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THE MODERATING IMPACT OF DIRECTORS’ DEMOGRAPHIC CHARACTERISTICS ON THE RELATIONSHIP BETWEEN CORPORATE GOVERNANCE AND FIRM PERFORMANCE IN CHINA’S LISTED COMPANIES

A thesis

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Liang Guo

Lincoln University

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The Moderating Impact of Directors’ Demographic Characteristics on the Relationship between Corporate Governance and Firm Performance in China’s Listed Companies

by

Liang Guo

The increasing reliance on corporate governance raises questions about whether corporate governance has a positive impact on financial performance, and whether or not intervening variables moderate the strength of the relationship between corporate governance and firm performance. Therefore, based on upper echelon theory, this study builds a comprehensive framework to answer these questions through integrating directors’ demographic characteristics into conventional corporate governance model. Using a sample of 155 Chinese listed firms during the period of 2004-2008, this study develops an index as a proxy for the quality of corporate governance and finds that good corporate governance can significantly positively affect firm performance. Further, the study examines the interaction effect of corporate governance and directors’ demographic heterogeneity, and indicats that demographic heterogeneity within board of directors can moderate the relationship between corporate governance and firm performance. From a theoretical perspective, this study not only explains how corporate governance affects firm performance, but also uncovers the importance of demographic characteristics in a corporate governance system. From a practical perspective, this thesis not only emphasises that optimal structure of corporate governance can significantly enhance the firm performance, but also indentifies that the directors’ demographic characteristics heterogeneity has a strong moderating impact on the effectiveness of corporate governance in Chinese listed companies.

Key words: Corporate governance, Financial performance, Demographic characteristics, Chinese listed companies.
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Chapter 1

Introduction

“Securities and Exchange Commission Chairman Mary Schapiro plans to look into whether the boards of banks and other financial firms conducted effective oversight leading up to the financial crisis, according to SEC officials, part of efforts to intensify scrutiny of the top levels of management and give new powers to shareholders to shape boards. As she examines what went wrong, Schapiro is also considering asking boards to disclose more about directors' backgrounds and skills, specifically how much they know about managing risk, said the officials, who spoke on condition of anonymity because no policy initiative has been launched.” (Washington Post, February 20, 2009)

The 2008-09 global financial crisis forces the scholars and police makers to refocus on the important impact of weaknesses and failures in corporate governance on firm performance (Kirkpatrick, 2009), and offers us another opportunity to restructure the arrangement of corporate governance in order to better strengthen the effectiveness of corporate governance. Therefore, this thesis takes up the challenge not only to advance our understanding of corporate governance concepts, but also to increase the knowledge of corporate governance practices.

In 2004, the OECD (2004) issued its revised principles of corporate governance and systematically emphasized the critical role of corporate governance in improving the firm performance. In this principle, the significant impact of corporate governance on financial performance was described as a framework to coordinate the relationship among the shareholders, board of directors, managers and other stakeholders. Specifically, the principles indicated that the corporate governance system is divisible into two parts: governance structure and governance process. Governance structure includes ownership structure and board structure (composition and leadership) and builds a basic framework for the practice of corporate governance. The governance process refers to the interaction among the governance participants through the governance structure. Thus the structure of corporate governance determines the effectiveness and efficiency of corporate governance process and ultimately influences firm performance. In summary, corporate governance provides a reasonable assurance of monitoring the performance and achieving the objectives of the firm (Barrett, 2002).
Further, the boards of directors are regarded primarily as a governance structure safeguard between the company and the owners of equity capital and as such lie at the heart of the corporate governance system (Williamson Oliver, 1985). However, despite the fact that research of boards has been considerable, the mixed empirical results emphasize that scholars should also consider other intervening variables that will influence the behaviors of board of directors and then moderate the strength of relationship between corporate governance and firm performance. At the same time, Upper Echelon Theory provides a complementary explanation for the important effect of the directors’ demography on the strategic decision process, and further indicates that directors’ demographic characteristics which act as proxies for their cognitive bias and values and perceptions will affect the effectiveness of decision making process of board members and ultimately organizational outcomes.

Thus, through incorporating Upper Echelon Theory into the conventional theories of corporate governance, the study will not only examine the relationship between corporate governance and financial performance, but also explore the interactive effect of demographic characteristics of directors on firm performance. That is, in order to enrich the conceptual framework of corporate governance and enhance the effectiveness of corporate governance, this study not only assesses the impact of corporate governance on firm performance, but also investigates whether or not demographic characteristics of directors can moderate the strength of the relationship between governance structure and firm performance.

