savings rate show that signs of dysfunctional credit allocation have left the loan policies often criticised. There have been debates on whether the loan policies defined by financial institutions help to efficiently allocate credit. A study by Haggard et al. (1995) suggests that government allocation of credit might be efficient from the transaction cost point of view but it will only work with a competent, informed and strong government whose motives were to maximise social welfare by offsetting and correcting imperfections. However, the KMT government's politically motivated loan policy was not designed to provide capital access for best potentials businesses. The preferential credit policy was used as an instrument to control the emergence of large capital rather than to shape the industrial structure or develop a sound financial system. Hence, banks had developed rather conservative practices for issuing loans and mainly depended on collateral provided by the loan seeker and the size of the enterprise to make their assessments. Since the government had full control of the financial system and banks' credit allocation, there was little need for the financial administration to perform its supervision role and for a credit checking system to be developed to support banks' loan decisions.

Second, the institutional quality of preventing corruption was looked at. The state-dominated banking system led to bureaucratic state-owned banks and high risk-taking private banks. The former heavily relied on the government's resources to operate and a network between banks, SOEs, the KMT and large enterprises began to establish. The local cooperatives owned by private financiers used extralegal methods to obtain loans through connections or the underground financial market posing a potential threat to the financial system. Management positions in banking institutions, particularly in state-owned banks and local credit associations, were used as rewards by the KMT for its royal supporters.

Finally, the institutional function of providing a stable political environment for the banking system to develop was deeply affected by Taiwan's political situation with China. Due to P.R.C.'s One-China policy, Taiwan was isolated from the global community and faced a crisis of international legitimacy. In addition, although the issue between Chinese immigrants and native Taiwanese was never addressed during this time, it acted as a potential threat to Taiwan's national stability. The governance features in terms of political stability were that deadlocked political relations with China and potential racial conflicts brought uncertainties in the financial industry.

When the KMT party took over the island, Taiwan was only a sideshow to their grander effort to recover all of China after the war. Therefore, the financial system was not built according to a carefully-prepared plan but mainly to provide financial resources for the KMT regime to survive. As a result the banking system was developed under strong political motivation and such attitudes and behaviours are inherent in the system and have profound impacts on further development in banks. Since the 1980s, Taiwan has undergone economic liberalisation, social diversification, and political democratisation. However, its financial liberalisation progress only speeded up after the breakdown of one-party authoritarian rule in 1988. The next chapter investigates the consequences of democratisation and financial deregulation for banking privatisation which began in 1989.

6 Banking privatisations: 1989-2000

The development of the financial system in post-war Taiwan was planned by the government with the main functions of maintaining economic stability and controlling domestic capitalists. Pressures that contributed to liberalisation of the financial system included demands from domestic capitalists and economists and also from foreign investors. However, it was the change of political atmosphere in the late 1980s which made Taiwan's financial liberalisation possible. Its political democratisation process started with the lifting of martial law in July 1987 and speeded up when the first Taiwan born leader Lee-Deng-hui chaired the Kuomingtang (KMT) and assumed presidency in January 1988.

Following President Lee's inauguration, he carried out a reshuffle of key personnel in important financial organizations such as the Chairman of the Central Bank of the R.O.C. (CBC) and the Chairman of the Bankers Association of the R.O.C. (BAROC)[47]. The year 1989 is considered a milestone in the financial modernisation process with the majority of influential acts implemented in this year. For instance, the New Bank Act which freed interest rates and allowed the entry of private banks was passed in July 1989. At the end of 1989, the new banking law completely abolished the interest rate floor and ceiling and ended the history of interest rate control in Taiwan. Within two years of the new presidency, there were rapid changes in the financial system and a new set of regulations was implemented. Since then, many milestones in Taiwan's political and financial history have been established.

The transformation of Taiwan's banks can be divided into three stages in the 1990s. In the early 1990s, banks tended to improve their competitive advantage in the market by setting up branches allowed by liberalisation. In the second stage, bank profits had decreased because of over-banking and over-competition. In addition, the standard of service required by customers had risen. Those banks that were not strong enough were eliminated through this competition. State-owned banks were forced to privatise and restructure. In the third stage, over-banking led to a worsening of performance that forced banks to integrate with other financial institutions.

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[47] BAROC was founded on 9 August 1983 with aims: (1) to assist the government in implementing financial policies (2) to promote economic development (3) to coordinate its members' relationship (4) to improve its members' mutual benefits (The Bankers Association of the R.O.C., 2009).

The previous chapter looked at the development of financial governance in post-war Taiwan between 1949 and 1988. Governance qualities observed in the state-dominated banking system were as follows. In terms of property rights institutions, Taiwanese banks had a rather conservative loan policy and no attention was given to develop credit systems that support the banks' loan risk management. As regards corruption prevention, bureaucratic state-owned banking created reciprocal relations between state-owned banks and big enterprises. The local community banks became political liability to the KMT ruling party. With respect to the political environment, Taiwan experienced a crisis of international legitimacy, and isolation from the global community. However, its political environment remained stable under the KMT's one-party authoritarian rule as the party's leadership designed a political machine capable of bringing order and stability to the island. Following the same outline as Chapter 5, this chapter explores governance features in the banking privatisation period between 1989 and 2000.

The chapter is organised as follows. Section 6.1 studies the transformation from a state-owned banking system to a privatised one. The focus is on political influence on financial development, the consequences of rapid expansion of banks, and credit allocation policy. Section 6.2 discusses governance qualities. The factors pushing Taiwan's financial reform in 2001 are considered in section 6.3. Section 6.4 summarises the chapter.

6.1 Banking privatization: 1989 to 2000

Financial modernisation brought better development of Taiwan's financial markets. Among the moves to liberalise financial institutions, the most dramatic changes were in the banking sector. The policy for banking liberalisation was proposed during the legislative disruption within two months of the lifting of martial law in 1987. However, the bill was delayed due to the internal fighting between the Taiwanese populists and Chinese immigrants within the KMT party. The former, led by Lee-Deng-hui, supported liberalisation of the financial system while the latter insisted on keeping firm financial control. After Lee assumed presidency in January 1988, he undertook an exercise in personnel restructuring. The Legislative Yuan[48] passed the first reading for the revised Banking Act in June 1989. The second and third readings were passed within the same day in July 1989 (Hsieh, 2007).

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[48] The Legislative Yuan (yuan, court or branch) is the central government's sole law-making body. It comprises 161 legislators (in 1991), one per electoral district, who serve four-year terms and are eligible to stand for re-election indefinitely. The legislature also has budgetary, interpellation, treaty, and war power responsibilities, among others (Government information office, R.O.C., 2004).

The revised Banking Act liberalised the establishment of new private banks and granted the Ministry of Finance (MOF) power to authorise new banking products.

6.1.1 New private banks

Following this, the MOF received a total of nineteen bank applications and granted fifteen licenses in June 1991. In addition, the largest investment and trust company,[49] China Securities Investment Corporation, was allowed to convert to a commercial bank, Chinatrust Commercial Bank, in July 1992. The Chinatrust Commercial Bank, together with the fifteen new banks, made up of a total of sixteen private commercial banks by July 1992. The backgrounds of the newly established banks are listed in Table 6-1.

Many of the arguments surrounding financial deregulation have focused on the licenses granted to new private commercial banks. In Hsieh's (2007) study, he pointed out three concerns over the MOF's examination process for issuing licenses to new banks. First, the large number of licenses issued for new banks to join the twenty-four old-established banks. Second, although a set of criteria was worked out for permitting establishment of new banks, there were loopholes in the financial authority's process for examining applications. For example, when an application did not adequately meet the criteria, it was not clearly defined whether to reject that application completely or to give an opportunity for its correction. The examination process was not transparent and the rules explaining what the financial authority's judgement was based upon were not clear. Another example can be seen in the restrictions on shareholders. The revised Banking Act limits an individual's ownership stakes to 5% and group shareholdings to 15% of any newly established private bank. It also puts stringent limits on related-party lending to prevent financial scandals (Yang, 1994). However, some applications were questioned because their funding resource and group shareholdings were greater than 15%. In the end, some applications went through after being retuned for correction. The third concern was regarding the members of the Legislature's Finance Committee which was formed to provide the Legislation with objective fiscal and public policy analyses and recommendations. None of the new banks which had shares held by members from the Legislature's Finance Committee failed to ob-

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[49] The Chinatrust was first established in 1966, as China Securities Investment Corporation , to facilitate the trading of stocks given to landlords as compensation for lands transferred to farmers during the government sponsored land reform programme. During its existence, the bank has undergone two reorganisation schemes: changing its name to Chinatrust Investment Co., Ltd. in 1971 and later, transforming its operations to Chinatrust Commercial Bank in 1992 (Chinatrust Commercial Bank, 2009).

tain an operating license. This provoked questions about the fairness and impartiality of the MOF's examinations of applications for banking licenses.

Name and opening date	Capital (billion NTD)	Chair	General manager
Asia Pacific 1992 Feb. 12	10.0	Former manager of Bank of Taiwan	Former manager and director of Bank of Taiwan
Baodao 1992 Apr. 09	10.0	Business group owner	Former manager and director of the Cooperative Bank of Taiwan
The Chinese Bank 1992 Jan. 25	10.0	Business group owner	Former Deputy-manager of Overseas Chinese Commercial Bank
Chung Shing 1992 Mar.12	13.5	Mayor of Kaohsiung City	Deputy-manager of City Bank of Taipei
Cosmos 1992 Feb. 12	12.0	Business group owner	Former director of the Bureau of Wine and Tobacco Monopoly; Former Deputy-manager of the Lank Bank of Taiwan
Da An Commercial 1992 Jan. 4	10.0	Former Minister of finance	Former Deputy-manager of the Chiao Tung Bank
Eastern Sun 1992 Jan. 21	10.0	Professor at Taiwan University	Deputy-manager of the Hua-Nan Commercial Bank
Far East International 1992 Apr. 21	10.0	Business group owner	Former Deputy-manager of the International Commercial Bank
Fubon Commercial 1992 Apr. 21	10.0	Business group owner	Former manager of the Hua-Nan Commercial Bank
Grand Commercial 1991 Dec. 30	12.6	Business group owner	Manager of First Commercial Bank
Our Commercial 1991 Dec. 30	10.5	Councillor in Kaohsiung	Former Deputy-manager of Medium Business Bank
Sino Pac 1992 Jan. 28	10.0	General manager of Overseas Chinese Commercial Banking Corporation	Deputy-manager of the Bank of Taiwan
Taishin Intl 1992 Mar. 23	10.0	Business group owner	General manager of the Central Deposit Insurance Corp; former Deputy-manager of City Bank of Taipei
Tan Asia 1992 Mar. 4	10.0	Former general manager of the Bank of Taiwan	Former Deputy-manager of the Medium Business Bank of Taiwan; business group owner
Union Commercial 1992 Jan. 24	12.0	Controller of another bank	Former Deputy-manager of the First Bank

Table 6-1 Banks established between 1991 and 1992

Source: Yung (1994:321)

In addition to the examination process, the openness of entry to the banking business was seen to be in favour of big business. Small and medium businesses, which accounted for 98.9% of the total number of enterprises and 69.7% of Taiwan's manufacturing exports in 1987, did not have investment opportunities in the financial sector. The minimum amount of capital for an entry was NTD 10 billion and required that at least 20% of the shares be issued to the general public. One of the possible explanations for such a large capital requirement is the KMT government's intention to be selective over commercial bank entries. Under the political leaders' anti-capitalist bias, large scale businesses which were able to provide this substantial amount of capital were businesses which had built good connections with the KMT.

6.1.2   Privatisation of state-owned banks

As discussed in Chapter 5, the negative consequences of state ownership of the banking sector started to attract attention and there were pressures from capitalists and economists to privatise the state-owned banks. This factor, together with the fierce competition from the new banks, caused the government to launch its privatisation programme in 1989 (Chang, 1994). In Taiwan, a bank is regarded as privatised when the government's holding falls below 50%. Starting with the three most influential banks, the First Commercial, Hua-Nan and Chang-Hwa banks, the authority planned to release 50% of the government's equity to the public. However, resistance from members of the Taiwan Provincial Government which held shares in these banks caused a delay. According to Yang (1994), the provincial council members were reluctant to give up their authority over these banks which gave them the ability to interfere, in particular in the loan-extending process, and provided massive fiscal revenue to both the central and local governments. In the end, the MOF gave in and began planning instead to privatise some of the central government owned specialised banks (Yang, 1994). The plan to privatise the state-owned banks was postponed for a decade until the downsizing of the Taiwan Provincial Government in 1998, when four state-owned banks, First Commercial, Hua-Nan, Chang-Hwa Banks and Taiwan Business Banks, which used to belong to the provincial government, were privatised (Fell, Klöter, and Chang, 2006). Then in 1999, another four state-owned banks belonging to city governments followed suit. As can be seen from Table 6-2, the number of state-owned banks remained at thirteen until 1998, and then reduced to nine in 1998 and five in 1999. The privatisation process for these banks was slow and at the same time they faced keen com-

petition from the newly entered banks and the loss of some well trained staff to the new establishments.

	Domestic commercial banks		Foreign banks branches in Taiwan
	Private	State-owned	
1991	12	13	36
1992	27	13	36
1993	27	13	36
1994	29	13	37
1995	29	13	37
1996	29	13	41
1997	39	13	46
1998	39	9	46
1999	47	5	41
2000	48	5	38

Table 6-2 Change in the number of state-owned banks and private banks

Source: Li and Tang (2007)

6.1.3 Ownership structure and rapid growth of banks

The market entry deregulation in the banking sector had an impact on its ownership structure and caused a rapid increase in the number of banks. First, the ownership structure changed from a state-dominated to a privatised system. In 1991, the thirteen government-owned banks controlled 54% of total bank assets, held 82% of all the domestic deposits and granted 65% of all domestic loans (Byun, 1998; Li et al., 2007). The privatisation of state-owned banks suffered a long delay, until 1998, when the four major state-owned banks mentioned above were transformed to private commercial banks by selling shares to the public. Figure 6-1 shows the ownership of banks by the end of 1998 when government owned banks and private banks controlled 35% and 38% respectively of bank assets. The four ex-government owned banks controlled 22%[50] and the foreign banks only 5%.

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[50] According to the Bureau of Monetary Affairs of Finance, R.O.C. (1999), the four ex-government owned banks, First Commercial Bank, Hua Nan Commercial Bank, Chang Hwa Commercial Bank and the Taiwan Business Bank, were ranked the fourth, fifth, sixth and seventh largest banks in Taiwan by the end of 1998.
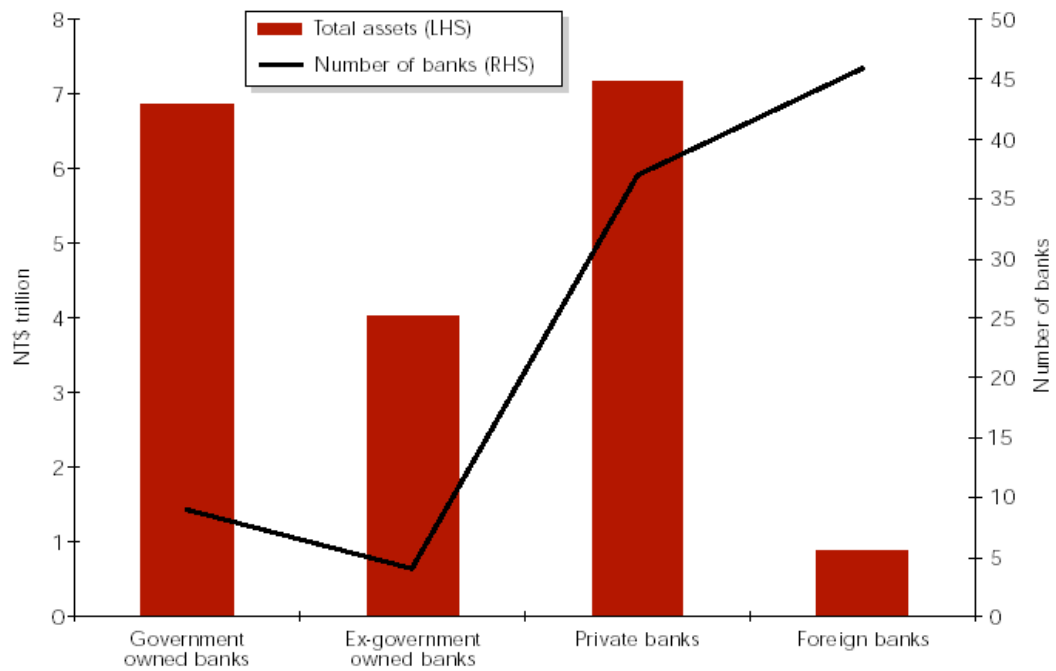
Figure 6-1 Assets and number of banks in Taiwan (December, 1998)

Source: Australia-East Asia Analytical Unit (1999).

The majority of the banks' assets were controlled by the government and conglomerate-owned private banks. Among the private banks, the KMT's conglomerates were the biggest shareholders. According to Chen (2004), the total assets of KMT enterprises amounted to USD 200 billion by the end of 1998, which ranked fifth among Taiwan's 100 largest conglomerates. Through these enterprises, the KMT had been able to manage and control four banks.[51] Among the four, the Zhonghua Development Industrial Bank was ranked first in Taiwan's 150 financial institutions both in terms of profit rates and of return on assets in 1999. The four ex-government owned banks were the third largest asset holders. These partially or fully privatised banks may still be under informal government influence (Australia-East Asia Analytical Unit, 1999). Along with liberalisation, some of the state-owned banks had been privatised; however, the KMT government as the largest single shareholder still retained substantial influence over important decisions in state-owned banks (Sato, 2002). The possibility was reduced for fully privatised banks but was not completely removed. Finally, the small share held by the foreign banks indicates their limited involvement in Taiwan due to the restrictions upon their operations. Overall, ownership of the

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[51] The Gaoxion Enterprise Bank, the Zhonghua Development Industrial Bank, Fanya Bank and Huaxin Commercial Bank (Chen, 1994).

banking sector had changed but the KMT as the then ruling party retained its control over the financial system and was able to exercise strong influence.

Second, the new entrants into private banking following deregulation led to a rapid increase in the number of banks. The number of head offices of domestic banks increased from twenty-four in 1989 to fifty-two in 1999 in addition to fifty credit cooperatives and 314 CDFFAs (Table 6-3).

End of period	Head office			
	Domestic banks	Credit cooperatives	Credit depart-ments of farmers' associations	Credit depart-ments of fisher-men's associa-tions
1989	24	74	282	22
1990	24	74	283	24
1991	25	74	285	26
1992	40	74	285	27
1993	41	74	285	27
1994	42	74	285	27
1995	42	73	285	27
1996	42	73	285	27
1997	47	64	287	27
1998	48	54	287	27
1999	52	50	287	27

Table 6-3 Numbers of Taiwanese banks between 1989 and 1999

Source: Council for Economic Planning and Development Executive Yuan R.O.C. (2000)

To increase their competitiveness, the domestic banks established branches to extend their market shares. Within about ten years, the number of domestic banks including main offices and branches increased threefold from 927 in 1988 to 2,628 in 1999 (Figure 6-2).

Taiwan, a nation of 23million people, was crowed with 4,428 domestic depository financial institutions including main offices and branches by the end of 1999. The excessive number of new banks and rapid expansion had led to an over-banking situation. According to Lim (2009), the original plan was to issue six permits for private banks to increase the competitiveness in the financial market. In the end sixteen permits were issued by the government for political reasons.

Change in the number of domestic banks
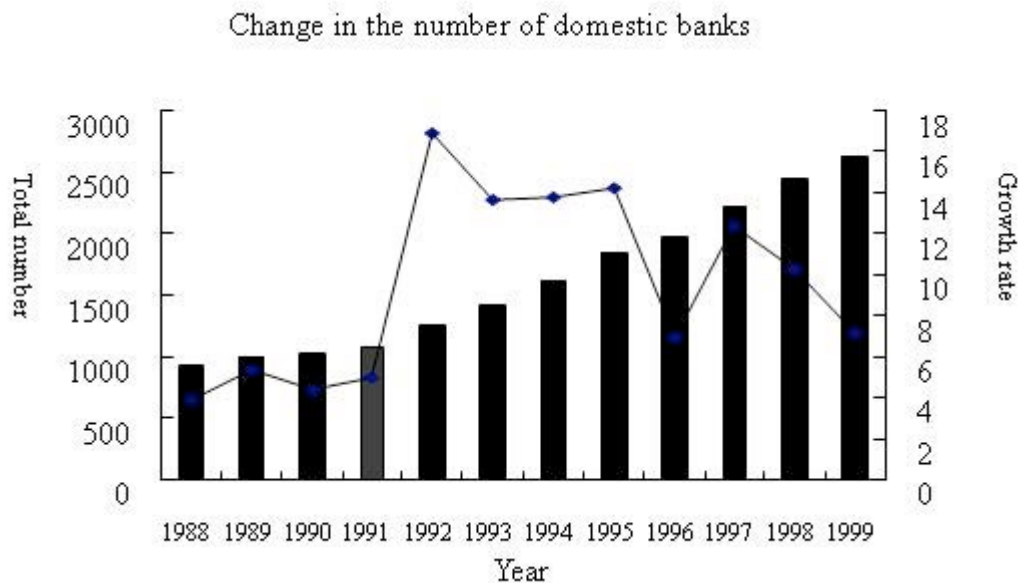
*Note:: Number includes main offices and their branches

Figure 6-2 Change in the number of domestic banks in the 1990s

Source: Council for Economic Planning and Development Executive Yuan R.O.C. (2000)

On average one depository financial institution served 5,194 people in 1999 compared with 8,627 people in 1991. Banks' concentration ratio had dropped significantly from 62.4% in 1991 to 38.9% in 1992 after the entry of fifteen new banks. After that, the ratio gradually decreased from 34.1% in 1995 to 28.3% in 1999 (Beck et al., 1999). Taiwan's top three banks - Bank of Taiwan, Land Bank of Taiwan and Taiwan Cooperative Bank - accounted for only 26% of total domestic bank assets (Bureau of Monetary Affairs of Finance R.O.C., 1999).

6.2 Analysis of governance quality

6.2.1 Property rights protection

As stated in Chapter 5, when property rights over economic resources are secure, lower transaction costs are required for people to enforce their claim over such resources. Hence, banks rely on institutions that enforce property rights for a well-defined loan policy so that all agents in the economy can access financial sector loans when they qualify. It was observed that loan policy in the state-dominated banking system before 1989 was not designed to coordinate with government's development policy not to provide capital access to businesses with the best potential. As a result, little effort was put into development of a

credit checking system and banks had rather conservative attitudes towards loans policy; they relied heavily on collateral to secure loans and low risk investments. Hence, there was low accessibility to finance for small companies and consumers. Following banking privatisation, there were changes in the banks' attitudes toward loan policy and their lending activities, which are discussed below.

6.2.1.1 Lenient loan policy

There are two explanations for banks' easy loan policies. First, there was a growing interdependence between politicians and owners in financial business. The owners of banks preserved good political relations by adopting a lenient policy towards powerful politicians. This way, the owners were able to obtain privileged information which gave them advantages in their business and enabled them to influence financial policy or regulation. For instance, legislative candidates with over-valued collateral would obtain loans from financial institutions for funding campaigns before an election, and these financial institutions would continue to give out easy loans to campaign contributors after the election. In return, the elected legislators were able to exercise their legislative power over the financial administration to make specific proposals to protect the interests of the banks with which they were associated. The second reason is the easy loan policy for related party lending. The newly established banks belonged to large business conglomerates which owned many other subsidiaries that could easily obtain loans from its associated banks. An example is seen in the Pan Asia Bank whose overdue loan ratio was 10.2% in April 1999 (Fitch IBCA, 1999). Most of its assets were short-term loans to the troubled Everfortune Group which owned 35% of the bank *(Australia-East Asia Analytical Unit, 1999)*.

It has been supposed that the banks' loose lending policy towards associated parties was most to blame for the increasing non-performing loan ratio (NPL) in the 1990s. As shown in Figure 6-3, Taiwan's overall banking NPL ratio climbed from 3% in 1995, to 5.7% in 1999 and reached a record high of 8.2% in 2001. Among all banking institutions, grassroots banking organisations, including credit associations and CDFFAs, performed the worst with NPL ratios of 4.0% in 1995, 13.7% in 1999 and 16.4% in 2001.
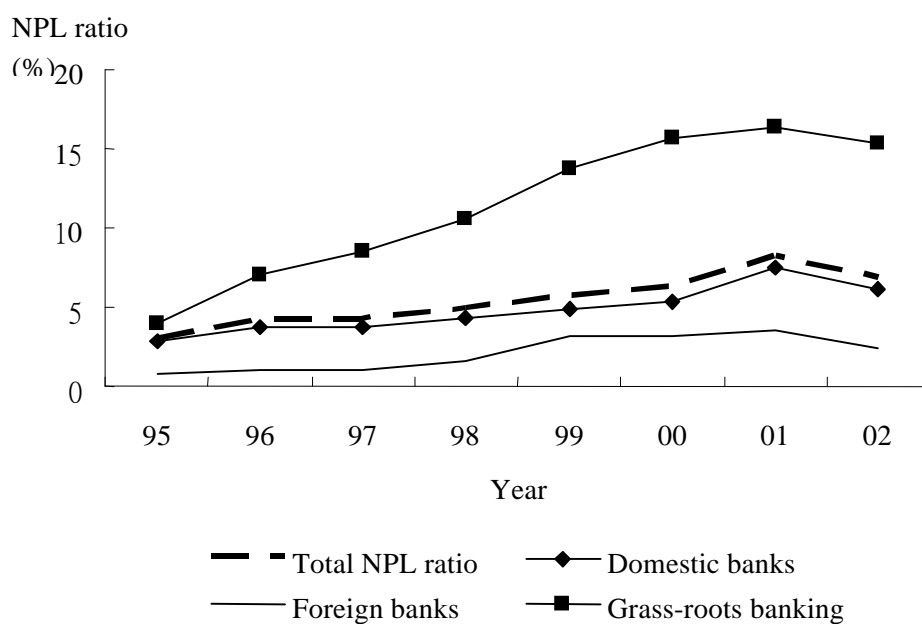
Figure 6-3 Taiwan's banking NPL ratios by %

Source: Banking Bureau Financial Supervisory Commission Executive Yuan R.O.C. (2005)

As a consequence of the sustained lenient policy, loans which were issued without ade-quate credit checking procedures became bad loans and were accumulated until there was a run on the banks. Problems in the banking sector began to surface when the Asian crisis happened in 1998 and caused runs on several financial institutions including the previously mentioned Pan Asia Bank (see Table 6-4).

Date	Name of banks	Date	Name of banks
11/1998	Central Bill Finance Company	07/1999	Dong-Gong Credit Cooperatives
11/1998	Hung-Fu Bill Finance Company	04/2000	Chuang Shing Bank
11/1998	Taichung Business	05/2000	Taiwan Development and Trust corporation
12/1998	Pan Asia Bank	05/2000	Overseas Chinese Bank
02/1999	Bank of Panshin	08/2000	Credit Department of Yuan-Lin Farmers' Association

Table 6-4 List of bank runs

Source: Lee (2001)

These problematic financial institutions were dealt with via mergers with healthier institutions arranged by the government until the financial reform took place in 2001.

6.2.1.2 Over-lending

Until the abolition of restrictions to set up financial institutions, Taiwan had a state-dominated banking system in which banks' interest rates were rigidly controlled by the government. Credit was rationed through primarily serving large private and government enterprises, leaving other businesses (mostly small businesses and medium-sized enterprises) to informal financial agents. After financial liberalisation, business financing provided by the informal financial sector gradually declined. According to Shea, Kuo and Huang (1995), informal arrangements accounted for around 50% of total financing by private enterprises in the 1960s. This ratio declined to between 35% and 45% in the mid-1980s and to 25% in the early 1990s.

The banks' lending activity, measured as the ratio of domestic credit to GDP (Table 6-5) increased significantly in the late 1900s. It rose sharply in 1988 with a growth of about 20% from 1987 levels. The ratio continually increased from 117.6% in 1990 to 171.9% in

Year	GDP	*Domestic Credit	Domestic Cred-
1987	3,237,051	2,454,600	75.83%
1988	3,523,193	3,395,400	96.37%
1989	3,938,826	4,409,100	111.94%
1990	4,307,043	5,063,500	117.56%
1991	4,810,705	6,189,700	128.67%
1992	5,338,952	7,960,500	149.10%
1993	5,918,376	9,511,000	160.70%
1994	6,463,600	10,955,600	169.50%
1995	7,017,933	12,100,300	172.42%
1996	7,678,126	13,051,700	169.99%
1997	8,305,267	14,307,500	172.27%
1998	8,899,290	15,408,300	173.14%
1999	9,244,438	15,952,300	172.56%
2000	9,612,491	16,525,900	171.92%

*Domestic credit includes claims on government, claims on government enterprises, claims on private and other

Table6-5 Banks' lending activity: Domestic Credit/GDP

Source: Council for Economic Planning and Development Executive Yuan R.O.C. (2001)

2000 with a 226.4% increase on domestic credit value.

Taiwan's rapidly expanding credit market was indicative of over-borrowing behaviours on the part of the banks for which there were three main contributory factors. First factor was the banks' lenient loan practise towards associated politicians and subsidiaries. The second factor was that the quick increase in the number of new banks with little differentiation between them that left them competing in the same market with limited potential for profit making. Banks struggled to make profit from financial products and relied heavily on interest revenue from lending businesses. In 2001, 86% of the operating revenue for domestic banks came from interest income, compared to 68% for local branches of foreign banks. Foreign bank branches took 21% of their operating revenue from fees and commission income whereas only 5% of the profit of domestic banks came from fees and commission (Lee and Tang, 2002). The third factor was the dramatic increase in the number of banks without careful planning for regulation and supervision to support the expansion. According to Lim (2009), one of the principal causes that prevented banks from increasing their products ranges was the lack of adequate regulations. Instead of diversifying their products to make profit in the highly competitive market, the banks focused mainly on lending business and opening more branches to increase business opportunities.

Over-lending expanded the credit market which planted the seeds for Taiwan's banking crisis in the late 1990s. Feridun's (2006) studies found that domestic credit/GDP is a significant variable explaining banking crises in emerging markets. This ratio links to financial fragility caused by excessively fast credit growth. Cheang (2009) suggests that past experiences in some of the crisis-hit economies show that both banking and currency crises are linked to over-lending. In some cases, the substantial credit growth was fueled by financial liberalisation and elimination of capital and financial account restrictions; this was precisely the case in Taiwan.

6.2.2 Corruption prevention

Corruption prevention is the second quality to be considered when it comes to banking governance. Prior to financial liberalisation, there was a patron-agent relationship between the ruling KMT party and banking institutions. State-owned banks were used by the government as political instruments to allocate credit, and political liability to the KMT regime was imposed on local banking associations. Mechanisms of institutional governance that

allow for coordination and cooperation among agents for corrupt exchanges are observed in two areas.

First, financial administrations lost their political autonomy with regard to banking policies to the Legislative Yuan. Second, along with democratisation and financial liberalisation, the relationship between the ruling KMT party and financial businesses had turned from the former patron-agent relationship to mutually dependence.

6.2.2.1 Political interference from the Legislative Yuan

There were changes in financial administration and policy making. One of the changes was that the legislators began to strengthen their influence on the policymaking process and to assert their legislative power over financial administration. The original 380 members of the Legislative Yuan were elected in China and followed the KMT government's reloca-tion to Taiwan. Under the one party system, these legislators, who were also members of the KMT ruling party, held their seats for life until the change in the rules in 1991 (Bellows, 2003). Over the years, deceased members were not replaced while additional seats were created for candidates in Taiwan. In 1986, there were 100 members elected (in Taiwan) for a three year term but did not have the majority to defeat the legislation (Bellows, 2003). The lifting of martial law in 1987 guided the path of political reform towards democracy. As a result, the Democratic Progressive Party, launched illegally after the 228 Massacre in 1947, was legalised in 1987. It became the first liberal opposition to the ruling party and was able to participate in the Legislative Yuan.

As democratisation progressed, the Legislative Yuan regained its power and begun to play an important role in deciding on policy, interfering greatly with policy in the banking sec-tor (Sato, 2002). Kuo (2000) points out two areas which revealed how financial administra-tion had lost its autonomy in banking policies. Firstly, the institutional affiliation of the CBC which used to be the highest authority in Taiwan's banking matters had changed from the Presidency to the Executive Yuan[52] in 1979. Since then, the CBC's political autonomy had weakened and been subjected to legislative supervision and political influence. Sec-ondly, revisions to banking law were led by the financial administration of the MOF before the 1980s. However, the newly elected legislators have asserted their political power

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[52] The Executive Yuan is the executive branch of the R.O.C. government, headed by the premier. The premier is directly appointed by the president, while other members of the Executive Yuan Council are appointed by the president on the recommendation of the premier (Government Information Office, R.O.C., 2004).

against the wishes of the MOF by leading the revision of banking law since the mid-1980s. An increasing number of legislators who were closely associated with the banking industry through directorship, shareholding or loan relationships frequently voiced their concerns and made specific proposals to protect the interests of the banks with which they were associated. For example, nine legislators who were the shareholders of ten different banks successfully interfered with the administration's evaluation process for granting operating licences to their associated banks (Chen, 2004).

6.2.2.2 Black gold phenomenon

Before financial liberalisation, the banking system was under the control of the ruling KMT government who could easily control and manipulate financial resources. After financial liberalisation, the KMT had to find alternative sources of finance and expanded its party enterprises into the banking sector which was considered a highly profitable field. The democratisation brought an increasing number of elections and the KMT government came to rely on local factions[53] and business groups for support.

In order to stay in power, the then ruling party KMT kept control of the financial industry through its agents, including power (collective) actors, local clientelistic[54] networks and conglomerates (Kuo, 2000). The agents and power actors helped the KMT to stay in power and demanded something in return. Along with the process, the KMT's relationship with its associates grew in strength and turned the former patron-agent into mutually dependent relationships. This led to the emergence of the term 'black gold' which refers to the collusion between politicians on one side and big business or local factions on the other. Göbel (2004) explains this phenomenon as obtaining money through corrupt methods with politicians on the one side and organised crime and big business on the other. In addition to the state, the major institutional players in Taiwan's financial market in the 1990s were the KMT, the conglomerates which owned private banks and the local factions which controlled credit associations. The three major actors participated in the black gold phenome-

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[53] As explained in Section 5.2.1, local factions are a special political design introduced by the KMT regime when it first took over control of Taiwan from the Japanese in 1949. As a foreign regime, the KMT nurtured more than one local faction in each constituency as its representatives in local elections in order to co-opt local elites and control them. The KMT gained their loyalty by offering local factions the franchise of local businesses (Chen, 2004).

[54] Clientelism refers to a form of social organization common in many developing regions which is characterized by 'patron-client' relationships. In such places, relatively powerful and rich 'patrons' promise to provide relatively powerless and poor 'clients' with jobs, protection, infrastructure, and other benefits in exchange for votes and other forms of loyalty including labour (Kuo, 2000).

non and contributed to the distortion of Taiwan's financial system. The role of each actor and their influences in the banking sector are explained below.

<u>KMT ruling party</u>

During the authoritarian rule, there was no effective separation between party and state especially between party property and state coffers. The KMT had tremendous financial leverage and maintained convenient access to the coffers as a means of supporting the party machinery. With the pace of democratisation proceeding rapidly, the KMT was forced to find alternative financial sources to support the party, so they expanded their enterprise to the financial industry which was considered to be highly profitable. The astronomical campaign expense was another reason why the KMT sought financial resources. In order to stay in power, the KMT had to pump in a massive amount of money to engage in legal (such as propaganda) and illegal (for instance bribing voters and vote-collectors) mobilisation activities (Kuo and Chen, 2003). The state-owned and KMT owned financial institutions were used as vote-buying machines. To extract funds for the election campaigns, reciprocal relationships had been formed between KMT politicians and conglomerates/local factions, which are explained further in the coming sections. In this way the KMT managed to survive the transition of power from an authoritarian to a democratic regime until 2000 when the first rotation of political power took place. By manipulating the financial market in formal and informal ways, the KMT contributed to major distortion of Taiwan's financial market (Chen, 2004).

<u>Conglomerates</u>

Taiwan's conglomerates underwent massive and rapid growth in the mid-1980s and developed both economic and political power as time went on. When the Private Bank Act was promulgated in 1991, the conglomerates with political connections succeeded in obtaining operating licences. According to Yung (1994), two major characteristics were observed amongst the new entry private banks. First, most of the headquarters of the new banks were in Taipei (the capital). Second, owners and managers included business group owners, former politicians and managers of previous government-owned financial institutions (Table 6-1). As explained earlier, the large amounts of capital required to enter the banking sector were government's means of being selective on bank entries. The business groups which could accumulate sufficient capital during the KMT's authoritarian rule to qualify for banking licenses would have been those which maintained good relationships with the

party. After the new banks were established, owners of financial businesses frequently made donations to help with election campaign expenses and adopted loose lending strategies for associated politicians to show their political loyalty. In return, those conglomerates were able to enjoy the benefits of interfering in financial policies and gleaning privileged information which enabled their businesses to expand.

<u>Local factions</u>

Another important players in the field were the local factions that controlled grass-roots financial institutions which included rural credit cooperatives and CDFFAs. This was a local credit system established in the 1960s by the KMT dictatorship. In theory, they were government-owned institutions and should operate in a manner similar to that of cooperative banks acting as a source of funding for their members. On the surface, the local credit system might not have a central role in the financial system but had an important role in consolidating KMT's power at a local level. The grass-roots associations were often used by the authoritarian KMT party to bolster its popular support by channeling funds to local leaders, who then lined their pockets with some of the money and spent the rest buying votes. Getting elected at the local level was not very attractive in terms of political power but granted access to local monopoly and oligopoly rights and money gathering machines like the CDFFAs was (Chen and Chu, 1992). As a result, the local credit associations had heavy political liabilities to the KMT regime and their management level personnel assigned by the government often did not have financial business experiences. This phenomenon was established at the beginning of the KMT regime and has had a lasting impact on Taiwan's local credit system even up to the present day.

6.2.3   Political stability

Political stability is the final feature of relevance to banking governance. The stand-off between China and Taiwan since the KMT government relocated to Taiwan was a major factor affecting Taiwan's political environment. The relationship between Taiwan and China remained deadlocked throughout the 1990s but became tense from 1995 onwards. A series of military threats were made towards Taiwan by China following President Lee's promotion of Taiwanese consciousness and his attempts to regain United Nations membership (Chu and Lin, 2001). In response to the threats from China, the government adopted a precautionary policy of maintaining an immediately available safety stock of foreign currency to be used in case of emergency or pressure from China (Dunn and Soong, 1999). Since the

beginning of January 1992 Taiwan has been one of the richest countries worldwide in terms of foreign reserves, which then amounted to USD 82 billion (Table 6-6). By 1997, foreign reserves had accumulated to USD 87 billion. This costly and economically unreasonable accumulation of foreign currency illustrates the impact that political factors had on the finance industry.

Year	Taiwan	Korea	Hong Kong	China
1991	82.4	13.3	28.9	42.7
1992	82.3	16.6	35.3	19.4
1993	83.6	19.7	43.0	21.2
1994	92.5	25.0	49.3	51.6
1995	90.3	28.8	55.4	73.5
1996	87.7	32.0	65.0	105.0
1997	86.0	31.0	71.0	134.0

Table6-6 Foreign reserves by comparison (in USD billion)

Source: Dunn and Soong (1999: 154)

As suggested in Chapter 5, potential racial division was another factor affecting Taiwan's political stability. The discriminating treatment between Chinese immigrants and native Taiwanese and the severe historical inequality when the KMT government first relocated to Taiwan have left a deep scar in Taiwanese society. This issue remained unsolved and unmentionable whilst the KMT was in power when Taiwan's politics were dominated by the China born elites. With the democratic progress that Taiwan made in the late 1980s, the past was disinterred. In 1995, Taiwan's president at the time, Lee Teng-hui of the KMT - a Taiwanese rather than an immigrant from China - apologised for the ruthless actions the party had taken against native Taiwanese in the past. At the same time, the Democratic Progressive Party (DPP) drawing on Taiwanese-nationalist[55] sentiments was gaining support and growing stronger. Taiwanese nationalism distinguishes itself from Chinese nationalism in Taiwan. The former claims Taiwan's independence and argues that Chinese culture is only one part of Taiwanese culture whilst the latter maintains that Taiwanese culture should only be emphasised in the larger context of Chinese culture (Cheong, 2000). With the presidential election approaching in 2000, ethnic lines and political ideologies

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[55] Taiwanese nationalism serves as social and political glues for people who have aspirations to live together in peace and prosperity in Taiwan as a democratic, economically strong island state that may in time become a new nation. Taiwanese nationalism has evolved as an ideology to help secure the independence of the people living in Taiwan unlike the usual foundations of nationalism in which people are unified by a shared history, ethnicity, language or nationhood (Liew, 2004).

received central attention in political debates and the nation was divided along political and racial lines.

Overall, the intensified conflicts between Taiwan and China have remained a serious threat to the people in Taiwan and to the stability of the Asia-Pacific region. According to Interviewee W,[56] this situation has created great market potential for offshore private banking services[57] in Taiwan. Given the high degree of political instability, people who were looking for more exclusive financial services would choose offshore private banking to secure their assets overseas. In addition, high profile and high ranking public officials also favoured such services in order to avoid disclosure of their financial status. The unstable political environment has made Taiwan's domestic financial market less attractive even to its own residents.

6.3 Pressures for financial reform in 2001

The increasing overdue loans due to banks' loose lending practices rendered the Taiwanese financial system very unstable (Figure 6-3). When the Asian financial crisis[58] happened in 1997, most of Southeast Asia and Japan saw slumping currencies, devalued stock markets and other asset prices, and a precipitous rise in private debt (Iwasaki, 1999). None of the countries in the region had been able to completely avoid its impact. Although Taiwan suffered the greatest loss of demand and confidence among all countries in the region, its financial sector was less exposed and did comparatively in the crisis. The success could be attributed to Taiwan's sound macroeconomic management, high foreign exchange reserves, restrictive banking regulations, and the preponderance of small and medium enterprises with low debt to asset ratios (Australia-East Asia Analytical Unit, 1999). The fact that Taiwan was not heavily dependent on volatile foreign capital inflows and was cut off from international markets also prevented it from being more badly affected by the crisis. Herring (1999) studied Taiwan's survival in the Asian crisis and pointed out that it had pursued policies that largely insulated it from the crisis. At the end of 1998, the shock of the

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[56] The first exploratory interview was conducted with four of Taiwan's high-level banking managers in March 2005 and the interviewees asked to remain anonymous.

[57] Private banking is different to retail- and corporate-banking. It is defined by Bickers (1996) as the provision of wealth management services; wealth protection for the high net worth individual. It covers trust, investment, banking, and tax services to individuals usually with liquid wealth of above 1 million dollar.

[58] Refer to footnote number 15 of Chapter 1.

Asian Financial Crisis began to influence the economy of Taiwan with the financial indus-try among the first affected, so aggravating its already fragile banking system. Other pres-sures for financial reform include: (1) worsening macroeconomic condition, (2) deteriora-tion of banks' asset quality, (3) rotation of political parties, (4) inefficient financial admin-istration, and (5) demands for cross-strait financial access.