Using a sample of 155 Chinese listed companies during 2004 to 2008 (a total of 684 firm-year observations), this thesis extends the integrated model which combine corporate governance, the directors’ demography and firm performance to the emerging and transitional economy of China. Specifically, it seeks to analyse not only the impact of corporate governance on financial performance, but also the moderating impact of the demographic characteristics of directors on the relationship between corporate governance and financial performance in China’s listed companies. As a result, this study aims to provide a comprehensive understanding of the interactive effects of directors’ demographic heterogeneity and corporate governance on firm performance. Specifically, the research expects to achieve the following objectives:

1. I attempt to construct a corporate governance index to assess the quality of corporate governance from the perspectives of ownership structure and the board structure in China.
2. I examine whether there is a positive relationship between corporate governance and financial performance based on the governance index in China’s listed companies.
3. I investigate whether or not the demographic characteristics of directors plays a moderating role in the relationship, that is, this study will ascertain whether the demographic heterogeneity of board of directors can strengthen or weaken the effect of corporate governance on financial performance in China’s listed companies.

The rest of this introductory chapter is organized as follows: the first section describes corporate governance reform in China as a background to the thesis and indicates the motivation for the research; the second and third sections set out the research problems and demonstrated the contributions of the thesis; and the fourth section presents how the remainder of the thesis is structured.

1.1 Corporate Governance in China

Before 1978, China was a centrally planned economy and all decisions on resource allocation (such as production, investment, revenue and employment) were made centrally by the government. Within this system, managers in state-owned enterprises could not decide the strategy in terms of the market conditions and were responsible only for coordinating the employees in the implementation of production required by the government. Meanwhile, manager’s compensation in State-Owned Enterprise (SOE) was determined by a central hierarchical system designed by central government. As a result, most Chinese enterprises suffered from inefficiencies in resource allocation and a lack of managerial incentives to improve production (W. Zhang, 2006).

Following the Third Plenary Session of the Eleventh Communist Party of China (CPC) Central Committee in 1978, China adopted an economic reform policy and aimed to move from a centrally planned to a market economy with Chinese characteristics through promoting institutional reform (W. Zhang, 1998). In the reform process, China has taken a gradual and experimental approach for economic reform rather than the ‘big bang’ or ‘shock therapy’ approach that was commonly adopted by other transitional economies (such as those in Eastern Europe), and as a result, has benefited from sensible policies and a relative absence of adverse shocks (Svejnar, 2007). Therefore, over three decades, China’s reform and ‘opening-up’ seems to have been successful in advancing economic growth through improving efficiencies in resource allocation and managerial incentive mechanisms to promote productivity.

China’s enterprises aimed to build a modern enterprise system and were initially transferred as limited liability companies with the objectives of profit-making after three decades of
successful reform. Furthermore, the focus of the reform was the corporate governance of traditional State-Owned Enterprises (SOEs), because the corporate governance reform has an important role in the emerging and transitional economy of China (Peng, 2004). Specifically, the evolutionary process is often divided into three stages as follows.

**Stage 1: 1978-1992**

Before 1978, the fundamental problem of an SOE is the ambiguity of property rights with state ownership because ownership and control rights are combined in the Chinese conventional ownership system. Consequently, as Lin (2001) indicated, the government acting as controlling authority of the enterprise choose not to bear any residual risks in the use of enterprise assets in the State-Owned Enterprises.

Therefore, during 1978-1992, enterprise reform was initially carried out from the ownership perspective, that is, the government primarily gave SOEs more autonomy and the management more incentives to improve enterprise efficiency through the separation of government from enterprise management. For example, the State Council issued a regulation for further expanding autonomy of SOEs in 1984 in which the contract responsibility policy was implemented to allow managers to share part of the profits of the enterprise. In 1988, the state-owned enterprise law was issued not only to clarify property rights, but also to separate the government from the enterprise management and to implement incentive contracts. However, these reforms could not reach their target because central planning still constrained the effectiveness of incentive contracts between the government and management and directly affected corporate governance through ownership and control (Lin, 2001; Qian, 1996).