6.3.1 Macroeconomic conditions

Taiwan has enjoyed rapid and sustained economic growth since the 1980s with an average economic growth rate of 7.2% from 1979 to 2000 (Figure 6-4). Taiwan's first economic downturn started in 1998 in the aftermath of the Asian financial crisis. The second eco-nomic downturn began in the fourth quarter of 2000 due to cyclical and structural phenom-ena. In 2001, Taiwan had its first negative economic growth rate of -2.2%.
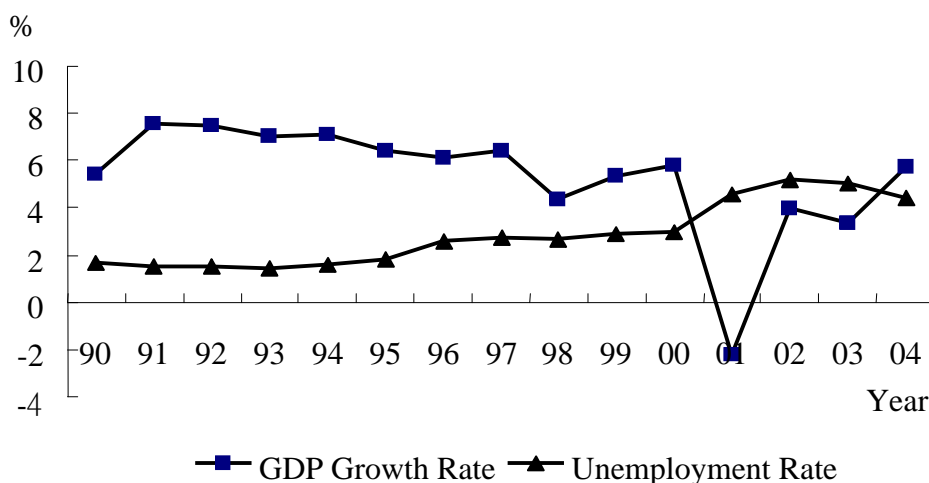
Figure 6-4 GDP growth rate and unemployment rate between 1990 and 2004

Source: Banking Bureau Financial Supervisory Commission Executive Yuan R.O.C. (2005)

Montgomery (2003) has drawn attention to the fact that the decline in equity and real estate prices, attributed to macroeconomic conditions, greatly affected the financial sector. Lim (2009) explained that the capital of financial institutions went down because Taiwanese banks had been heavily reliant on real estate and stock as collateral for loans due to the un-developed credit checking system in Taiwan. As a result, when the real estate and stock market experienced crash, the banks had to liquidate the collateral and thus drove both markets further downward. This vicious circle led to an increase in bad loans and frozen bank capital which had an impact on their profit making. The added weight of a global

149

economic recession made things even worse for domestic enterprises and left asset quality deteriorating. The unemployment rate had risen since 1993 although economic growth was fairly high until 2000. Rising unemployment and declining stock values have reduced private consumption ever since.

6.3.2   Deterioration in the quality of banks' assets

Due to the banks' lenient loans policies, Taiwan's overall NPL ratio climbed from 3% in 1995, to 5.7% in 1999 and reached a record high of 8.2% in 2001 (Figure 6-3). Normally in a high NPL condition, banks tend to carry out internal consolidation to maintain asset quality by raising provision for loan loss that decreases the banks' revenue and reduces the funds for new lending (Hou, 2007). However, Taiwanese banks' borrowing activities did not seem to be affected by their increasing NPL (Table 6-5). The factors contributed to the bad loans situation included previously mentioned worsening macroeconomic conditions, lenient policy and cut-throat competition among banks. Besides, change of industrial structure since the late 1980s was another cause. According to Lim (2009), firms that made efforts to diversify investment to overcome the slump in their business were sometimes unable to make payment for their loans.

The accumulating NPL eventually led to deterioration in banks' profitability. The return on assets (ROA) of domestic banks declined from 1% in 1994 to 0.4% in 2000 whilst the return on equities (ROE) dropped 11.5% to 4.9% in 2000 (Table 6-7).

	Domestic banks		Local branches of foreign banks	
	ROA	ROE	ROA	ROE
1994	1.00	11.50	0.93	22.20
1995	0.70	9.00	1.32	29.60
1996	0.70	9.70	1.30	27.40
1997	0.90	11.40	1.52	33.30
1998	0.60	8.00	1.01	22.00
1999	0.50	5.90	0.77	16.72
2000	0.39	4.90	1.29	33.16

Table 6-7 ROA and ROE of domestic banks and local branches of foreign banks (%)

Source: Banking Bureau Financial Supervisory Commission Executive Yuan R.O.C. (2005)

Domestic banks in Taiwan had comparably low profit figures comparing with the local branches of foreign banks which performed consistently well throughout the same period. The average ROA of the local branches of foreign banks was 1.2% between 1994 and 2000 compared with 0.7% of domestic banks. The average ROE is 26.3% of the local branches of foreign banks whilst it is 8.6% for domestic banks.

6.3.3 The rotation of political parties

From 1949 to 2000, Taiwan remained under the governance of one party - the KMT. During this period, banks were often used as political machines and collusion between politicians and financial businesses had always been an issue. Due to political intervention, some inappropriate missions were imposed on banks, especially those that were state-owned. In March 2000, Chen Shue-Bian of the DPP was elected president which ended 50 years of KMT rule. Financial institutions owned by the conglomerates which had enjoyed financial favour under the political protection of the KMT party begun to run into problems. Loans issued by private banks to associate politicians and subsidiaries could easily be granted a rescheduling of loan repayment if the loans were not paid on time. The change in the ruling party following financial restructuring led to the exposure of over-political lending and bad debts as a result of lenient loan policy.

6.3.4 Inefficient financial administration

The pace for bank liberalisation was so fast that the new regulatory regime was not in place when the new banks were set up. Sato (2002) suggests that Taiwan's financial administration was ill-prepared for financial liberalisation and did not keep up with the great changes that took place in the financial and political systems in the 1990s. He explained that financial administration had little need to perform its functions, particularly the supervision of financial institutions, during the period of authoritarian government and state-dominated banking. Hence, the under-trained and insufficient numbers of staff in the underdeveloped operational environment experienced difficulties in supervising the rapid development of the financial industry. The lack of a comprehensive regulatory framework and efficient financial supervision to meet the liberalised financial system were other reasons to push for financial reform in Taiwan.

6.3.5 Demands for cross-strait[59] financial access

With the lifting of martial law in 1987, the restrictions on travelling to China were also weakened. Besides, there were increasing economic activities between China and Taiwan following China's economic opening up in the same year. Gradually, Taiwanese companies had been relocating their factories to China in order to benefit from low labour costs and this strengthened the massive exodus of funds. Taiwanese investment in China had increased rapidly since the 1990s and accounted for 53.4% of the island's outward investment in 2002 (see Figure 6-5).

Total Investment in China
USD hundred million

% of investments in China accounted for by Taiwan's
Total outward investment
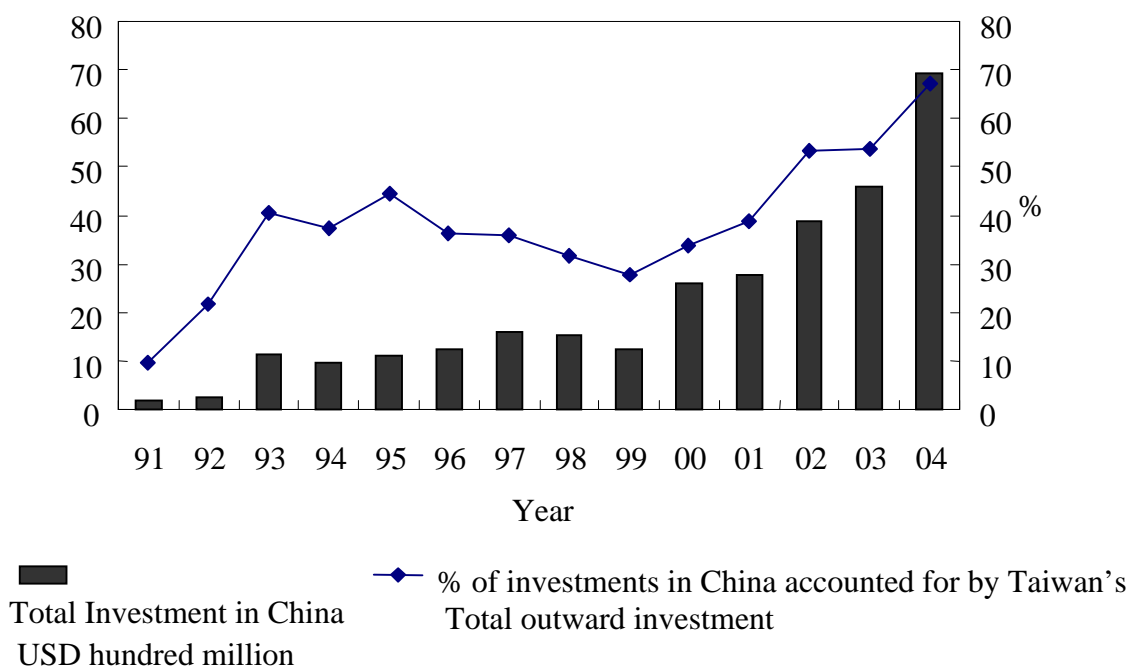
Figure 6-5 Taiwan's investment in China

Source: Department of Statistics Ministry of Economic Affairs R.O.C. (2005)

Sources of finance for Taiwanese subsidiaries in China came mainly from the parent companies due to difficulties in accessing funds from Chinese banks. As a consequence, the parent companies were forced to continually use home bank-financing to invest in China. However, for decades, 'direct financial transactions' between Taiwan and China were forbidden due to restrictions set up by the Taiwanese authorities. In order to transfer funds to and from China, Taiwanese investors had to make remittances and account settlements through third parties, mostly banks in Hong Kong or the United States. Such restrictions

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[59] Cross-strait relations is a term which refers to the relationship between the Chinese on two sides of the Taiwan Strait, namely China and Taiwan.

imposed on financial transactions between Taiwan and China generated extra costs for companies that wanted to transfer profit from investment back to Taiwan's financial markets. As a result, these restrictions have discouraged the capital backflow from China to Taiwan. This way, the intense businesses between China and Taiwan under the financial restrictions have made it difficult for the banking sector to grow (Yu, 2006). Pressures from investors and banks drove financial reform in Taiwan aimed at developing efficient cross-strait financial access. The other factor pressurising the governments on both sides to loosen the restrictions is generated by World Trade Organisation (WTO) commitments. Both Taiwan and China became members of the WTO in 2001 and this raised the issue of cross-strait financial affairs as both China and Taiwan had to fulfil WTO commitments of non-discriminatory principles known as the most-favoured-nation treatment.[60] This meant that both countries had to remove progressively the cross-strait restrictions set up between them since 1949.

6.4 Summary

Prior 1989, the KMT had guarded its dominance in the financial sector. With political reform taking place, the government's attitudes have shifted from using the financial sector as a tool for industrialisation in the era of development to liberalising the sector as a strategy in response to neo-liberal hegemony (Chen and Hsu, 2005). In order to stay in power, the KMT government found an alternative ways to retain its substantial influence in the financial system to ultimately maintain its status and privileges. For one, the KMT government as the sole or largest single shareholder still had great influence over important decisions in state-owned or ex-state owned banks. Second, the private banks were not exempt from political influence because the KMT had expanded its enterprises to the finance industry and developed interdependent relationships with conglomerates-owners of private banks, and local factions who controlled local credit associations. By the end of the 1990s, government-owned and private banks controlled about three quarters of the assets shares and ex-government banks controlled almost a quarter of the shares. Taiwan's banking system was transformed from state-dominated to privatised when sixteen new banks joined the market to compete with the state-owned banks in 1991. Due to the speedy expansion, Taiwan suffered from over-banking and an over-competitive system in the 1990s. According to Yu (2006:161) "over banking is a quantitative problem and over competition is a

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60 Most-favoured-nation treatment means where a country normally does not discriminate between rights holders from different trading partners (WTO, 2010).

quality problem". The former caused Taiwan's fragmented banking system and the latter limited banks' profit making.

The changes to banking institutional governance along with privatisation were observed in three areas. *First,* institutional quality in property rights protection which affected banks' loan policy and lending activities. The rapid expansion of banks in the 1990s popularised banking services and reduced financing from the informal market. This period saw a change in banks' lending attitudes from conservative to loose lending towards certain parties, politicians and their affiliates. Furthermore, the throat-cutting competition meant that banks had to become more aggressive in their lending and the quality of their loans deteriorated. The rapid growth credit market in the 1990s is indicative of banks' over-lending practices. *Second,* institutional mechanisms on controlling corrupt dealings were looked at. The changes in the power structure and political interference had great influence on the banking system and created opportunities for corrupt dealings. The first effect is the influence that politicians had over state-affiliated financial administration. The financial administration had lost its political autonomy and opened the door for political intervention into the financial system, in particular from legislators who had established close associations with the banking industry ever since banking privatisation. The second effect is that change in the power structure as a result of democratisation strengthened local factions and business groups' autonomy and political influence in relation to the KMT government and created the 'black gold' phenomenon. The accumulating bad loans that weakened the banking system resulted from collusions between financial business owners/managers and politicians. The fact that the financial administration did not maintain its autonomy made it even more difficult to restrain banks' inappropriate lending. *Finally,* the political atmosphere remained reasonably stable in the early 1990s but had become tense since 1995 when President Lee began to promote Taiwanese nationalism. This situation worsened as the Presidential election approached in 2000 when the political environment became progressively more hostile between the KMT and DPP and the nation was gradually divided along political ideological and racial lines. Given Taiwan's high degree of political instability, domestic investors often seek overseas banking services to protect their assets. Despite the political tension, this period saw increasing economic activities between Taiwan and China. Due to the restrictions imposed on cross-strait financial transactions, Taiwanese companies with investments in China had difficulties transferring capital back to Taiwan, resulting in a Taiwanese capital exodus.

It is evident that Taiwan's financial evolution had been interconnected with its political evolution (Zhu and Bao, 2000; Sato, 2002; Lim, 2009). During the period of one-party authoritarian rule, the banking system was developed merely to support government's selective credit allocations and was fully under the government's control. With political democratisation in the 1990s, the banking sector was liberalised but without sufficient regulatory support and financial administration losing its political autonomy; the system was still subject to great political intervention. Sato (2002) believes that bad loans later burdening Taiwan's banking organisations and leading to 2001 financial reform had been interrelated with the society's democratisation and financial liberalisation since the late 1980s. The aftermath of the Asian crisis in late 1998 threatened Taiwan's fragile banking system with banks run spreading throughout the financial industry. Taiwan's financial system suffered a great loss of confidence and financial reform became a top priority in the political agenda. Just as financial liberalisation in 1989 began after a change of political structure, Taiwan's financial reform took place after its first rotation of political power in May 2000.

7 Institutional barriers and financial reform: 2001-2004

Taiwan had a repressed and bureaucratic financial system in the early period and its financial development has been deeply connected to its political democratisation. In the late 1980s, it faced a series of macroeconomic crises, pressures from foreign capital to change its policies on foreign exchange and the demands of a free-market and financial liberalisation from domestic capitalists and economists. However, it was the change of political atmosphere that facilitated financial deregulation and entry into the banking sector. The breakdown of the one party authoritarianism in 1988 speeded up Taiwan's political democratisation and financial liberalisation. During the 1990s, increasing overdue loans made the Taiwanese financial system very unstable. One of the main reasons for increasing overdue loans was the inappropriate lending practices which resulted from interdependence between politicians and financial business owners. After the Kuomingtang (KMT) manipulation of the financial system for fifty years, people in Taiwan were discontented with its abuse of power and repeated corruption accusations. The public lost faith in the government because of the worsening economy and financial system. Consequently, the Democratic Progress Party (DPP) used anti-corruption and financial reforms as its presidential election platform and won in 2000.

The financial reform came along with Taiwan's first rotation of political power. In 2001, a package of six financial regulations that were considered to be the most important rules came into effect and this year marked the first year of Taiwan's financial reform. However, despite the measures taken to reform the banking system, the perceived soundness of Taiwanese banking was getting worse ranked 36th, 53rd, 61st, 73rd and 68th in 2000, 2001, 2002, 2003 and 2004 respectively based on World Economic Forum's (WEF) survey results. From a governance quality perspective, this chapter investigates the reasons why the financial reform did not restore public confidence in the financial system.

Taiwan's financial reform can be divided into two phases. The first phase, which started in 2001, was designed to tackle the problems of Non-Performing Loans (NPL) in the banking sector. The reform was aimed at maintaining the integrity of financial markets and facilitating the sound development of financial services with the restructuring of the banking sector as the top priority. The second phase of reform began in July 2004, in which year the DPP narrowly won the second round of the presidential election. The key objective of

phase II's financial reform was consolidation and promotion of Taiwan as a regional fund-raising and asset management centre. This thesis focuses on the first phase of the reform between 2001 and 2004. Due to the path-dependency of institutional development, individuals and organisations adapt to the changes slowly and under constrains of their accumulated learning experiences from the past. Concentrating on the first stage enables the study to observe how existing institutional behaviours reacted to the reform policies, how they evolved in such a transformation process to form a new belief system, and eventually shaped the direction of the institutional changes.

Financial reform is a process of institutional change where institutions must certainly be designed in the best way to achieve the proposed reform. North (2005) states that policy change of formal rules will produce the desired result only when the informal norms are complementary to that rule change and enforcement is either perfect of at least consistent with the expectation of those altering the rules. This means the institutional characteristic of path-dependency may facilitate or hamper the transformation process. Popper (1945) argues that pure institutionalism is impossible and that institutions are like fortresses; they must be well-planned and well-staffed. How government as a policy conductor and participants in financial markets react to reform policies determine achievements of reforms. This thesis argues that trust in the financial system is institutional trust. Hence, trust in the institutions governing financial systems is the key element for a successful reform. Good governance is credited with reducing the costs of enforcing agreement and making credible commitments across time and space and thus with how well the reform process develops.

According to the theoretical framework developed in Chapter 2 and the quantitative analysis in Chapter 4, governance qualities in financial system are reflected in three areas: (1) property rights protection, (2) corruption prevention, and (3) political stability. Governance quality of protecting property rights during the banking privatisation period was shaped by the banking sector adopting an easy loan policy toward associated subsidiaries and politicians. In terms of corruption control, local credit associations were used as vote-buying machines and there was collusion between politicians on one side and conglomerate-owned private banks on the other. As for political stability, the relationship with China remained deadlocked in the first half of the 1990s and turned tense from the mid 1990s. The objective of this chapter is to investigate the institutional characteristics of path-dependency that affect implementation of reform policies. It is also to see whether govern-

ance has evolved to support reforms. The chapter investigates the interactions between institutional characters and reform measures to gain a deeper understanding of how governance features affect the implementation of reform policies and eventually produce the outcome of the reform in Taiwan. Section 7.1 states the aims of the first phase of the financial reform between 2001 and 2004. It analyses four reform policies: (1) enhancement of quality of assets; (2) encouragement of mergers and acquisitions; (3) reforming financial supervision and increasing financial transparency; and (4) promoting investments in Taiwan. Sections 7.2, 7.3 and 7.4 investigate the governance qualities of property rights protection, corruption prevention and political stability to see how they have facilitated or hampered the reform process. Section 7.5 begins with an overview of changes in governance quality after the reform. Then the achievements of the four reform policies are presented followed by the institutional drawbacks of each. Section 7.6 concludes the chapter.

7.1 Financial reform measures

Among all the problems within the banking sector, the increasing NPL was the most serious one and particularly from grass-roots banking organisations. The priority objective in the first stage of the reform was to tackle the NPL problem. Many important financial laws and regulations were enacted or amended from November 2000 onwards to create a solid regulatory framework to support the reforms. These laws include the six financial regulations: (1) enacting Statute for the Establishment and Administration of the Financial Reconstructing Funds of the Executive Yuan, (2) reversing the Deposit Insurance Act, (3) reversing the Business Tax Law, (4) enacting the Financial Holding Company Act, (5) enacting the Law Governing Bills Finance Business, and (6) reversing the Insurance Act. In the line with the blueprint for the relevant laws and regulations concerning financial reform, the Executive Yuan set up a Financial Reform Task Force in July 2002. The Task Force had five sub-committees, which were responsible for the reform of banking, insurance, the capital market, community financial institutions, and combating financial crime, respectively.

The aim of financial reform was to make financial institutions stronger and healthier through expansion by mergers and acquisitions, universal banking, and globalisation, thereby enhancing their international competitiveness. The objectives were: (1) to establish a financial monitoring system in accordance with international norms and standards; (2) to make the securities market stronger and healthier; and (3) to accelerate the disposal of NPL

to enhance Taiwan's financial competitiveness. To achieve the objectives of the reform, several measures were taken: (1) to enhance the quality of the assets, (2) to encourage mergers and acquisitions, (3) to reform financial supervision and to increase financial transparency, and (4) to promote investments in Taiwan.

7.1.1 Enhancing quality of banking assets

The overall NPL ratio of Taiwan's banking system climbed from 3% in 1995 to 8.8% in March 2002. Taiwan had a higher level of NPL when compared with the United States' average NPL rate 0.8% and Japan's 6.9%, about the same level 8.9% for Eastern European banks, but lower than 12.2% for Asian crisis countries (Huo, 2007).[61] However, its grass-roots credit cooperatives had a considerably higher level of NPL, in particular the Credit Departments of the Farmers' and Fishermen's Associations (CDFFAs) which had an NPL ratio at 18.2% in June 2002.[62] This indicates a high volatility, poor risk management and control mechanisms at the local banking level which posed a serious threat to the whole banking system. Hence, NPL were treated as a priority when the reform began. For the purpose of enhancing the quality of bank assets, the Ministry of Finance (MOF) implemented its '258 financial programme' in 2002 and expected that local banks could reduce their NPL ratio to below 5% and raise their capital-adequacy ratio to meet the Bank of International Settlements' standard of 8% within two years (Lim, 2009).[63] To deal with the bad debts of financial institutions, the reform actions for enhancing asset quality included the following: (1) Reducing tax for financial institutions. Revision of the Business Tax Law reduced the value-added tax for the financial sector from 2% to 0% and lowered business tax for financial institutions from 5% to 2% to help with the reduction of financial institutions' bad debts. (2) The Central Bank of R.O.C. (CBC) lowered the reserve requirement ratio for banks and increased the interest rate for banks' reserves to stimulate more capital for the banks to write off bad debts (Hsu, 2002). (3) According to the Financial Institutions Merger Act, Asset Management Companies (AMC) were to be set up to deal with distressed financial institutions and to resolve their deteriorated assets. For instance, a financial institution may sell its NPL to an AMC directly or through an impartial third par-

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[61] Data from Hou (2007), who studied average NPL ratios in different regions/countries between 1998 and 2005. Eastern European countries include Poland, Croatia, Latvia, Romania, Serbia and Montenegro, Ukraine, Czech Republic, Bosnia, Hungary, Slovakia, and Turkey. Asian Crisis Countries include Hong Kong, the Philippines, Indonesia, Thailand, and the Republic of Korea.

[62] Data source: Banking Bureau, Financial Supervisory Commission, Executive Yuan, R.O.C. (2005).

[63] The Basel Committee on Banking Supervision at the Bank for International Settlement set out the basics for capital adequacy in the first Basel accord 1988 (Basel I) and a revised framework for capital is set out in the second Basel accord 2005 (Basel II). According to them, capital adequacy is a ratio of a bank's capital to its assets.

ty. Afterwards, the NPL may be resold by AMC after being repackaged or securitised. To promote this policy, the government had suggested to all members of the Bankers Association of the Republic of China (BAROC) to formally establish an asset management company to deal with banks' non-performing assets or collateral securities. The BAROC responded to the government's policy by inviting thirty banks and three bill finance companies to set up Taiwan's first asset management company in November 2001, named Taiwan's Asset Management Corporation. (4) An NTD 140 billion (USD 4 billion) Financial Reconstructing Fund was set up by the government in 2001, aiming to clean up bad loans troubling grass-roots banking organisations in three years. The government entrusted the Central Deposit Insurance Corporation (CDIC) with taking charge of the Financial Restructuring Fund's Management Committee. This committee was responsible for deliberating on the use and operation of funds and also providing public disclosure in relation to the funds. (5) The passage of the Financial Assets Securitisation Act in June 2002 and the Real Estate Securitisation Act in July 2003 established the legal framework for securitisation in civil law in Taiwan. These acts enabled banks' long term collateral to be securitised, thus improving their liquidity. According to these Acts, assets with predictable cash flows such as housing loans, business loans, automobile loans, rights under credit cards, accounts receivables and real estate are allowed to be securitised.

7.1.2   Encouraging mergers and acquisitions

In terms of financial consolidation, measures were taken to raise the efficiency and economies of scale in the banking sector. Reducing the NPL ratio and easing the burden of non-performing collateral assets was only one aspect of financial reform. The longer-range and more fundamental objective was the effective enhancement of the competitiveness of Taiwan's banks in both domestic and global markets. From the angle of competitiveness, the basic problem was the proliferation of too many economically small-scale banks. Before the reform, Taiwan had some fifty-three domestic banks and 362 credit cooperatives serving a NTD 675 billion banking market with a population of only 23million. As a result, Taiwan had 1.4 branches for every 10,000 people which is more than double that of other Asian countries (Kovac, 2004). Taiwan had the most fragmented banking market in East Asia and even the market share accounted for by large Taiwanese banks was rather low.

The enactment of the Financial Institutions Merger Act in January 2000 and the Financial Holding Company Act in 2001 aimed to raise the efficiency and economies of scale of

Taiwan's financial institutions. These acts offered both tax and non-tax incentives to encourage voluntary mergers among financial institutions. The Financial Institutions Merger Act provided an appropriate market exit mechanism with legal grounds to break through the barriers of resolving the problem of insolvent communal financial institutions. Small-scale financial institutions, such as CDFFAs, were strongly encouraged to upgrade from a cooperative structure to one company limited by shares so as to merge with other financial institutions through favourable tax laws. The enactment of the Financial Holding Company Act allowed banks, insurers and brokerage clusters to operate under a single corporate structure. Cross-selling of financial products was partially allowed under the holding company structure and information and equipment could also be shared under one roof. The objective was to facilitate a holding company to enlarge its business scale, increase its number of customers, diversify its service, disperse its risk and reduce its operation costs. By doing so, Taiwan's financial industry was expected to increase through an economy of scale, multi-faceted marketing and cost saving.

7.1.3   Financial supervisory reform and financial transparency increase

Incorporated with the integration trend in the banking sector, financial supervisory reform was carried out to unify the supervision of financial intermediaries and increase financial transparency. Before the financial reform took place, Taiwan used to manage financial institutions using the traditional concept: different regulation and different authorities managed different markets and different financial institutions (see Chapter 1 Figure 1-1).

To promote a consolidated financial supervision, the Legislative Yuan passed the Act Governing the Establishment and Organisation of the Financial Supervisory Commission of the Executive Yuan on 10 July 2003. A new agency, named the Financial Supervisory Commission (FSC) was to be set up on 1 July 2004 to concentrate supervision of banking, securities and insurance industries under one roof, as well as to integrate the tasks of monitoring these industries. It was to promote uniformity in the supervision of financial institutions and aimed to eliminate blind spots that occur in separate supervisions by functions. Under the new financial supervisory framework, the FSC was independent of the MOF and directly reported to the Executive Yuan. The purpose was for the FSC to exercise its powers independently to avoid multiple layers of supervisions. It also aimed to combat collusion between political and financial business.

The FSC's responsibilities include supervision, examination, and inspection of financial markets. It includes four bureaus and five supporting departments (Figure 7-1). The Bureau of Monetary Affairs (BOMA), the Securities and Futures Bureau, and the Insurance Bureau are responsible for supervision of financial institutions. The Examination Bureau was in charge to examining all financial institutions. It is worth mentioning that the newly established Examination Bureau integrated staff in charge of examination from the CBC, BOMA and the CDIC, aimed at providing better administrative and human resources to conduct financial examination within one agency.

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│ Central Bank of the │  │ Financial Supervisory│
│ R.O.C.              │  │ Commission           │
└─────────────────────┘  └─────────────────────┘
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                    ┌──────────────────────────────────┐
                    │ Bureau of Monetary Affairs        │
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                    │ Securities and Futures Bureau     │
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                    │ Examination Bureau                │
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                    │ Supporting Departments:           │
                    │ International Affairs Department   │
                    │ Legal Affairs Department          │
                    │ General Planning Department        │
                    │ IT Department                     │
                    │ Secretarial Office                │
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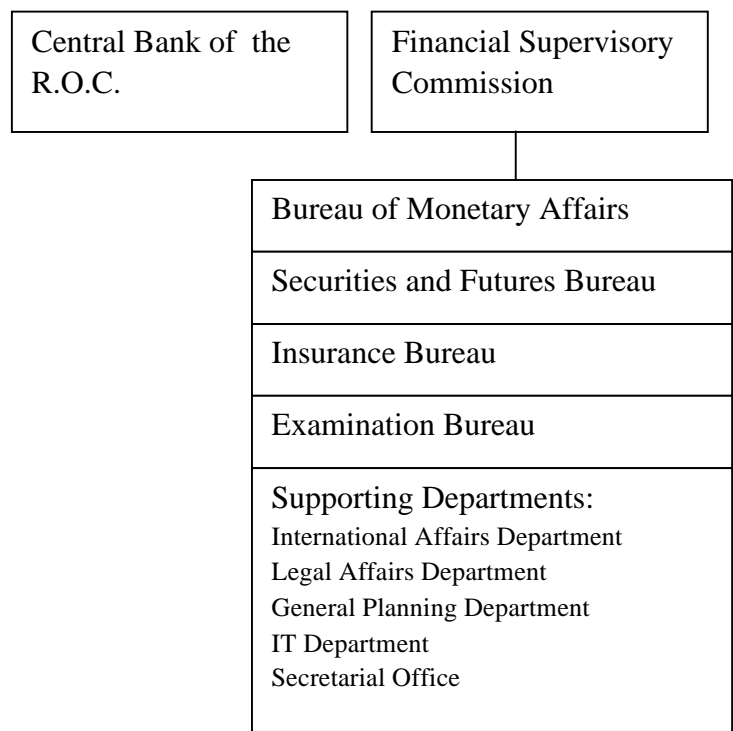
Figure 7-1 Financial supervisory framework after reform

Source: Financial Supervisory Commission, Executive Yuan, R.O.C. (2004)

The MOF's regulatory philosophy shifted from merit-based regulation to disclosure-based regulation. Rhee (2011) explains that the difference between the two philosophies is that merit-based regulation assumes that financial regulators are best equipped to decide the merits of transactions on behalf of investors, whilst disclosure-based regulation thinks that financial market participants themselves can better decide the merits of a transaction. Under the new disclosure-based principle, investors were required to assume responsibility for their own investment decisions and thus would not be protected from poor judgments. In line with this idea, all publicly listed banks were required by the newly-amended Banking

Act to use their website to make quarterly disclosures of their Certified Public Accountants to reveal their financial information. At the same time, the MOF was tightening the screws on banks to achieve greater transparency of their lending information and make statistics reflect reality better.

7.1.4 Promoting investment in domestic markets

Firstly, measures were taken to create a flexible mechanism for financial transactions between Taiwan and China to stop the exodus of funds to, and promote business opportunity in China. As discussed in Chapter 6, decreasing investment in Taiwan's domestic market mainly resulted from this exodus of funds to China. Investments from Taiwanese companies' subsidiaries in China increased rapidly in the 1990s. The financial restrictions on the cross-strait financial transactions not only increased transaction costs for Taiwanese doing business in China, but also prevented Taiwan's financial industry from taking a competitive advantage from doing business in China. Post 2001, a series of amendments were made to the 'Guidelines for Conducting Remittance to Mainland China by Financial Institutions in the Taiwan District' and 'Guidelines for Conducting Foreign Exchange Businesses relating to Export and Import from Mainland China by Banks in the Taiwan District'. In June 2001, Taiwan's government permitted domestic banks to establish representative offices in China. Later, in November 2001, the government announced the authorisation of direct cross-strait remittances by offshore banking units (OBUs), with the scope of the business including remittance of deposits, remittance of funds, and trade financing. Funds no longer had to be transferred through banks within a third country. In this way, the island's residents were able to save between 20% and 30% in service fees when remitting money to China, and the remittance time would be cut by half. In August 2002, the government moved further to allow overseas branches and OBUs of banks in Taiwan to provide credit to, and to purchase accounts receivable from, Taiwanese businessmen in China.

Secondly, measures were taken to encourage foreign capital inflow. The Qualified Foreign Institutional Investor (QFII) system was introduced in Taiwan in 1991 to act as a buffer to prevent rapid flows of currency in and out of the country. In line with Taiwan's internationalised capital markets, regulations governing foreign investment were revised to encourage foreign capital inflows. A major part of the restrictions formerly placed on foreign investments in the securities market were lifted. The longstanding QFII system was abol-

ished on 2 October 2003, reducing application approvals to a one-step process, and simplifying other related procedures. Deregulation was aimed at lowering the operational costs for foreign investments and attracting foreign capital. At the same time, it was hoped that this would stimulate Taiwan's economy and provide better international access for local companies and improve their competitiveness.

7.2 Governance quality of property rights protection

The pervious chapters have pointed out the importance of property rights protection when studying banking governance features. Only when it is known that private property rights are secure, will financial business and individuals have incentives to cooperate with government's reform actions. Consequently, countries with better property rights protection have better banking systems (Tressel and Detragiache, 2008).

Before banking privatisation, Taiwan had a state-dominated bureaucratic banking system and its main function was to assist the government's selective credit allocation policy. The preferential credit policy was used as an instrument to control big capitalists and to maintain macroeconomic stability. The banking system was designed to meet these political purposes instead of developing a reliable system with functions to allocate capital to sound and productive investments. The dysfunctional credit allocation was apparent in an active informal financial market and high saving rate which left loan policies often criticised.

Following the financial liberalisation in the late 1980s, the banking system was transferred from government-owned to private. The rapid expansion of banks without careful planning, and inappropriate lending practices led to an over-grown credit market. The fragmented banking system with increasing overdue loans damaged public confidence in the system. In this section, four aspects related to creditors' rights protection are looked at. First, reforms to loan policy to protect creditors from banks' irresponsible lending practices are reviewed. Second, how well the government looked into depositors' and investors' rights when tackling the worst problematic local credit associations is investigated. The third and fourth sections review the governance functions of protecting creditor's assets in the event of bank failure and in dealing with banks' accountability.

7.2.1 Reforms to loan policy

The financial industry in Taiwan had been used as a vehicle for promoting economic growth and plugging the deficiencies of other sectors. This attitude resulted in conservative loan practices due to the insufficient resources available to foster finance specialists and a lack of financial innovation capability. In the past, the main activities of domestic banks were corporate finance and home mortgages. When the reform started, banks were under great pressure to make improvements on their financial statements. As the reform begun tightening up regulations on corporate loans, banks switched the focus to consumer banking or more precisely credit cards, cash cards and residential mortgage lending to expand their loan business (Lim, 2009).[64]

Both private and public banks focused on promoting cash and credit cards to extend their loans and making turnover and profit figures look good on financial statements. Based on the data from the World Competitiveness Yearbook by Institute for Management Development (IMD), the number of credit cards issued[65] in Taiwan had increased from 1.4 per capita in 2002, to 1.7 in 2003 and 2.0 in 2004. In 2004, Taiwan was ranked 3rd among sixty economies regarding the number of credit cards issued per capita. In joint first place were Scotland and the United Kingdom with 2.9 cards issued per capita. Compared to the number of cards issued, Taiwan had a considerably low card transaction rate. In the same year (2004), Taiwan was ranked 33rd for credit card transactions[66] with 5.7 card transactions taking place per capita. Scotland and the United Kingdom were ranked 9th/10th with 68.1 transactions per capita. The banks' relentless promotion of card business had led to increasing numbers of outstanding card loans.

The rapid increase in credit cards issued without a robust credit checking system to support the activities had again led to growing non-performing card loans. According to the Card International Report from Financial News Publishing Ltd, the Taiwanese banks did not have a risk management infrastructure to support their issuance levels. As a consequence, a debt crisis had begun to unfold by mid-2005, with outstanding cash-card loans still under NTD 300 billion, banks on the island spent NTD 22.7 billion, or 7.6% of the total loans, to write off related bad debts in 2005 (Philip, 2006). By the first half of 2006, the media re-

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[64] The card debt problem exploded in early 2006, the Financial Supervisory Commission immediately insisted that consumer credit be tighten up (Taiwan Panorama Magazine, January 2007).

[65] Number of Visa and MasterCard holders (IMD, 2005).

[66] Total number of MasterCard and Visa transactions. Transactions: Transaction where a card is used for, payment of goods, service, or acquisition of cash, which results in cardholder turnover (IMD, 2005).

ported on 520,000 problem debtors (out of a population of 23 million), whose bad debts averaged USD 9,300 per person (Ahmad, 2007).

7.2.2 Reconstruction of local credit associations

Before commercial banks became popular, grass-roots banking was established to make up for the lack of commercial banks and to provide financial services to rural and small town residents. Unlike commercial banks, there were many restrictions for this type of financial organisation; for example, they could neither conduct foreign exchange transactions nor cross-region business. In addition, lending services were only available for member organisations. Therefore, when commercial banks started to spread all over the country in the 1990s, local credit institutions gradually lost their advantageous position and incurred serious losses due to the inflexible regulatory framework. However, these organisations remained important for residents in rural areas and for farmers and fishermen who had long term business with them.

From the beginning of the reform, the financial authority continued to push reforms of local credit associations, especially the CDFFAs which had the worst bad loan problems. The revised Banking Act passed in 2000 gave regulators the power to take over illiquid cooperatives. The fact that they actually implemented the law shows that they were serious about the reform, at least with regards to cooperatives. It was a courageous move and a crucial step in the difficult and pressing task of tackling Taiwan's serious NPL issue. However, a substantial improvement in rural financial services was needed to save the precarious local credit associations and eventually enhance the overall asset quality of the banking sector. The rural financial reform should have been accompanied by other supportive policies to advance comprehensive development of rural financial services. The financial reform focused on cleaning up the bad loans accumulated by grass-roots financial organisations and their reconstruction. The regulatory reform did not modify the regulations to support grass-roots financial organisations and did not improve their competitive ability. There were questions about the motivations of the DPP ruling party's drastic measures on local credit institutions. The criticism was that such radical reform activity was aimed more at destroying the KMT's political foundation than at solving the NPL problem. The government overlooked the importance of grass-roots banking institutions to local people. The relentless reform actions provoked local communities and shook their faith in government's willingness to protect their welfare.

7.2.3 Exit-mechanism for banking failures

To protect creditor's rights in the case of banking failures, a speedy and effective mechanism for dealing with banks in trouble should be established as soon as possible in the post-reform era. To deal with the local credit associations that had problems with high value overdue loans, the government introduced the Classification Management Act with respect to CDFFAs to provide them with an exit mechanism. In addition to this, a Prompt Corrective Act, based on risk-base capital standard, was introduced to enable financial authorities to take action on CDFFAs with a high risk of running into bankruptcy. The plan was to set up a National Agricultural bank to absorb the seized problematic local credit associations. However, the policy was designed without communication with local credit associations and government was forced to back down on both measures due to the strong protest from farmers and fishermen. The Classification Management Act was suspended and bad loans from problematic CDFFAs were absorbed by existing banks.

7.2.4 Weak discipline in corporate governance

The weakness in the corporate governance mechanism of Taiwan's financial services industry was observed in two phenomena in the 1990s: (1) the increasing incidence of banks frauds such as insider lending and self-dealing, and (2) the proliferation of financial institutions (Chen et al., 2008). Government regulation distorted the behaviour of bankers and inhibited standard corporate governance processes. The state-owned banks had continued to be managed by those who were selected based on their political connections rather than professional considerations, and the domestic private banks were mostly owned by family business groups that dominated the banks' ownership and management (Lee, 2002).

Typically a family business is defined as "the founder or his family members still serves as the company's director, management or stakeholder holding most of the company's shares" (Hwang and Wua, 2007). Majority of the domestic private banks in Taiwan were owned by family conglomerates where shares were concentrated in the hands of a few shareholders. In most of the cases, directors were also managers or closely related to the management. There was no clear distinction among management, board of directors, or board of supervisors. There was a lack of independent directors. Therefore, the power to run these banks belonged to the founders. Under these circumstances, rights of minority shareholders at most private banks were totally ignored. Shareholders did not have a say in the operation of these firms and they were the last to know about problems. The collapse of the Chung-

Shing Bank in 2000 due to a recorded NPL ratio of 64.8% is an example of inappropriate lending from a bank to its affiliate (Government Information Office R.O.C., 2005a). A total of NTD 840 million loans were authorised by the president, the founder of the bank, to its affiliates and much of it without collateral and several times of loan extension.[67] Chung-Shing Bank was an example showing that the loan decisions made by banks in Taiwan were not always based on risk analysis but on network relationships.

7.3 Governance quality of corruption prevention

Corruption is a symptom of fundamental institutional weakness (Hellman et al., 2000) and an underlying problem of governance. It occurs when property rights institutions fail to constrain elites from expropriating individual producers' income and assets (Acemoglu, et al., 2005). Prior to 1989 when banking was dominated by state-owned banks, they were developed as instruments to maintain political stability and control domestic capitalists. When political democratisation and financial liberalisation took place in the 1990s, the KMT had expanded its party enterprises into the banking sector. While private banks were controlled by the KMT and conglomerates, many of the state-owned banks were often used by local factions as vote-buying machines. There was a strong interconnection between politicians, financial business owners and local factions. For fifty years, the KMT manipulated the financial industry and used it as a vital financial resource to stay in power. As a result, the poorly functional banking system with seriously overdue bad loans and repeated financial scandals had damaged public trust in the system.

The DPP won the presidential election in 2000 by campaigning on anti-corruption and financial reform platforms. Consequently, there were high expectations from the public for the DPP to establish clean politics and governance. In fact, anti-corruption was seen as an important agenda for financial reform to increase financial transparency and combat financial corruption. This is why government's signalling of its intention to combat corruption was particularly important for restoring trust in Taiwan's financial reform.

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[67] On 28 April 2000, the Central Deposit Insurance Corporation took control of the Chung Shing Bank and suspended the board of directors after discovering apparent violations of lending regulations. The bank's former president and a former Mayor of Kaohsiung City, Wang Yu-yun, and former general manager, Wang Shuen-ren (son of Wang Yu-yun), were under interrogation over granting three loans worth a total of NTD 840 million to Taiwan Pineapple Corporation (affiliates of the Chung Shing Bank) and much of it without collateral. It was also discovered that nearly NTD 120 million out of the loans to Taiwan Pineapple was transferred to the accounts of a company owned by Wang Yu-yun (Lin, 2000).

Soon after the financial reform began, the MOF staged a major personnel shake-up at state-owned financial institutions in late July and early August 2001. In September, it acted again to replace executives of several state-owned banks including the Bank of Taiwan. There has been some success in efforts to remove the interference of local factions and other influential financial groups with symbiotic relations to the KMT. In addition, the government had been reshuffling personnel on the boards of state-affiliate financial institutions, and had been making efforts to prevent outside interference in these institutions (Yang, 2000). A series of scandals had come to light because the authorities had been able to expose the illegal and corrupt activities involving financial institutions. Examples include the First Financial Holding Company (insider trading), the Chuna Shin Commercial Bank (Chairman taking banking assets), the Bank of Overseas Chinese (high ratio of NPL), and Kuo Hwa Life Insurance (President Da-Min Won's asset stripping) (Lee, 2005).

Overall, the DPP government had earned credit from a series of anti-corruption actions in the financial reform. However, there had been a number of incidents which contradicted the government's pledge towards anti-corruption: (1) As previously mentioned the government had to back down on tackling the NPL problems in CDFFAs, the most corrupt financial organisations, due to pressures from local communities. (2) New government was perceived to be following the KMT's suit in building reciprocal relationships with conglomerates. (3) The releasing of state-owed bank shares raised doubts about government's motivation in reallocating the nation's financial resources. (4) A reformed regulatory framework to support government's anti-corruption policy was held back due to an obstruction of law making in the Legislative Yuan.

7.3.1 Network of local credit associations

The collusion between political parties and banking businesses contributed to the easy loan policies adopted by banks and led to a mountain of bad debts. When the DPP came to power in May 2000, the administration made fighting corruption a key policy issue. August 2000 was declared by the new government as 'anti-corruption' month in which a Black Gold[68] Investigation Centre was established, new laws were enacted and existing ones were revised. In this month, the DPP government took its first substantive steps to clean up the NPL problem and tackled the most problematic and corrupt financial organi-

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[68] Black gold corruption, explained in Section 6.3.2.2, was a murky world where big business, organised crime, and politics come together.

sations in Taiwan – the CDFFAs. An elite team directed by the MOF and CDIC seized control of thirty-six CDFFAs in 2001 to dispose of their bad loans. The aggressive moves were taken without sufficient communication and complementary policies. As a result, the drastic reform actions provoked both local financial organisations and their main customers. On 23 November 2002, about 120,000 farmers marched in the streets of Taipei in protest at the newly enacted Agricultural Financial Law and the forced mergers and takeovers of the CDFFAs. Under powerful pressure from the local financial communities and in consideration of the forthcoming 2004 presidential election, the DPP government suspended and postponed the criticised reform policies (Chen and Kuo, 2003).

The pressure of protest led to a policy U-turn and eventually caused two cabinet ministers to resign making people believe that the government was backing away from restructuring the country's financial system. As a result, Standard and Poors decided to downgrade Taiwan's credit rating over concern that the government had changed its basic financial reform direction.[69] The network between local credit institutions and the KMT party was shaken but remained intact.

7.3.2   The DPP government and conglomerates

A sufficient amount of funds was expected to be injected into the financial system for financial reform. Prior the change of political power, the KMT commanded a large of amount of financial resources. For one, there was no distinction between the state, government and KMT assets under the long-standing one party rule. Further, the KMT's own enterprises were ranked first among the nation's 150 financial institutions in 1999 (Chen, 2004). Most importantly, the KMT and conglomerates owners have established a tight interdependent relation. The then ruling KMT enabled the latter's businesses to grow at amazing speed across various sectors, and the latter to maintain its grip on power. These highly influential business men had enjoyed financial favours, which were often shady or illegal under the shield of political protection. Such favours allowed their businesses to create an unfair competitive force and a massive economic bubble. In return for these favours, the conglomerates owners repaid the KMT in money and other means to help it stay in power. As a result, a large number of pro-KMT conglomerates have run into problems since political power changed hands in March 2000.

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[69] Taiwan was given a AA+ rating in 2000, but the situation began to deteriorate in December of that year. As a result of the policy flip-flops on reform of the CDFFAs, Taiwan's rating was cut to AA the next year.

When the new administration came into power, it did not command the same amount of financial resources as the KMT. In a study of democratisation and financial reform in Taiwan, Kuo and Chen (2003) explained the reasons why the DPP did not resume the status of the KMT in the financial sector when it took over government. For one, the DPP is not a centralised party as the KMT was. Secondly, the DPP did not own any party enterprises and did not hold major interest in the banking business. Unlike the KMT which had been building connections with the banking business over fifty years, the DPP maintained a weak institutional relationship with financial institutions and had been slow in establishing stronger links with banks prior to 2000. To consolidate its newly gained power and survive in the peculiar election culture, the DPP followed the KMT's suit, aligning itself with conglomerates and inheriting the 'black gold' phenomenon. Instead of building the connections through the party's network as the KMT did, the DPP had to establish relations with banks through President Chen's personal connections. There were incidents which left President Chen and the DPP government being criticised for exploiting their control of government for personal wealth. State-owned banks were seen to be used by the DPP government to reward the services of supporters and in some cases became election campaign tools. An example of scandal involving government officials surfaced in June 2002 and involved DPP members of parliament accused of having pressured the state-run Taiwan Power Company to award contracts for the construction of the country's fourth nuclear power plant to a favoured firm (Lin, 2002).

7.3.3   Share release of state-owned banks

Share release of state-owned banks was a ripe target of public criticism during the first reform. In response to the financial consolidation laws that came into effect in November 2001, one of the first of those critical announcements concerned the proposed merger of three state-owned banks, the Bank of Taiwan, Land Bank of Taiwan and Central Trust of China, to create a big organisation with approximately 20% of both deposits and loans. Observers questioned whether this merger orchestrated by the MOF would generate any significant efficiency gains in view of the government ownership of all three and anticipation that there would be no reduction of staff.

The transaction and timetable of the Mergers and Acquisitions (M&A) between public and private banks were perceived to be completely preconditioned. There were concerns that released shares of state-owned banks would result in financial conglomeration and transfer

of public property at large discounts (Hwang and Wua, 2007). Take the merger between Taipei City Government and private financial company Fubon Financial Holdings as an example. The deal took place on 18 August 2002 and was the first M&A between a public and a private bank. Taipei Bank was first acquired by Fubon Financial Holdings and then merged with its subsidiary company, Fubon Commercial Bank. The former Taipei Bank president Liao Cheng-Ching accused the city government of making a mistake by merging the bank with Fubon Commercial Bank because Taipei Bank was bigger than Fubon Bank in terms of assets (Huang, 2003a). There were also allegations that government officials benefited personally from the mergers. The former general manager Jess Ding from Taipei Bank was offered the position as chief executive officer in the Fubon Financial Holding Company after the merger took place (Tian, 2003). In the process of releasing shares of state-owned banks, it was seen that reform may cause a reallocation of the nation's financial resources while the government was urging financial institutional consolidation. The government's purpose was to allocate the financial resource from pro KMT to pro DPP enterprises.

7.3.4 Blockage in law making for anti-corruption

When the DPP first came to power in October 2000, the KMT held more than half of the seats in the Legislative Yuan while the DPP held just about one third of the seats as a minority government. Throughout the first phase of financial reform, the opposition alliance parties - KMT, New Party[70] and People First Party (PFP)[71] - held more than half of the seats in the Legislative Yuan.[72] The drafts introduced by the DPP government to promote financial transparency in order to control corruption were frequently reintroduced for consideration in the Legislative Yuan. For instance, when the new administration tried to pass a bill establishing an independent anti-corruption agency following the model of the Independent Commission Against Corruption in Hong Kong, the progress was made rather slow through the legislature (Jou, 2001). In May 2002 the legislative committee refused to proceed with the bill for the fifth time (Ministry of Justice, R.O.C., 2005). Furthermore, the

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[70] The New Party was formed out of a split from the then-ruling Kuomintang by members of the New Kuomintang Alliance in August 1993 (New Party, 2001). The party maintained a close but tense relationship with the KMT as part of the pro-KMT coalition.
[71] The People First Party was founded by James Soong and his supporters after his failed independent bid for the presidency in 2000. The PFP is the third largest political party in Taiwan and originally grew out of the KMT (PFP, 2000). The party maintains a close but tense relationship with the KMT as part of the pro-KMT coalition.
[72] According to the data from the Central Election Commission (2009), in the 1998 election, the KMT won 54.9% of the total seats in the Legislature and the DPP won 31.3%. In the 2001 election, the DPP replaced the KMT and became the largest party in the Legislature by winning 40.5% of the total seats, while the KMT took 31.60%. In the 2004 election, the DPP won 39.6% of the total seats and the KMT held 35.10%.

aggressive policies to combat corruption and strengthen the financial system were voted down by an alliance of KMT and other opposition parties who would have faced severe losses had the new regulations been passed (Göbel, 2004). An example is seen in the New Party's casting of a decisive vote on the passage of a sweeping Financial Disclosure law which reflected the importance of coalitionist politics in the Legislative Yuan (Lim, 2009). Despite government's claim to combat corruption, there had been slow and dissatisfactory reforms on regulations to support this policy.

7.4 Governance quality of maintaining political stability

Political instability quite plausibly impedes a nation from building institutions or undermines such institutions' effectiveness even if built (Kaufmann et al., 2003). A stable political environment is therefore crucial for building trust in the institution which enables efficient reforms implementation. Political stability is particularly important in Taiwan's case because, for one, its historical background with China had great influence on Taiwan's financial system development. Another reason is that the stand-off between Taiwan and China caused Taiwan's political isolation from the global communities which added barriers for Taiwan's financial market to participate in global financial markets. Taiwan's political situation became increasingly unstable after the DPP came to power. First, the worsening relationship between China and Taiwan did not help to remove barriers to cross-strait financial transactions. Second, the government was weak in enforcing reform measures. Finally, hostile political competition divided the public with different ideologies which made it harder for government to gain support.

7.4.1 Barriers to cross-strait financial transactions

The relation with China had always played an important part in Taiwan's political arena. When the DPP party took over the government of Taiwan, the tension between Taiwan and China reached its peak. This is because the DPP is known as a pro-independence party and its victory symbolised the fact that Taiwan's voters were deeply unsettled by Beijing which made China more alert with regard to Taiwan's status. The likelihood that the government in power could be destabilised by China's military force put the DPP government's capacity in doubt.

The tense political stand-off with China was unfavourable for Taiwan's financial reform because: (1) It increased transaction costs on cross-strait financial transactions. Since the

1990s, Taiwanese companies had begun to relocate their factories to China to benefit from low labour costs. The Chinese economy attracted more investors from Taiwan, especially after both joined the World Trade Organisation (WTO) in 2001 and opened up their economies to the world. Investments from Taiwanese in China had increased rapidly during the 1990s and accounted for 67% of Taiwan's outward investment in 2004.[73] When both Taiwan and China joined the WTO in 2001, financial authorities on both sides were pressurised to lift the restrictions on cross-strait financial exchanges. However, the difference between Chinese and Taiwanese governments made it difficult to reach a consensus on cross-strait financial transaction regulations.

The increasing outward investments into China have caused a massive exodus of funds due to the restrictions on cross-strait financial exchanges. This attracted great concern from both the government and banking communities as it hindered the reform efforts by obscuring the potential size of Taiwan's domestic financial industry. (2) It impaired the banking sector's development opportunities. As the capital markets in China were in the early stage of development, Taiwan had already undergone transition from a manufacturing economy to a service economy. This would have enabled Taiwan's financial business to take advantage of the gap between its own development level and that of China. Furthermore, Taiwan and China share a common cultural background with the same language. This should have benefited Taiwan's entry to the financial market in China by lowering the barriers. However, the hostility and tension between the DPP government and China prevented Taiwan's banking from expanding in China. The restrictions that had been placed on banks setting up branches in China stood in the way of overseas deployment for Taiwanese businessmen. This also made it impossible for Taiwanese businessmen to capitalise on business opportunities in China. Since China opened up its economy in 2000, it had been rapidly developing the financial services sector and gradually opening up its market to foreign investment. As a result, fears of Taiwan's financial business losing competitiveness to China had begun to grow.

7.4.2 Weak government

The new administration was perceived to be weak as a ruling party. The reasons are three-fold. (1) As discussed in Section 7.3.4, the opposition alliance parties led by the KMT still dominated the Legislative Yuan even after transferring political power to the DPP regime.

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[73] According to statistics compiled by the Department of Statistics Ministry of Economic Affairs R.O.C. (2005).

Taiwan's central government consists of the Office of the President and five Yuans (branches) - the Executive Yuan, the Legislative Yuan, the Judicial Yuan, the Examination Yuan and the Control Yuan (Government information office, R.O.C, 2004). Its constitutional structure is a semi-presidential[74] system under which it is best when the president and a majority of the members in the Legislative Yuan belong to the same party (Lee, 2001). While the appointment of Head of the Executive Yuan - the Prime Minister - by the president did not require the approval of the Legislative Yuan, the Executive Yuan is nevertheless accountable to the Legislature. DPP's minority standing made it difficult for the government to gain the support it needed in the Legislative Yuan when trying to design reform policies. The Legislative Yuan became a playing field for the DPP and the KMT to battle against each other, and Taiwan was caught up by the unprecedented eruption of a feud between the new president belonging to a minority government and the KMT-dominated Legislative Yuan. For example, when the new government came into power in 2000, the KMT majority in the Legislative Yuan geared up to impeach the president and its administration. President Chen's first Prime Minister Tang Fei resigned under great pressure (Huang, 2000). (2) The new regime's authority had been too weak to implement measures needed to reform the financial system because of insufficient financial resources, as mentioned in Section 7.3.2. (3) The ruling party's own lack of experience and unfamiliarity with government operations failed to prevent a rise in political instability. As an opposition party, the DPP was good at checking and balancing the ruling party but as a ruling party it lacked the experience and tact necessary to decrease the force of the impact between the ruling and opposition powers (Lee, 2001).

7.4.3 Hostile political competition

Taiwan's major political parties, including the DPP, PFP, KMT and New Party, are divided along ideological and ethnic lines. The DPP is built on 'Taiwanese Principles', while the KMT, the PFP, and the New Party are all built on 'Greater China Principles'. In other words, the DPP's ideology is built on the notion of an independent, sovereign state of Taiwan, while that of the opposition alliance favours a unified China. With the ideological conflicts, there were tensions and constant bickering between the opposition alliance and the DPP.

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[74]According to Elgie (1999:13), a semi presidential regime is defined as 'the situation where a popularly elected fixed-term president exists alongside a prime minister and cabinet who are responsible to parliament'.

During the presidential election in 2000, the 228 massacre[75] was often mentioned by the DPP demanding that the KMT party take responsibility for its actions. To gain support for this cause, the DPP leaders played on the hateful feelings of native Taiwanese towards Chinese immigrants. The nation was divided according to political ideologies as a result of aggressive competition between ruling party and opposition alliance parties. The ethnical conflicts between Chinese immigrants and native Taiwanese had became more serious after the political rotation.[76] The lasting scar of the 228 incident and the feud along ideological and ethnic lines decreased social cohesion and trust in society. A survey result from the IMD competitiveness report shows Taiwan's social cohesion[77] index dropped from 5.71 in 2002 to 5.03 in 2004. The hostile political competition that divided the nation made it very difficult for the ruling party to gain support from citizens with different political ideologies and to implement the reform measures.

7.5 Governance of financial reforms achievements

This section looks at changes in Taiwan's overall governance quality since the financial reforms began in 2001 using a governance indicators database from Kaufmann, Kraay and Mastruzzi's (2010a) research project entitled Worldwide Governance Indicators (WGI).[78] In their study, countries are compared on six dimensions of institutional development: *voice and accountability*, *regulatory quality*, *government's effectiveness*, *control of corruption*, *rule of law* and *political stability*. Figure 7-2 shows the changes in percentile rank of Taiwan's governance quality in the six institutional dimensions.

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[75] The 228 massacre was explained in Section 5.2.3.2.

[76] Currently, of Taiwan's population 18 million are native Taiwanese while 4 million are ethnic China born immigrants (Lee, 2001).

[77] Survey questions: social cohesion is a priority for the government. Rate varies between one and ten.

[78] The Worldwide Governance Indicators project reports aggregate and individual governance indicators for 213 economies over the period 1996–2009 for six dimensions of governance (Kaufmann et al., 2010a).

Taiwan's Governance indicators 1996-2004
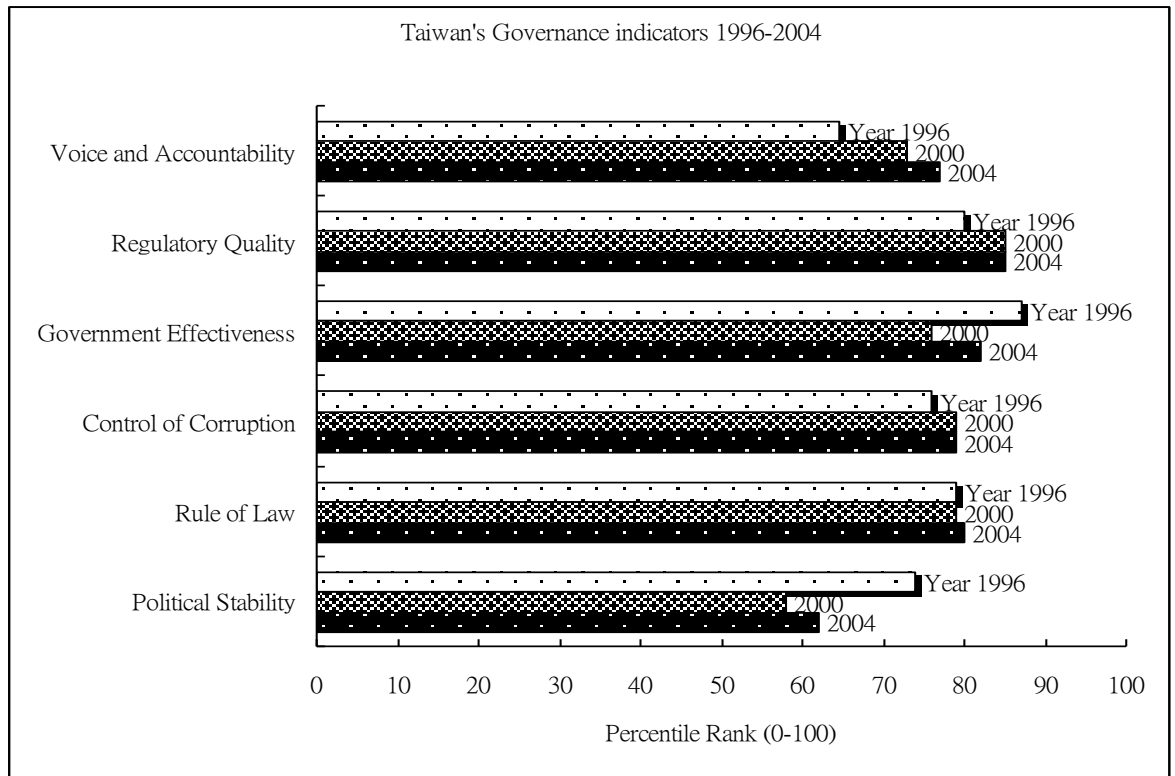
Figure 7-2 Taiwan's governance indicators in 1996, 2000 and 2004

Source: Kaufmann, Kraay and Mastruzzi (2010b)

The vertical axis shows the indicator groups. The horizontal axis compares the indicator groups in the years 1996, 2000 and 2004. This is to compare the perception of governance quality prior to the reforms (1996), at the beginning of the reforms (2000) and by the end of the first phase (2004). Since government plays an important role in governance quality, these three points in time also offer the change of perceptions in government when under the KMT regime (1996), during the change of political power (2000) and under the DPP regime (2004).

Voice and accountability measures the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media (Kaufmann et al., 2007). This is the only indicator group that consistently improved. Taiwan's first change of political power symbolises substantial progress in democratisation and also indicates high independence of Taiwan's media which can deliver information with less interference from the government.

Regulatory quality measures the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development (Kauf-

mann et al., 2007). The chart shows a clear improvement in this institutional dimension. The government's effort towards designing a stronger regulatory framework for the financial industry had a positive impact. However, the quality of policy implementation was in doubt as shown for the indicator *government effectiveness*.

Government effectiveness measures the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies (Kaufmann et al., 2007). There was a sharp drop in *government effectiveness* from rank 87th in 1996 to 76th in 2000, climbing back to 82nd in 2004. The possible explanation for the sharp drop in rank in 2000 could be a lack of confidence on the part of the public in the new and inexperienced government.

The next three indicators, *control of corruption*, *rule of law* and *political stability*, capture the changes of governance quality in three key areas discussed in Sections 7.2, 7.3 and 7.4. (1) *Rule of law* measures the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, the police, and the courts, as well as the likelihood of crime and violence (Kaufmann et al., 2007). This is particularly related to rules enforced to protect property rights. The percentile rank of this indicator group was 79th in 1996, 2000 and increased by one percentile to 80th in 2004. (2) *Control of corruption* captures the perception of the extent to which public power is exercised for private gains. This indicator measures the frequency of 'additional payment to get things done' as the effect of corruption on the business environment and also the 'grand corruption' in the political arena. The percentile rank showed a slight increase from 76th in 1996 to 79th in 2000 and 2004. The marginal improvement in these two indicators shows that citizens and the state have more respect for the institutions governing financial activities but not major improvement. (3) *Political stability* indicates the perceptions of the likelihood that the government will be destabilised or overthrown by unconstitutional measures. A clear sign of deterioration is seen from Figure 7-2, the percentile rank fell from 74th in 1996, to 58th in 2000 and increased to 62nd in 2004.

Overall, the WGI suggests that Taiwan's democratisation progressed further and the regulatory framework was improved after the financial reform. However, the quality of policy implementations was perceived to be weaker and there were only slight improvements in

enforcing the rule of law in society. Despite government's pledge to its anti-corruption stance, the DPP government was perceived to be more or less the same as the KMT and Taiwan has experienced an increasingly unstable political environment since the new government came to power.

The following sections study the achievements of the four reform policies discussed above and the barriers in the inherited institutional context to implementing these policies. The analysis focuses on the three key governance qualities discussed in Sections 7.2, 7.3 and 7.4. The aim is to investigate governance influence on enforcing policies as a result affecting reform performance.

7.5.1 Enhancing quality of banking assets

7.5.1.1 Achievements

From 2002 to 2003, domestic banks wrote off NTD 650.7 billion (USD 18.98 billion) and by May 2003, AMC had purchased bad assets worth around NTD 161.2 billion (USD 4.7 billion) from domestic banks. Compared with the peak amount of NPL of NTD 1,147.6 billion in March 2002, the total amount had reduced by NTD 517 billion to NTD 630.6 billion by the end of 2003. The NPL ratio for domestic banks also steadily backed down from 7.5% in December 2001 to 2.8% in December 2004 (Table 7-1).

Among all banking organisations, the CDFFAs had the worst NPL problem. Their NPL ratio reached its peak at 19.4% at the end of 2001 and dropped to 14.5% by the end of 2004. The NPL ratio was still considerably high because the reform of the CDFFAs did not go far enough to tackle the problem. The main obstacle is the long existing co-dependent relationship between the KMT party and CDFFAs which is discussed later in this chapter. Overall, after three years of effort, the average NPL ratio was pushed down to a tolerable level of 3.3% in December 2004. With regard to enhancing banks' liquidity, the Financial Assets Securitisation Act and the Real Estate Securitisation Act enabled banks to utilise their long-term collateral more efficiently with the high turnover rates of funds. By the end of 2003, six issuances of such securities had been approved, including the first overseas issuance, totalling NTD 37.6 billion (USD 1.1 billion).

End of Year	Date	Non-Performing Loans ratios by percentage				
		Overall NPLs ratios	Domestic banks	Local branches of foreign banks	Credit cooperatives	CDFFAs
1998	Dec.	4.93	4.37	1.65	7.55	13.1
1999	Dec.	5.67	4.88	3.2	10.54	16.03
2000	Dec.	6.2	5.34	3.22	12.45	17.91
2001	Dec.	8.16	7.48	3.53	11.66	19.37
2002	Dec.	6.84	6.12	2.36	10.34	18.62
2003	Dec.	5.00	4.33	1.51	6.91	17.57
2004	Mar.	4.78	4.14	1.42	6.75	17.34
	June	4.15	3.54	1.21	5.97	16.4
	Sept.	3.88	3.31	1.14	5.46	15.73
	Dec.	3.28	2.78	1.03	3.17	14.51

* Note: (1) Trust and investment companies and Postal saving s system are not included (2) Overall NPLs rations is a weighted average according to market share of banking system. By the end of 2004, market share of domestic bank is 73.34%, Local branches of foreign banks 2.61%, Trust and investment companies 0.54%, Credit cooperatives 2.79%, CDFFAs associations 5.92%, Postal saving system 14.79 %.

Table 7-1 Non-performing Loan Ratios by %

Source: Financial Statistics dataset from Banking Bureau, Financial Supervisory Commission, Executive Yuan. R.O.C. (2005)

However, studies that examine the performance of banks after the reform suggest no significant improvement in banks' performance or upgrading economies of scale and scope. Yang (2006) studies banking performance and finds that domestic banks' return on equity (ROE) and return on assets (ROA) deteriorated after the reform (Yang, 2006). As seen from Table 7-2, the value of ROE and ROA for domestic banks in Taiwan dropped to their

End of period	Average asset (1)	Average Net worth	Profit before tax	ROA (3)/(1) x 100	ROE(3)/(2) x 100
2000	201,020	15,614	966	0.48	6.19
2001	212,578	15,975	576	0.27	3.60
2002	219,189	15,096	-1,046	-0.48	-6.93
2003	229,190	14,324	505	0.22	3.52
2004	246,232	15,083	1,554	0.63	10.30

Table 7-2 Performance indicators of Taiwanese banking

Source: Banking Bureau, Financial Supervisory Commission, Executive Yuan. R.O.C., (2005)

lowest at -6.9% and -0.5% by the end of 2002 but showed slight improvements by the end of 2003. Both performance indicators are below international standards, that is a value of 15% for ROE and 1% for ROA according to Yang (2006).

7.5.1.2 Institutional drawbacks

The institutions did not evolve to improve banks' asset quality. (1) Property rights institutions failed to provide a better credit checking system for banks' risk management. The rapid increase in credit card issuing without support from a reliable credit checking system to assist banks making loan decisions again led to growing non-performing card loans. The high costs of writing off bad cash-card debts made it hard for banks to maintain sound asset quality. In addition, lack of corporate discipline amongst private banks and their borrowers meant that companies could easily borrow funds from banks because the board of directors did not scrutinise management actions. Banks as lenders could easily issue loans to their associated companies. Furthermore, the mechanism did not allow for problematic banks to exit the market when running into trouble. Finally, the system did not modify the regulations to support local credit associations' further development. Hence they remained the weakest link in the system with a high risk of running into bankruptcy. (2) Although anti-corruption actions managed to tackle a number of CDFFAs and disposed of their bad loans, the KMT's local network built through community credit associations remained unconquered, as did the collusions with conglomerates. In addition to this, evidence suggests that the new government's pre-conditioned mergers between state-owned banks did not improve their performance.

7.5.2   Encouraging mergers and acquisitions

7.5.2.1 Achievements

In 2001, sixty-nine financial M&A worth a total amount of 19.3 USD billion took place (Table 7-3). The number of M&A soon reduced to thirty-six, then to eighteen and sixteen in the following years. The high number and value of M&A in this year were down to two factors. The first factor was the government's forced mergers and takeovers of nine credit associations and twenty-nine CDFFAs in an attempt to clear bad loans. The second factor was the establishment of financial holding companies. The Financial Holding Company Act with low-tax incentives had encouraged existing financial institutions to merge with each other, and as a result fourteen financial holding companies were formed by late 2001.

Between 2001 and 2004, M&A between sixty-eight financial institutions had occurred, with fifty-one of the transactions taking place between banking institutions.

	2000	2001	2002	2003	2004
Number of M&A transactions	16	69	36	18	16
Total amount of M&A	2	19.3	11.9	2.3	0.9

Year

■ Number of M&A transactions
■ Total amount of M&A values in USD billion
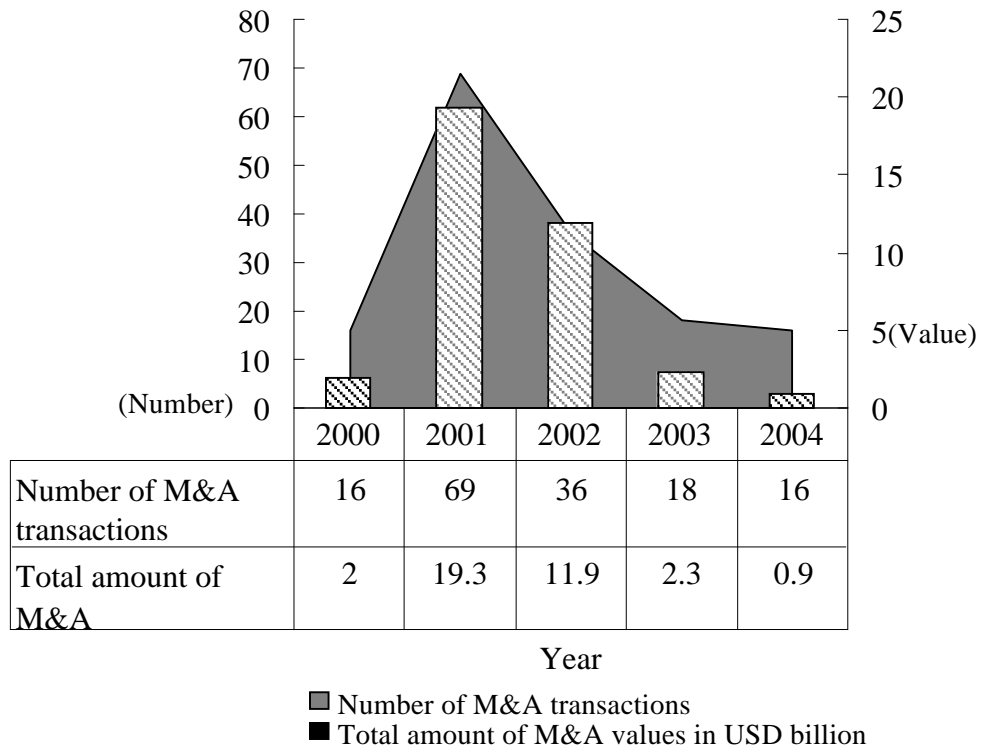
Table 7-3 Financial M&A transactions in Taiwan between 2000 and 2004

Source: Bloomberg News (2005)

Between 2000 and 2004, local financial associations had fallen significantly in number (see Table 7-4). The number of credit cooperatives had reduced by 33%, credit departments of farmers' associations by 12%, and credit departments of fishermen's associations by 7%. However, there was less achievement with domestic commercial banks. There were only four domestic banks less in 2004 compared to 2000 with an increase of 18% in the number of branches between 2000 and 2004.

End of period	Head office				Number of branches			
	Domestic Banks	Credit Co-operatives	Credit Departments of Farmers' Associations	Credit Departments of Fishermen's Associations	Domestic Banks	Credit Co-operatives	Credit Departments of Farmers' Associations	Credit Departments of Fishermen's Associations
2000	53	48	287	27	2693	394	973	49
2001	53	39	260	25	3005	373	883	44
2002	52	37	253	25	3068	358	847	40
2003	50	35	253	25	3173	341	829	39
2004	49	32	254	25	3189	319	827	39
	-4	-16	-33	-2	496	-75	-146	-10
%	-7.55%	-33.33%	-11.50%	-7.41%	18.42%	-19.04%	-15.01%	-20.41%

Table 7-4 Number of banking institutions between 2000 and 2004

Source: Banking Bureau, Financial Supervisory Commission, Executive Yuan. R.O.C. (2005)

With respect to market concentration rate, Taiwan can be regarded as Asia's most over-banked market in 2004. None of the subsidiary banking units of the nation's fourteen financial holding companies had a market share above 10% by 2004, hence their degree of international competitiveness remained inadequate. The low concentration rate of the banking sector meant that with few economies of scale, profit margins were small. The concentration ratio remained at a low level between 26% and 29% from 2000 to 2004 (Figure 7-3). This figure is much lower than in other Asian countries. For instance, the ratio was 97% in Singapore, 64% in Hong Kong, 48% in Thailand, and 45% in Korea in 2004 (Beck, Demirg-Kunt, and Levine, 2008).

Admittedly there was little achievement in terms of financial consolidation but there was an improvement in the percentage of income from fees and commissions. Cross-selling of financial products enables subsidiary banks to engage in a wider range of financial services such as insurance, securities, and bills financing to diversify their products. In 2001, 86% of the operating revenue for domestic banks came from interest revenue and only 5% of profit came from fees and commissions. In 2004, the percentage of domestic banks' interest revenue had reduced to 78% and the percentage of fees and commissions increased to 9% (Lee and Tang, 2002).

Bank concentration rate

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Bank concentration rate	62.40	38.93	37.02	35.48	34.11	33.30	30.21	28.61	28.32	28.58	28.03	27.76	27.53	26.16
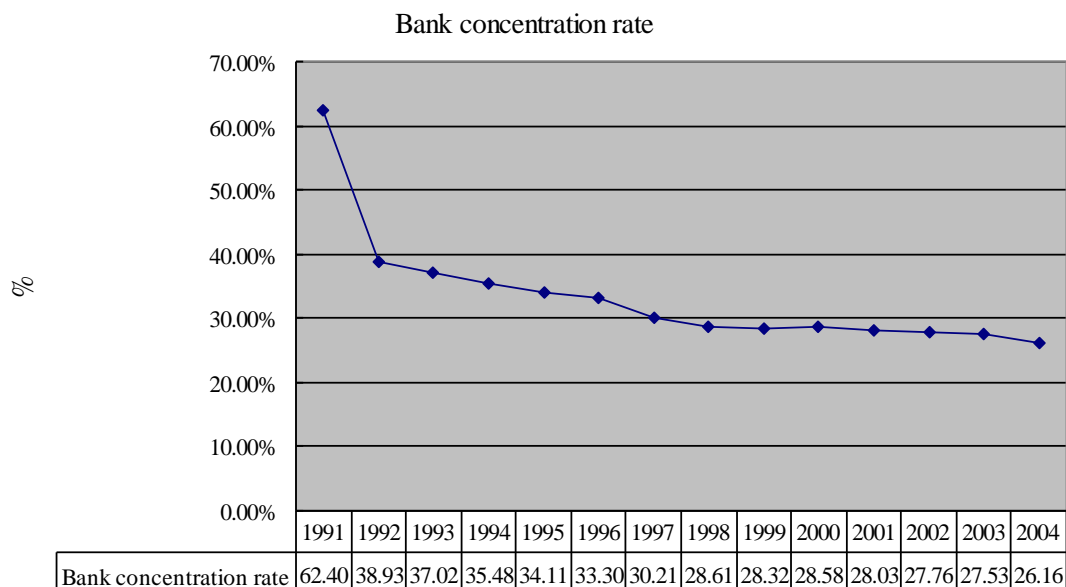
*Note: Bank concentration ratio is the ratio of the three largest banks' assets to total banking sector assets

Figure 7-3 Taiwan's banking concentration ratio

Source: Beck et al., (2008)

7.5.2.2 Institutional drawbacks

The reform policy of encouraging M&A was aimed at solving overbanking problems and expanding the scale of Taiwan's banking sector. Institutional barriers to policy implementation were seen at: (1) Property rights institutions; lack of understanding of corporate governance discourages M&A. For this reason, there has been considerable reluctance from global/regional players to buy minority stakes when a number of family-controlled Taiwanese banks expressed interest in selling shares after the Merger and Acquisition Act came into effect. The lessons learnt elsewhere in Asia made foreign investors reluctant to buy fully-priced minority stakes that did not allow control of management. (2) Corruption; doubts over government's motivation for promoting financial consolidation discouraged M&A. The pre-conditioned M&A arranged by the government were perceived as government's intention to reallocate the national financial resource. Scandals regarding government officials taking cuts from M&A deals harmed government's credibility. In many cases the M&A proceeded in secret and there was resistance from banking workers to taking part in the deals. For example, the management of the Taipei Bank secretly concluded a deal with Fubon Holding Company, disregarding its employees' strong opposition.[79] In

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[79] The deal between Taipei Bank and Fubon Financial Company took place on 18 August 2002. A month before the deal went public, a former 30-year employee of the Taipei Bank, Mr. William Huang, was dismissed without notice after writ-

addition, the aggressive political competition obstructed the law making process for complementary measures for M&A. For example, when the Merger and Acquisition Act came into effect in November 2001, the aftermath arrangements for employees were not in place. According to the figures quoted by Taiwan Panorama Magazine, after Fubon Financial Company took over Taipei Bank, 1,500 of the original 3,600 staff of the Taipei Bank left (Lee, 2007). The same applies to the merger of Cathay with United World Chinese Bank where about 10% of its employees (roughly 500 persons) left. And in the acquisition of the General Bank by the Chinatrust Group, the former shed 900 employees or two-thirds of its original workforce. This is another reason why banks were reluctant to take part in the consolidation process. (3) Political stability; the aim of financial M&A was to help Taiwan's fragmented banking sector by expand its scale. However, the tense political standoff with China hampered the banking sector's development opportunities in China. Moreover, the unstable political environment discouraged foreign banks from merging with Taiwan's domestic banks due to the high political risk.

7.5.3 Financial supervisory reform and financial transparency increase

7.5.3.1 Achievements

Accomplishments of supervisory reform are not easy to measure, especially over a short period of time. One thing which probably does represent the achievements was the confidence in the reformed supervision system. Chen and Ruan (2003) question whether a unified financial supervision is most appropriate in the financial and political environments of Taiwan. The debates include: whether the new supervision was capable of being a single financial regulator for regulating all securities and investments; whether the financial policy and implementation should be handed to the same organisation; and most of the all, whether the new financial authority could control the risks involved with financial conglomerates as each of its departments was responsible for regulating only one type of financial business. Further, as Hwang (2007) points out, the new supervisory agent- FSC under the Executive Yuan did not have independent resources of personnel management, operating budget or examination, and hence might still be subject to intervention from the Legislative Yuan.

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ing an email to the managers asking for a clear explanation of a planned merger with Fubon Bank on 18 June 2002. The president and managers of Taipei Bank claimed that the phrase used in Huang's email 'don't cheat the workers anymore' had been a serious insult to them (Huang, 2003a, 2003b). After Huang was dismissed, he filed a civil suit claiming the bank had no grounds on which to fire him and he won the case in February 2005 after a long fight (National Federation of Bank Employees Unions, 2009)

The degree of perceived financial transparency can be used as an indicator of public confidence in the FSC. Under the new disclosure-based approach, market participants rely on financial authorities to help raise the standard of corporate disclosure and market disciplines to decide the merits of transactions. Hence, a higher degree of transparency perception should reflect that public trust the new authorities in imposing market disciplines. According to a survey result from the IMD, the financial institutions' transparency in Taiwan dropped from rank 35th to 39th between 1999 and 2004 suggesting a perceived deterioration of degree of transparency in Taiwan's financial organisations. This implies a decline in public trust in the reformed financial supervisory framework.

7.5.3.2 Institutional drawbacks

The aim of reconstructing the financial authorities and increasing transparency was to impose market disciplines and keep the financial system upright. (1) Property rights institutions as previously discussed did not strengthen banking corporate governance to improve financial transparency. (2) Corruption prevention: The FSC was set to consolidate the supervision of financial institutions to eliminate blind spots that occurred in separate examinations by function. It was designed to exercise its power independently to avoid political influence when enforcing the reform policies. However, as discussed earlier the FSC under the Executive Yuan still had the problems of budget and personnel independence because of the intervention from the Legislative Yuan. The most serious drawbacks were the FSC's frequent changes in leadership and continuing outbreaks of corruption scandals. The accountability of the FSC was doubted when its first chairman was removed from his position due to corruption and the involvement of several high-ranking officials' in scandals (Taipei Time, 26 Jan. 2007). Further, a NTD 140 billion (USD 4.46 billion) financial reconstruction fund was established in 2001 to clean up bad loans. Such substantial amount of fund injected into the system made the obstruction in law making for improving financial transparency a greater worry. There have been concerns that this fund could be usurped by involved public officials because the uses of allocation of the funds were not specified in the regulation. (3) The FSC has seen frequent personnel changes since it was established in 2004 due to the inexperience government in power and the unstable political environment which has created challenges for supervision reforms.

7.5.4   Promoting investment in domestic markets

7.5.4.1 Achievements

During the first phase of the reform, seven representative offices of Taiwan banks[80] were permitted by China and Taiwan's authorities to establish in Shanghai China, as well as seventeen securities firms, seven insurers and one insurance broking company. However, banks that set up representative offices were only able to collect business information and provide consulting services; they were not allowed to handle deposit and loan operations. In addition, Taiwan's government had allowed the OBUs of some domestic and foreign banks in Taiwan to engage in financial transactions with Chinese commercial banks. This permission of direct cross-strait remittances by OBUs helped increase the total amount of cross-strait financial transactions to NTD 42 billion from January to May 2004. By the end of 2003, net inflows of foreign investment reached USD 66.4 billion, reflecting a substantial increase of nearly USD 23.5 billion over the year before. Shareholdings of foreign investment represented around 15% of the total market capitalisation of Taiwan's stock market. Regarding the direct investment, the amount increased from USD 1.45 billion to USD 1.90 billion with its percentage of GDP increased from 0.49 to 0.59 according to IMD data. However, the gap between direct investment flows abroad minus flows inwards grew from 3.44 in 2002 to USD 5.25 billion in 2004. This shows that outward flows increased more than incoming flows.

7.5.4.2 Institutional drawbacks

The ongoing discussion of the institutions which failed to provide well-protected property rights and enforce disciplines in the financial market had made Taiwan a less attractive market for foreign investors. In addition, the increasing exploitation of exercising public power for private gains had encouraged participation in Taiwan's shadow economy[81] and lowered its economic outlook. According to the figures provided by Schneider (2006), the shadow economy in Taiwan increased from 25.4% in 1999/2000 to 27.7% of official GDP in 2002/2003. A corrupted financial culture creates a shadow economy which can affect a country's policy and law making processes, weaken public institutions and alter the country's public spending priorities. Apart from this, a shadow economy can exhaust a country's natural resources and public wealth and hinder business and investment opportunities. Finally, unstable political conditions made Taiwan a less desirable place to invest. The in-

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[80] On 16 September 2010, the China Banking Regulatory Commission gave the approvals of four representative offices of Taiwanese banks (Land Bank of Taiwan, First Commercial Bank, Chang Hwa Bank and Taiwan Cooperative Bank) to open branches in China. That was the first time banks from Taiwan had been given permission to do so (Wang, 2010).
[81] A shadow economy includes not only illegal activities but also unreported income from the production of legal goods and services, either from monetary or barter transactions (Schneider and Enste, 2000)

creasingly tense relations with China, hostile attitude between political parties and a divided nation brought great uncertainties to Taiwan's investment markets. This prevented investments which were urgently needed for expansion of Taiwan's financial markets as political risk appeared to be one of the main barriers which discourage foreign investors from investing in emerging markets (Bekaert, 1995). Even for domestic investors, those who look for more exclusive financial services would choose offshore private banking services to secure their assets overseas.

7.6 Summary

The priorities of the first reform focused on solving NPL problems. The average NPL ratio was pushed down from 8.2% in December 2001 to 3.33% at the end of 2004. However, the NPL ratio for CDFFAs remained high at 14.5% at the end of 2004. As regards consolidation of the financial institutions, 155 financial M&A took place between 2000 and 2004. However, the nation still had too many banks with concentration ratio remained low at 26% at the end of 2004. Also, none of the subsidiary banking units of the fourteen newly established financial holding companies had a market share above 10 % (Huang, 2004). Studies that used ROA and ROE for examining banking performance suggest no significant improvement after reform (Yang, 2006). The new financial supervision with disclosure-based philosophy was designed to promote financial transparency but appeared to be less convincing when Taiwan's financial institutions' transparency was perceived to worsen from rank 35th to 39th between 1999 and 2004. Finally, there were increases in cross-strait financial transactions and inflow of foreign investment but overall, the outflow of investment was higher than the inflow. While there were evidences that Taiwan's banking system has improved as a result of the financial reform, the progress had been slow and unsatisfactory.

This chapter investigated the impacts of quality of governance on the reform achievements and found it to be a major set-back to the process. Overall, Taiwan's governance qualities showed clear improvements in democratisation progress and regulatory quality but only slight improvements in corruption control and rule of law. The government's effectiveness in terms of policy implementations and ability to stabilise the political environment deteriorated. The path-dependent institutional barriers when enforcing reform policies were observed in three qualities of governance. First, property rights institutions should have been improved to support the credit checking system which helps with asymmetric information

problems by increasing transparency when granting loans. This way, discipline in the financial markets would be enforced and protection provided for the public's investments. However, the credit card crises unfolded in mid-2005 and growing non-performing card loans were indicative of banks' continuously irresponsible lending practices. In addition, lack of supportive policies or exit-mechanisms to help financial organisations in trouble had shaken public faith in how securely their properties were protected by the institutional system. Finally, property rights institutions were unsuccessful in strengthening discipline in banking corporate governance. As a result, the rights of creditors' and shareholders' could be ignored. The governance quality of property rights protection did not transform to deliver a more secure and transparent financial system and failed to provide a better environment in which fair and predictable rules form the basis for transactions and protect the rights of creditors and shareholders.

Furthermore, government's efforts to eliminate corruption for an honest and upright financial system are important for building trust in the system to facilitate reforms. This is particularly the case in Taiwan whose financial system was distorted by the KMT as a 50-year ruling party. The collusions between politicians and financial business owners contributed to the serious bad loans problems and wrecked the banking system. The new DPP government won the presidential election in 2000 on the platforms of anti-corruption and financial reform with high expectations from the public for a clean government. The DPP administration was perceived to recognise the importance of anti-corruption and moving in the right direction. However, the unsuccessful attempt to tackle the NPL problem in local credit associations had put government's determination to conquer local networks in doubt. In addition to this, there were scandals surrounding the new government, such as exploitation by officials of public power for private gain from M&A deals. There were also allegations of scandals involving the government using state-owned banks as a reward for the service of supporters and in some cases as election campaign tools. Finally, the DPP government experienced difficulties in forming a comprehensive legal framework for reducing corruption due to the law making blockages in the Legislative Yuan.

Lastly, the severe political instability had a number of unfavourable impacts on Taiwan's financial reform. For one, the new DPP government's pro-independence ideology led China to become more hostile toward Taiwan which did not help with cross-strait financial transactions and Taiwanese banks' business expansion into China. In addition, the hostile

political environment created obstacles for the minority government when implementing reform policies and caused conflicts along ideological and ethnic lines. Not only was the ruling party fully constrained by the opposition alliances, but the political divisions tended to preclude aggressive policies to strengthen the financial system. Hostile competition seriously obstructed and delayed the legislative process and slowed down financial reform.

In summary, the new government gained credit by enacting and amending important financial laws and regulations to facilitate reforms. The new rules which were meant to create a solid foundation for a better financial system were perceived to be good at the beginning of the reforms. The government's efforts towards reconstructing the financial system distorted by the KMT's long-term authority were recognised. However, the DPP ruling party was seen to lack commitment to design and enforce institutions which secure the rights of investors and savers and protect their rights. With the change of political power, there was a significant reduction in financial corruption but DPP's anti-corruption efforts were perceived as more of an attempt to change the political rules of the game, which were made by the KMT party, for its own survival. The government did not manage to dispel public suspicion that its financial programme was merely a vehicle for its own political interests to destroy the KMT and wipe out its connections. By the end of the first reform phase, the public had begun to question the DPP's ability and willingness to engage in reform policies to make the financial system more accountable and resilient. The financial reform programmes was perceived as a popular slogan on the government's campaign agenda rather than a sincere attempt to improve Taiwan's financial system and investment climate. The high expectations of the public led to even greater disappointment when government's efforts to crack down on corruption for a healthier financial system were in question.

The Taiwanese case demonstrates how institutions interact with reform policies and can fail both to alter existing forms of behaviour and to create new generalised habits of thought aimed at achieving the reform purpose. The reform policies could alter the formal rules but could not alter the accompanying norms. Overall, the institutional context did not translate into better governance quality for supporting the reform policy and had in practice held back reform progress. The government's behaviours did not transform with the reform to create new habits and thoughts, hence the limited success in inducing policy enforcement. The institutional context after the reform was no more efficient and reliable than it was before, which helps to explain why reform did not restore public confidence in Tai-

wan's banking system. As a result, the existing path-dependent institutional behaviours became obstacles to the reform actions.

8   Conclusion

The specific subject of this study is the influence of informal institutions in the context of the finance industry in Taiwan with particular reference to its recent experience of reform in the banking sector. The research perspective is based on New Institutional Economics which formed a foundation for the analysis of the project. The research question addressed is *how do informal institutional constraints shape financial reform?* To begin with, a preliminary quantitative research examined the determinants of institutional quality in influencing confidence in the financial system. This was conducted to prepare the ground for the core of this thesis – a study of Taiwan's financial reform. The research has been pursued from a descriptive perspective aiming to investigate the factors underlying the slow pace of recent banking reform. It drew on statistical findings from quantitative research and applied the analytical framework established in the theoretical part of the study to form a foundation for an empirical investigation into the historical financial development and recent reform experience in Taiwan.

This research has shown that trust is at the heart of financial reform and confidence in the financial system stems from the institutions governing the system. Good governance facilitates institutional changes by enhancing trust in institutions and encourages cooperative behaviours for a smooth reform. Governance is therefore the underlying factor which accounts for the variety of financial reform experience across countries. It was also shown that path dependent institutional changes can limit reform effectiveness. The significant finding of this study is that the three key institutional qualities which contributed to good governance in the financial system are: property rights protection, corruption prevention, and political stability. The following sections provide a brief summary of the findings of this research.

8.1 The findings of the study

The theoretical part of the study addressed the importance of institutional support for a financial system to perform its functions and suggested that financial reform is a process of institutional transformation. The important role trust plays in facilitating institutional transformation was recognised and this is particularly the case in the naturally trust intensive financial industry. Financial products are 'credence goods' par excellence; their quality can usually be assessed only a long time after they have been purchased (Spencer, 2000). It is

for this reason that the financial industry is 'naturally' based on trust. Without trust, the system cannot work; and when trust breaks down, the system collapses. It is suggested that governance as an outcome of institutions determines citizens' confidence in the financial system and affects reform achievements. Governance institutions that govern the way economic agents interact are needed to support financial activities. Three governance qualities which were concluded to be crucial for a financial system to perform its functions are: (1) Property rights protection which determines the incentives for resource use is a primary factor of good economic governance. (2) Corruption prevention as corruption is perceived to exist when property rights are violated and is considered as a fundamental problem of governance. (3) Political stability because no institution governing a financial system is able to perform its function in an unstable political environment.

Findings from the quantitative part of the study showed that there is a significant statistical correlation between the level of trust in banks and the selected institutional factors. The important finding was that the three key institutional discriminators separating countries' trust level in banks were *bribery and corruption, risk of political instabilities, personal security and private property.* Among the discriminators, *bribery and corruption* stands out as the most important one. The equation produced from the discriminant analysis successfully predicted 72% of group members and can be seen as a strong discriminate function. It is worth noting that Taiwan's group membership was downgraded based on this discriminate function due its comparably low score on *risk of political instabilities* which indicates high political risk. This suggests that Taiwan's vulnerable political situation might take great responsibility for the poor perception of governance, which resulted in lack of confidence in its financial system, and hence led to the slow pace of reform. Furthermore, the evidence suggests that institutional indicators have stronger influence on the level of trust in the banks than financial development indicators. Although the disclosure of banks' financial ratios is central to the ability of shareholders to exercise their voting rights and investment decisions, it appeared from our results that those indicators have little influence on the level of confidence in banks. While the reform achievements are often reviewed according to banks' development indicators, it should be noted that these measurements do not reflect trust in the system which is needed for substantial growth.

The qualitative study of Taiwan was divided into three periods. First, *Chapter 5* investigated the historical path of institutional development in post-war Taiwan between 1949 and

1988. This period saw the Kuomingtang (KMT) authority made every effort to control financial resources through the financial system. As a result, the financial structure fully reflected the KMT leadership's obsession with two political objectives: (1) maintaining a stable macroeconomic environment, and (2) guarding against the rise of big indigenous financiers. The institutional development of the financial system was observed to have the following characteristics. First, while finance played the supporting role for national industrial policy, the state maintained full control of finance to weaken its subverting potential. Second, the banking system with control over credit allocation was the pillar in Taiwan's financial system. Finally, the weakness of the capital market led most households to choose bank deposits as the main saving option even though the official interest rate was low. Governance features of the banking sector characterising this period are that it was a centralised and government dominated system. First, property rights institutions with respect to the efficiency of credit allocation. The authority regarded financial stability as the main priority and the financial system had a good record of stimulating and mobilising domestic savings. However, its function of allocating credit was often criticised. It is argued that the politically motivated loan policy was not designed to provide capital access to businesses with best potential. Neither was it designed to shape industrial structure. It was mainly for the political aim of maintaining financial stability and controlling domestic capital. This was deeply embedded in the institutional structure of Taiwan's financial industry. Second, governance quality of corruption prevention: there was no effective separation between the ruling party's and the state's financial assets. Under the strict regulations and control by the government, Taiwanese state-owned banks had very conservative lending policies that made their function more like pawnshops than modern financial institutions. State-dominated finance did not leave much space for private finance. The private financiers who were allowed to enter the banking sector did their utmost to expand their businesses to compete with the state-owned banks and often went beyond what they were licensed to do. For the risk-avoiding state-owned banks, the connections were built with the state-owned big enterprises which secured the banks with safer and sizable lending. For privately owned banks with risk-taking lending policies, the political liability, namely the connection of the credit cooperative to the KMT regime, was established and later became the weakest link in the banking structure. The last feature is governance quality with regard to the facilitation of political stability, which was greatly affected by the political standoff between China and Taiwan. In the 1970s, China began to employ its One-China policy and since then has been oppressing Taiwan in the international arena and isolating it from the

global community. The loss of international legitimacy made the KMT authority crumble and the deadlocked situation with China increased uncertainty and political struggle for Taiwan. In addition to the political challenges outside, the conflict between immigrant Chinese, originally from China, and the native Taiwanese was a problem. It began when the KMT government first took over Taiwan and has remained an issue to be resolved up until the present time. With challenges from both inside and out, Taiwan's political environment remained precarious, but was stabilised to some degree by political and financial support from the United States.

Chapter 6 examined the period between 1989 and 2000 when financial liberalisation took place. Taiwan's financial deregulation came along with its political liberalisation in 1989. It was a result of demands from domestic capitalists and economists, the pressures from foreign capitalists, the change of economic climate and most importantly the democratic reform in the government. The institutions which evolved with the financial and political transformations were witnessed to make the following changes. First, the attitude towards the financial industry shifted from its use to liberalise the sectors as a tactic in response to the neo-liberalism paradigm. Second, the KMT party and conglomerate-owned banking businesses dominated Taiwan's financial system. With the pace of democratisation proceeding rapidly in the 1990s, the KMT was forced to find alternative sources of campaign financing and had expanded its party enterprises during the 1980s and entered the banking and investment industries. Taiwan's conglomerates experienced massive and rapid growth in the mid-1980s and developed both economic and political power as time went on. When the Private Bank Act was promulgated in 1991, the conglomerates with political connections managed to obtain operating licences. Sixteen private banks established in 1991 had two things in common; they were owned by a syndicate which had many subsidiaries and the owners of the syndicate had good political connections. Third, the speedy financial deregulation and rapid increase of the new banks brought substantial credit growth. However, the profit of banks had decreased because of over-banking and over-competition. The governance features characterising the banking sector in the 1990s are the interconnections between the KMT ruled government and financial businesses. First, governance quality in respect to property rights protection. The collusions between politicians and owners of financial businesses violating protection to creditor's property rights can be seen from: (1) the loss of the financial administration's political autonomy in banking policies, (2) the strength of legislators who were closely associated with the banking sector in policy mak-

ing, and (3) lenient loan policies adopted by conglomerates towards related party lending and their subsidiaries. The failure to constrain political elites violating property rights has led to an overgrown credit market and fragmented banking system. Second, governance quality with respect to corruption offences was noticed from the growing collusion between the former mentioned two parties. The relationships between politicians and financial businesses changed from a client-patron to an interdependent relationship. The owners of financial businesses showed their political loyalty by providing financial support; in return owners were able to obtain the privileged information which gave them business advantages and enabled them to influence financial policies or regulations. Finally, quality of governance in terms of maintaining political stability. The lifting of Martial Law in 1989 caused dramatic changes in the political economic atmosphere in Taiwan. The then President Lee's policies of emphasising the importance of a separate Taiwanese culture rather than regarding Taiwan as an appendage of China, and his attempts to restore United Nations membership in 1995, prompted a series of military threats by China and the relationship became tense and remained deadlocked throughout the 1990s.

The final part of the qualitative study was conducted in *Chapter 7* covering Taiwan's recent financial reform between 2001 and 2004 focusing on the influence of institutional constraints on enforcing financial reform measures was conducted. Taiwan's case showed that the institutional persistence of interacting behaviours between politicians, financial authorities and owners of banks and became obstacles in the way of implementing measures to achieve the objectives of the reform. The existing institutional barriers include: (1) Lack of motivation to create secure mechanisms to define and enforce the rules for property rights protection. This resulted in inefficient credit allocation in the post-war period and an overgrown credit market and lenient loan policy during banking privatisation. During the process of financial reform, the underdeveloped creditors' rights protection showed little support to advance banks' further development. To make the matter worse, the rapid increase in credit card issuing after the reform with the insufficient credit checking system led to a credit card crises in 2006. Even though financial organisations were aware of the importance of good discipline in the financial market, they made no effort to improve the enforcement of reformed regulations. Together, the government and financial organisations failed to provide a better environment where fair and predictable rules form the basis for transactions and protect the rights of clients. (2) An existing pervading attitude in Taiwan that the financial sector was merely a vehicle for promoting the economy

and plugging the deficiencies of other sectors. During the post-war period, the financial system was developed with political consideration with the main functions of maintaining financial stability and controlling domestic capital. Financial liberalisation in the 1990s created a consolidated network between politicians, political parties and financial businesses for mutual benefit. The financial reform came along with the change of political power and the public's high expectations of an honest and upright financial system. Although the new government - the Democratic Progress Party (DPP) - took credit for a series of anti-corruption actions, there have been accusations about the new government manipulating the financial industry for its own interests. A major personnel shake-up took place after the rotation of political power where the financial authorities and state-owned banks replaced their pro-KMT managers with pro-DPP individuals. In addition to this, the former ruling party - the KMT - retained its influential role in politics and finance by holding the majority of seats with its alliance in the Legislative Yuan after the loss of the Presidential election. The financial sector should not be considered mainly as an industry to help other sectors but as an industry in its own right. (3) Political instability caused by the stand-off with China had an unfavourable impact on Taiwan's financial development and this has remained the case since the post-war era. The severe political instability weakened the governance quality and hampered the reform process. Reasons for the increasing political instability are fourfold. First factor is the change of government in 2000. Second, the pro-independence ideology of the new government led China to become more hostile to Taiwan. Third, there was aggressive competition between the ruling party and opposition alliance. Fourth, the nation was divided according to different political ideologies. The prolonged political instability damaged public confidence in banks, and this is supported by the evidence from our quantitative research. The results showed that Taiwan had a comparably low score on *risk of political instabilities* which brought down the level of trust in its banks. A stable political environment is vital for the performance of financial reform. Both ruling and opposition parties failed to appreciate how vital it is for Taiwan to push forward with further financial reform; instead they let partisan infighting interfere with reform implementation.

Taiwan's case demonstrated that its banking sector was strongly embedded within and shaped by the institutional context in which it operates. It also showed that persistence of weak governance quality restricted government's ability to efficiently pursue reform measures. Before the financial reform, the collusions between politicians and financial

businesses contributed massively to the non-performing loans problem. In addition, the repeated financial scandals involving the ruling government, the conglomerates and their associated banks damaged the public's faith in the financial system. Furthermore, the stand-off with China and unstable political environment made it harder for Taiwan's financial system to function. The financial system was abused by the political party in power and the poorly functioning system damaged resident's confidence in that financial system. However, despite government's efforts towards financial reform, it was observed that the institutional context had not been transformed to allow better governance to support the reform policies and to rebuild trust in the financial system. Hence, the path-dependence in governance held back Taiwan's financial reform performance. Although governance should not be regarded as almost synonymous with government, government plays a key role in providing good governance. Three weaknesses observed on the part of the new government worsened the perceptions of governance quality. One, the new government was perceived to be weak on enforcing reform policies due to insufficient financial resources. Two, the minority standing of the new government in the Legislative Yuan made it difficult for the ruling party to gain the support needed to hammer out reform policies. Three, the new government lacked the experience and tact necessary to decrease the impact when disagreements between the ruling and opposition powers became obstacles to implementing reforms. The existing institutional barriers and weak government failed to transform institutional behaviours to create new habits of thought for achieving reform purposes.

8.2 Taiwan's financial industry since 2004

The thesis examined the evolution of the banking sector in Taiwan to study the impact of informal institutional constraints on the reform achievements during 2001 and 2004. The findings suggest that development of the Taiwanese banking sector had been path dependent and significantly influenced by governance features which were not quite as strong as in mature economics.

In 2004, the Democratic Progressive Party won the presidential election for the second time and launched a second round of financial reform with the main goal of consolidating the nation's crowded banking sector. The ambitious agenda were: (1) cutting the number of the state-owned banks by half (to six) by end of 2004, (2) reducing the number of financial holding companies from fourteen to seven by the end of 2006, and (3) eventually creating

at least three large financial holding companies, each with a market share of at least 10% by the end of 2006. Theses initiatives failed. One of the reasons is the government's insistence on controlling every aspects of the consolidation (The Economist, 24 Nov. 2005). As observed in the first stage of the reform, government's motivation and creditability for promoting mergers and acquisitions (M&A) deals were questioned during the first stage of the reform. There had been concerns that released shares of state-owned banks would result in financial conglomeration and transfer of public property at large discounts (Hwang and Wua, 2007). The fear of being accused of selling state assets cheaply had led the government to over-price its shares of state-owned banks during the second reform and discouraged M&A transactions. In general, the government failed to persuade the public and the bank union of the need of financial consolidation. In addition, the unsuccessful second reform was due to the accumulated burden of bad loans on the banks. To combat the collusion between banks and businesses, the lending standards to corporations had been tightened since the beginning of the financial reform. Under the pressure to expand their loan business, Taiwanese banks switched to consumer banking and heavily promoted cash and credit cards. As a result of not having a robust credit checking system to support the rapid loan issuing, Taiwan experienced a "twin-card" lending crisis which led to a loss of almost $3 billion for banks in 2006 (Philip, 2006). Overall, the second financial reform did not proceed well and has been criticised as lacking careful decision-making with unreasonable target numbers and timeframe (Chung, 2005). In 2007, the Legislative Yuan held an overall review of the financial reform and reached a unanimous agreement to terminate the reform.

The findings from this thesis suggested that it was the DPP government's lack of ability and accountability to engage in reform policies that held back progress in the first reform. Although DPP's efforts towards reconstructing the financial system distorted by the KMT's long-term authority were recognised, it was seen to lack commitment to design and enforce institutions which secure the rights of investors and savers. The "twin-card" crisis indicates that banks' irresponsible lending practices and inefficient credit checking system remained issues in the second reform stage. The investigation from this research also pointed out that the government's credibility was a serious obstacle to successfully enforce reform policies. The DPP had earned credit from a series of anti-corruption actions when it first came to office in 2000 but its efforts were perceived as more of an attempt to change the political rules towards the end of the first reform. When Taiwan was staging its second

round of the reform, there were spreading rumours that DPP government and Chen-Shui-bian, then president, took bribes from banks and financial institutions. The steep decline in the credibility level of the government officials also helps explaining the limited success in the second reform.

According to the governance indicators database from Kaufmann, Kraay and Mastruzzi's (2010a), the quality of Taiwan's governance deteriorated during the second stage reform between 2004 and 2008. Out of the comparing six institutional dimensions, Taiwan's percentile rank decreased in five dimensions: *voice and accountability*, *regulatory quality*, *government's effectiveness*, *control of corruption*, *rule of law* with only improvement shown in *political stability*. Coincidently, the perceived soundness of Taiwanese banking was ranked 68th in 2004 and continued falling to 117th in 2008 based on survey results from World Economic Forum (WEF).[82] The failure of second reform and the loss of confidence in the financial system support the view of this thesis that perceptions on governing system are related strongly to the confidence level in banks, which determines reform achievements.

In 2008, Ma Ying-Jeou of KMT won the presidential election with 58% of the vote and his party secured eighty-one seats in the legislature (CNN, 23 Mar. 2008). Ma had been regarded by the Taiwanese media as Mr. Clean because of his efforts while as Justice Minister in the 1980s to clean up corruption in the KMT and had built a clean and impartial imagine since then. His victory symbolised the nation's desire for a clean break from the previous deeply scandal-tainted politics and for an honest government. Since Ma came to power, the former president Chen Shui-bian had been the target of repeated financial corruption claims and was sentenced to life imprisonment for embezzlement, money laundering and bribery in September 2009 (Taiwan News, 25 Dec. 2009). Ma's election campaign policy specific to financial sectors was to promote cross-strait economic and eventually breakthrough in regional cooperation through cross-strait connections. It stated that the people had chosen the promise of economic growth through closer ties with China over fears that those ties to the China could lead to a loss of independence. By 2010, four representative offices of Taiwanese banks were approved by the Taiwanese and Chinese governments to open branches in China. This was the first time banks from Taiwan had been given permission to do so (Wang, 2010).

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[82] There are 104 cases in the ranking n 2004 and 134 in 2008.

All in all, the government appeared to be accountable and stable since the KMT came into office in 2008. The governance database from Kaufmann et al. (2010a) indicates Taiwan's quality of governance had improved in all six governance dimensions, particularly *rule of law* and *voice and accountability* with the percentile ranks increasing by 8.4 points and 4.7 points respectively. At the same time, the survey results from WEF confirms that the confidence levels in Taiwanese banks had also improved from 117th in 2008 to 94th in 2009, and continued to rise to 58th in 2010 and 51st in 2011.[83] However, there is no evident improvement in banking performance when evaluating on the basis of financial ratios. The values of Return on Equity (ROE) for domestic banks dropped from 10.30% in 2004 to 9.38% in 2011 whilst Return on Assets (ROA) also decreased from 0.63% to 0.59%. Both indicators were still below international standards of a value of 15% for ROE and 1% for ROA. Besides, Taiwan was in fact hit hard by the global financial tsunami and its economy faced a downturn in 2009 due to a heavy reliance on exports which in turn made it vulnerable to world markets.

Despite no hard evidence suggesting a significant improved banking system and the negative effects of the global financial crisis, the banks are perceived to be more trusted since 2008. The increase level of the perceived government accountability seems to have restored the trust in the banking sector and should reduce costs of enforcing policies. However, whether the designed institutions and policy mechanisms laid the foundation for long term development and are able to reach Taiwanese banks' optimal operating performance remained to be seen.

8.3 Limitations of the research

There are two major limitations of this study that need to be acknowledged and addressed. The first limitation is the reliability of proxy measures of governance. Quality of governance is a subjective concept, meaning the term 'quality' itself is not 'value neutral' because it relates to the wider cultural context of a particular society. Any proxy for governance is by definition an imperfect measure of broader governance dimensions. The perception of governance quality relates to the values held by the researcher or to the wider cultural context of a particular society which defines the desirability of certain types of governance. Although the findings in this study suggest governance indicators reflect the level of trust

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[83] There are 133 cases in the ranking n 2009, 139 in 2010, and 142 in 2011.

in banking systems better than banking development indictors, it is worth noting that all types of governance quality indicator should be viewed as complementary rather than competing.

The second limitation concerns the extent to which the findings can be generalised beyond the study. As mentioned previously, the expectation of certain types of governance relates to the complex cultural context of a particular society. Achieving efficiency as a result of an interaction between financial developments and financial governance appears to be a difficult task for both advanced emerging economies and later reformers. This is mainly due to the different starting conditions and the complexity of the problems that need to be addressed. Hence, caution should be exercised when interpreting the findings of single country studies. Though a country study of Taiwan provides an opportunity to learn some important lessons from the experience of emerging economies, these lessons could be difficult to apply to other reformers without taking into account specific countries' traits. In the case of Taiwan, the political democratisation and financial liberalisation are interconnected. Its banking reform was subject to severe political instability and unfavourable conditions which determined the results achieved. In addition to this, it is worth noting that conflicting political ideologies between individuals and government might cause a bias when judging governance. This is particularly the case in Taiwan where the nation is divided into two clear camps by different political ideologies concerning Taiwan's independence from China. The findings in this study have their contextual aspects; however they provide crucial insights for understanding the role of governance in deciding reform achievements.

8.4 Policy recommendations and future research

The Taiwanese case showed that the existing institutions in emerging markets may not been effectively transformed to create new habits and thoughts to assist reform purposes. In this case, the existing institutional behaviours became obstacles and failed to create new generalised habits of though to achieve reform purposes. Although the empirical focus of this thesis is on a single country, the developed theoretical framework provides a sufficient level of generalisability and can be extended to other emerging economies bearing in mind that each country has its own unique context and history that influence and shape the reform experience.

In terms of its policy relevance, the research encourages policy makers to study national history and to build upon existing initiatives taking into account the path-dependent environment and informal institutional embeddedness of implemented projects. The first recommendation to be drawn from this research is that reform policies should be designed with the institutional context in mind by taking into consideration people's beliefs and expectations. Taking reform actions applied to Credit Department of the Farmer's and Fishermen's Associations (CDFFAs) for example. As the most grass-roots financial institutions in Taiwan, CDFFAs even now play important roles for small farming and fishing populations. However, the trend for large-scale, internationalised, diversified financial services makes it difficult for these grass-roots financial organisations to survive. In the process of financial consolidation, the government should take minority groups' welfare into consideration aiming not only to improve banking efficiency but also to provide fairness. One of the aims for financial consolidation is to provide diversified financial service for the customers. However, Taiwan's financial institutions lack an innovative culture and employees who are good at financial innovation and this would not be improved simply by promoting large-scale financial corporation. Some measures which the Taiwanese government adopted for financial reform are from Western countries. These regulations, which work in other countries, might not necessarily work in Taiwan due to cultural differences. In view of high non-performing loans, which were considered to be the main reason for the demand for Taiwan's financial reform, simply enhancing banks' asset quality might not be enough. In Taiwan's case, movement in the real estate market and stock market have a great impact on non-performing loans. Therefore, it is necessary to introduce industrial policies along with financial reforms in order to strengthen these two markets and boost Taiwan's economy. In this way, the root of the problem associated with non-performing loans is more likely to be tackled.

The second recommendation is to recognise the deciding role that governance quality has in facilitating achievements of financial reform. Improved governance quality, particularly at the sectoral level, is the key to further developing the financial sector. For an emerging economy like Taiwan measures need to be taken to strengthen the financial sector so that its role in supporting sustainable economic growth can be enhanced. To facilitate financial reform, not only should objective governance institutions be reformed, it is equally important to improve the perception of governance quality. Developing a decision-support

tool for policymakers and authorities to measure the impact of sectoral governance on financial development may also be worth considering.

Banking reforms in emerging markets are far from over and too little time has gone by to assess the results achieved. Future research investigation into achieving efficiency as a result of an interaction between financial developments and governance would benefit from focusing in the following areas:

First, longitudinal studies should be conducted to investigate the efficiency effects of the changes of the governance quality on banking performance. One of the objectives of the banking reform is to improve banking profitability. Whilst the relationship between governance quality and confidence in banks is established in this study, the issue of to what extent the better governance is correlated with improved market valuation and optimal operating performance by banks should be addressed.

Second, the perception of governance quality is a subjective state where expectation is an important factor. The expectation of governance in each country is different. For example, corruption might not be considered as corruption in certain countries but it might be in others. Given the different histories and characteristics of banking organisations at different levels, expectations should vary too. Future research addressing the issues of expectation when making judgements on governance would be of great help in further advancing the field of governance and financial development.

Third, the changing pattern of bank governance is a complex process which goes beyond changes in regulation and supervision and guidelines of good practice. A convincing evaluation of the degree of transformation has to go beyond this and deal with the consequences of reform measures for banks at firm level. Future research, therefore, would be useful to investigate the effect of governance quality on reform achievement at commercial banks, state-owned banks and local credit associations.

8.5 Summary

The thesis has contributed to knowledge on both a practical and a theoretical level. On a practical level, it offers the perspective of understanding financial reform as a process of trust building. In this sense, policies are best designed taking into account the institutional

context which has shaped people's beliefs and behaviours and constrains the enforcement of new policies. Furthermore, as good governance enhances trust in institutions, it consequently builds confidence in the financial system. Financial reform should involve reconstruction of the financial industry as well as strengthening of governance quality. Finally, efforts should be made to improve government's credibility by signalling reform commitments. This approach will help to promote trust in institutions to reduce enforcement costs.

The theoretical contribution is made by stressing the influence of informal institutions on financial development while most studies in the field have focused on the influences of formal institutional settings. Besides, instead of treating trust as a social capital resource which facilitates financial development, the study specified that trust in the financial system which promotes its development stems from trust in its surrounding institutions. Furthermore, the study advanced the view that governance is a decisive institutional quality for development. It identified three qualities - property rights protection, corruption prevention, and political stability - which contribute to good governance of a financial system.

A well-developed financial system is not sufficient to guarantee long-term growth, but long-term growth is difficult to achieve without a sound financial system. Financing the growth of a model economy creates long chains of agency relationships. Therefore, the dynamics of linkages between the involved agents during the development process would influence the institutional structure of an industrial system and the degree of comprehension of the financial system. No country has institutions that can safeguard all these relations from abuse all the time. Consequently, there is an issue of moral hazard which causes financial corruption and financial crisis. According to McKinnon (1993), Taiwan's financial liberalisation process has followed the order suggested to transfer from a financially controlled to a market-oriented economy. However, this study found that while Taiwan has evolved from a state-controlled financial system to a market-based one, the state institutions and the rule of frameworks governing the market did not evolve to the same level. As a result, the inept system of governance led to opportunism, fraud and corruption. The long chains of agency relationships create incentive problems and highlight the importance of help from the governing framework in developing the financial system.

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Appendix 1 List of institutional variables

Based on North's definition of institutions, the indicators are selected to represent the perceptions of institutional qualities that reflect (1) political interaction, (2) social interaction, and (3) infrastructure and technology.

Name of the predictors	Explanation
Institutions quality reflecting political interactions	
Policy direction of the government	Policy direction of the government is consistent
Legal and regulatory framework	The legal and regulatory framework encourages the competitiveness of enterprises
Adaptability of government policy	Adaptability of government policy to changes in the economy is high
Government decisions	Government decisions are effectively implemented
Political parties	Political parties do understand today's economic challenges
Transparency	Transparency of government policy is satisfactory
Public service	The public service is independent from political interference
Bureaucracy	Bureaucracy does not hinder business activity
Bribery and corruption	Bribing and corruption do not exist in your economy
International transactions	International transactions can be freely negotiated with foreign partners
Foreign investors	Foreign investors are free to acquire control in domestic companies
Investment incentives	Investment incentives are attractive to foreign investors
Institutions quality reflecting societal Interactions	
Justice	Justice is fairly administered
Personal security and private property	Personal security and private property are adequately protected
Risk of political instability	The risk of political instability is very low
Social cohesion	Social cohesion is a priority for the government
Attitudes toward globalization	Attitudes toward globalization are generally positive in your economy

Name of the predictors	Explanation
Institutions quality reflecting societal Interactions	
Image abroad	The image abroad of your country/region encourages business performance
National culture	The national culture is open to foreign ideas
Flexibility and adaptability	Flexibility and adaptability of people in your economy are high when faced with new challenges
Need for economic and social reforms	The need for economic and social reforms is generally understood by people in your society
Values of society	Values of society support competitiveness
Institutions quality reflecting infrastructures and technology	
Communications technology	Communications technology (voice and data) meets business requirements
Information technology skills	Information technology skills are readily available
Performance and application of technology	Performance and application of technology are supported by the legal environment
Cyber security	Cyber security is being adequately addressed by corporations
Intellectual property rights	Intellectual property rights are adequately enforced
Educational system	The educational system meets the needs of a competitive economy
University education	University education meets the needs of a competitive economy
Education in finance	Education in finance does meet the needs of enterprises
Language skills	Language skills are meeting the needs of enterprises
Skilled labor	Skilled labor is readily available
Finance skills	Finance skills are readily available
Brain drain	Brain drain (well-educated and skilled people) does not hinder competitiveness in your economy
Foreign highly-skilled people	Foreign high-skilled people are attracted by the business environment of your economy
International experience	International experience of senior managers is generally significant

Appendix 2 Case summary and Group means

Analysis Case Processing Summary

Unweighted Cases		N	Percent
Valid		50	100.0
Excluded	Missing or out-of-range group codes	0	.0
	At least one missing discriminating variable	0	.0
	Both missing or out-of-range group codes and at least one missing discriminating variable	0	.0
	Total	0	.0
Total		50	100.0

Tests of Equality of Group Means

	Wilks' Lambda	F	df1	df2	Sig.
Policy direction of the government	.744	5.273	3	46	.003
Legal and regulatory framework	.706	6.379	3	46	.001
Adaptability of government policy	.830	3.140	3	46	.034
Government decisions	.639	8.678	3	46	.000
Political parties	.655	8.080	3	46	.000
Transparency	.495	15.621	3	46	.000
Public service	.616	9.578	3	46	.000
Bureaucracy	.593	10.530	3	46	.000
Bribery and corruption	.308	34.388	3	46	.000
International transactions	.520	14.167	3	46	.000
Foreign investors	.592	10.583	3	46	.000
Investment incentives	.780	4.329	3	46	.009
Justice	.439	19.603	3	46	.000
Personal security and private property	.621	9.373	3	46	.000
Risk of political instability	.381	24.902	3	46	.000
Social cohesion	.543	12.905	3	46	.000
Skilled labor	.944	.902	3	46	.447
Finance skills	.585	10.857	3	46	.000
Brain drain	.652	8.167	3	46	.000
Foreign highly-skilled people	.637	8.734	3	46	.000
International experience	.653	8.139	3	46	.000
Attitudes toward globalization	.887	1.953	3	46	.134
Image abroad	.629	9.037	3	46	.000
National culture	.810	3.602	3	46	.020
Flexibility and adaptability	.915	1.427	3	46	.247
Need for economic and social reforms	.905	1.602	3	46	.202
Values of society	.789	4.096	3	46	.012
Communications technology	.791	4.062	3	46	.012
Information technology skills	.739	5.423	3	46	.003
Development and application of technology	.511	14.699	3	46	.000
Cyber security	.517	14.341	3	46	.000
Intellectual property rights	.409	22.118	3	46	.000
Educational system	.669	7.578	3	46	.000
University education	.567	11.687	3	46	.000
Education in finance	.551	12.477	3	46	.000
Language skills	.767	4.667	3	46	.006

Appendix 3 Variables not in analysis

Step 0		Tolerance	Min. Tolerance	F to Enter	Wilks' Lambda
	Policy direction of the government	1.000	1.000	5.273	.744
	Legal and regulatory framework	1.000	1.000	6.379	.706
	Adaptability of government policy	1.000	1.000	3.140	.830
	Government decisions	1.000	1.000	8.678	.639
	Political parties	1.000	1.000	8.080	.655
	Transparency	1.000	1.000	15.621	.495
	Public service	1.000	1.000	9.578	.616
	Bureaucracy	1.000	1.000	10.530	.593
	Bribery and corruption	**1.000**	**1.000**	**34.388**	**.308**
	International transactions	1.000	1.000	14.167	.520
	Foreign investors	1.000	1.000	10.583	.592
	Investment incentives	1.000	1.000	4.329	.780
	Justice	1.000	1.000	19.603	.439
	Personal security and private property	1.000	1.000	9.373	.621
	Risk of political instability	1.000	1.000	24.902	.381
	Social cohesion	1.000	1.000	12.905	.543
	Skilled labor	1.000	1.000	.902	.944
	Finance skills	1.000	1.000	10.857	.585
	Brain drain	1.000	1.000	8.167	.652
	Foreign highly-skilled people	1.000	1.000	8.734	.637
	International experience	1.000	1.000	8.139	.653
	Attitudes toward globalization	1.000	1.000	1.953	.887
	Image abroad	1.000	1.000	9.037	.629
	National culture	1.000	1.000	3.602	.810
		Tolerance	Min. Tolerance	F to Enter	Wilks' Lambda

Flexibility and adaptability	1.000	1.000	1.427	.915
Need for economic and social reforms	1.000	1.000	1.602	.905
Values of society	1.000	1.000	4.096	.789
Communications technology	1.000	1.000	4.062	.791
Information technology skills	1.000	1.000	5.423	.739
Development and application of technology	1.000	1.000	14.699	.511
Cyber security	1.000	1.000	14.341	.517
Intellectual property rights	1.000	1.000	22.118	.409
Educational system	1.000	1.000	7.578	.669
University education	1.000	1.000	11.687	.567
Education in finance	1.000	1.000	12.477	.551
Language skills	1.000	1.000	4.667	.767

Step 1	Tolerance	Min. Tolerance	F to Enter	Wilks' Lambda
Policy direction of the government	.939	.939	1.136	.287
Legal and regulatory framework	.797	.797	.096	.306
Adaptability of government policy	.930	.930	.508	.298
Government decisions	.603	.603	.877	.291
Political parties	.859	.859	.490	.299
Transparency	.658	.658	.425	.300
Public service	.501	.501	.748	.294
Bureaucracy	.560	.560	.323	.302
International transactions	.720	.720	2.795	.260
Foreign investors	.957	.957	3.227	.254
Investment incentives	.987	.987	2.164	.270
	Tolerance	Min. Tolerance	F to Enter	Wilks' Lambda
Justice	.467	.467	.099	.306

Personal security and private property	.451	.451	1.831	.275
Risk of political instability	**.674**	**.674**	**3.242**	**.254**
Social cohesion	.827	.827	.747	.294
Skilled labor	.906	.906	.250	.303
Finance skills	.889	.889	1.197	.286
Brain drain	.819	.819	.388	.301
Foreign highly-skilled people	1.000	1.000	2.868	.259
International experience	.934	.934	.744	.294
Attitudes toward globalization	.825	.825	.453	.299
Image abroad	.757	.757	.598	.297
National culture	.992	.992	.881	.291
Flexibility and adaptability	.978	.978	.321	.302
Need for economic and social reforms	.894	.894	1.024	.289
Values of society	.889	.889	.068	.307
Communications technology	.662	.662	1.903	.274
Information technology skills	.790	.790	.068	.307
Development and application of technology	.656	.656	.678	.295
Cyber security	.683	.683	.837	.292
Intellectual property rights	.467	.467	.849	.292
Educational system	.677	.677	.410	.300
University education	.885	.885	.821	.292
Education in finance	.712	.712	.183	.305
Language skills	.837	.837	.748	.294

Step 2		Tolerance	Min. Tolerance	F to Enter	Wilks' Lambda
	Policy direction of the government	.740	.531	.885	.239
	Legal and regulatory framework	.746	.626	.141	.251
	Adaptability of government policy	.849	.615	.483	.245
	Government decisions	.542	.534	1.397	.232
	Political parties	.755	.592	.467	.246
	Transparency	.572	.572	.057	.253
	Public service	.467	.455	1.229	.234
	Bureaucracy	.557	.458	.383	.247
	International transactions	.617	.577	1.551	.229
	Foreign investors	.824	.580	1.204	.234
	Investment incentives	.880	.601	.776	.241
	Justice	.371	.371	.275	.249
	Personal security and private property	**.322**	**.322**	**3.608**	**.204**
	Social cohesion	.432	.352	.922	.239
	Skilled labor	.869	.647	.482	.246
	Finance skills	.842	.639	1.105	.236
	Brain drain	.639	.525	.538	.245
	Foreign highly-skilled people	.912	.615	2.988	.211
	International experience	.928	.655	.487	.245
	Attitudes toward globalization	.819	.609	.555	.244
	Image abroad	.654	.582	.970	.238
	National culture	.989	.672	.636	.243
	Flexibility and adaptability	.976	.659	.348	.248
	Need for economic and social reforms	.873	.648	1.231	.234
	Values of society	.849	.644	.122	.251
	Communications technology	.644	.539	1.909	.224

	Tolerance	Min. Tolerance	F to Enter	Wilks' Lambda
Information technology skills	.768	.607	.174	.251
Development and application of technology	.617	.553	.668	.243
Cyber security	.677	.535	.528	.245
Intellectual property rights	.389	.389	.194	.250
Educational system	.658	.549	.588	.244
University education	.874	.639	.490	.245
Education in finance	.682	.576	.006	.253
Language skills	.809	.631	.485	.245

Step 3	Tolerance	Min. Tolerance	F to Enter	Wilks' Lambda
Policy direction of the government	.740	.322	.872	.192
Legal and regulatory framework	.687	.296	.131	.202
Adaptability of government policy	.800	.304	.615	.195
Government decisions	.492	.293	1.025	.190
Political parties	.729	.311	.659	.195
Transparency	.572	.322	.059	.203
Public service	.457	.315	.675	.194
Bureaucracy	.520	.300	.050	.203
International transactions	.525	.274	1.746	.181
Foreign investors	.824	.322	1.151	.188
Investment incentives	.721	.264	1.710	.182
Justice	.302	.262	.383	.198
Social cohesion	.384	.286	1.513	.184
Skilled labor	.774	.287	.059	.203
Finance skills	.753	.288	2.193	.177
Brain drain	.553	.279	.469	.197
	Tolerance	Min. Tolerance	F to Enter	Wilks' Lambda

Foreign highly-skilled people	**.869**	**.307**	**3.739**	**.161**
International experience	.878	.305	1.017	.190
Attitudes toward globalization	.796	.313	.187	.201
Image abroad	.601	.296	.722	.194
National culture	.886	.289	1.664	.182
Flexibility and adaptability	.953	.315	.528	.196
Need for economic and social reforms	.831	.307	1.071	.189
Values of society	.762	.289	.347	.199
Communications technology	.607	.304	1.115	.189
Information technology skills	.744	.312	.064	.203
Development and application of technology	.560	.292	1.197	.188
Cyber security	.630	.300	.973	.191
Intellectual property rights	.354	.293	.281	.200
Educational system	.561	.275	.171	.201
University education	.861	.318	.681	.194
Education in finance	.584	.276	.509	.197
Language skills	.723	.288	.498	.197

Step 4	Tolerance	Min. Tolerance	F to Enter	Wilks' Lambda
Policy direction of the government	.674	.306	1.223	.148
Legal and regulatory framework	.538	.294	.602	.155
Adaptability of government policy	.660	.299	1.084	.150
Government decisions	.480	.285	1.176	.149
Political parties	.609	.304	.687	.154
	Tolerance	Min. Tolerance	F to Enter	Wilks' Lambda
Transparency	.571	.307	.060	.161

Public service	.392	.303	1.824	.143
Bureaucracy	.491	.293	.182	.159
International transactions	.525	.263	1.704	.144
Foreign investors	.813	.307	1.136	.149
Investment incentives	.544	.264	2.834	.134
Justice	.301	.254	.209	.159
Social cohesion	.384	.274	1.332	.147
Skilled labor	.760	.279	.091	.160
Finance skills	.733	.281	1.513	.146
Brain drain	.530	.274	.195	.159
International experience	.826	.297	.616	.155
Attitudes toward globalization	.618	.305	1.328	.147
Image abroad	.409	.295	1.292	.148
National culture	.808	.285	1.279	.148
Flexibility and adaptability	.867	.304	.741	.153
Need for economic and social reforms	.691	.301	1.960	.142
Values of society	.501	.289	.835	.152
Communications technology	.606	.289	.762	.153
Information technology skills	.743	.297	.070	.161
Development and application of technology	.545	.285	.967	.151
Cyber security	.626	.289	.945	.151
Intellectual property rights	.353	.283	.234	.159
Educational system	.525	.272	.171	.159
University education	.783	.306	.385	.157
Education in finance	.578	.268	.305	.158
Language skills	.688	.266	.527	.156