In particular, the result of enterprise reform reminded the policy makers and scholars that the effective exercise of ownership rights by the government involves a range of complex governance issues which limits the capacity for effective monitoring of enterprise assets (Jefferson & Rawski, 2002; Tam, 2000). Therefore, since 1993 the government has begun taking measures to establish a basic framework of corporate governance.

**Stage 2: 1993-1998**

At the end of 1993, the Chinese Communist Party (CCP) announced its decision on various issues concerning the establishment of a Socialist Market Economic system. In this decision, the CCP called for the establishment of modern corporations as an important measure of enterprise reform and placed emphasis on the clarification of property rights in order to
transfer the SOEs into the legal entities in a way of corporatization. Specifically, some scholars and policy makers suggested that the government should establish financial intermediaries and holding companies to reorganize the relationship between the government and SOEs; others proposed that the government should adopted some forms of debt-equity swap between various classes of SOEs to solve problems of their bank loan repayments and to improve the profit performance (Tam, 2000). Especially in the early 1990s, the Chinese central government opened the stock exchange and allowed SOEs to issue some of the state shares to individual investors. As a result, these programmes promoted SOEs to speed up the reform of property rights and the establishment of a modern system of corporate governance.

In addition, corporate law was introduced in this stage and clearly required the enterprises not only to hold an annual shareholder meeting, but also to maintain a board of directors and a supervisory board. Specifically, based on corporate law, board of directors and supervisory board are defined as a decision control unit and as a monitoring unit separately, and are appointed by and report to shareholders. That is, the board is responsible for appointing the top managers, organizing the shareholders meeting and implementing the resolutions of shareholders meeting and undertaking strategy decisions. At the same time, the law also described the responsibilities of the supervisory board which mainly included monitoring directors and managers to ensure compliance with the law and the articles of incorporation, and requesting directors and managers to alter their actions if they were in conflict with the enterprise’s objectives. Therefore, the Chinese governance structure not only derives the benefit of the Germanic two-tier governance system, but also benefited from the advantages of the single-tier governance structure of the Anglo-American model. For instances, the advantage of a two-tier governance structure is that the board of supervisors has greater independence in relation to the executives. Its disadvantage is that the supervisory board lacks information to carry out its functions because it is far from the real business of the company. The advantage of a single-tier governance structure is that it has more information in relationship to the business of the company; its disadvantage is that it simply becomes a “rubber stamp”, because it is easily manipulated internally in state-owned enterprises (Qian & Wu, 2003).

In summary, SOEs have gradually been restructured to establish the basic framework of corporate governance based on the modern enterprise system with

“Clarified property rights, clearly defined responsibility and authority, separation of enterprise from government, and scientific internal management” (p.2)
through corporatization and securitization (Wang, 2004). Furthermore, in order to increase the effectiveness of corporate governance, China’s government has issued a series of regulation and principles to improve the corporate governance system since 1999.

Stage 3: 1999- present

The decision on the SOE reform issued by the Fourth Plenary Session of the Fifteenth CPC Central Committee made a few breakthroughs in Chinese enterprise reform in 1999. For instance, the government announced three important new policies that had a profound effect on the development of China’s corporate governance:

1. The adjustment of the layout of the state economy to narrow its scope;
2. The diversification of ownership structure for those enterprises over which the government still expected to maintain control; and
3. The establishment of effective corporate governance according to international standards.

In particular, government officials formally introduced the concept of corporate governance in 1999. Furthermore, the third plenum of the Sixteenth Party Congress announced its decision of further perfecting the socialist market economy system to strengthen the reform in 2003. Based on these decisions, the government require the SOEs to further develop the separation of ownership and control in order to perfect the modern system of corporate governance.

Therefore, corporate governance has gradually been regarded as an important component of enterprise reform that affects the firm performance in the state-owned enterprises and achieved significant developments over the past 30 years. For instance, according to a survey by Deloitte (2010), the reform of corporate governance in most surveyed Chinese firms was not just to meet the regulatory requirements, but to meet their company’s long-term development needs including the need to raise capital, to protect shareholder rights and to improve decision making. Therefore, as Fan Fuchun (2002), vice chairman of China Securities Regulatory Commission (CSRC), indicated:

“High quality listed companies cannot be set apart from effective corporate governance. Practice experience shows that improving the corporate governance system is an integral part for raising the quality of listed companies. This also forms the micro-foundation for an effective operation of the entire capital market.” (p.12)
Meanwhile, Chinese government have also promulgated a large number of laws and regulations, which included the Company Law of People’s Republic of China (PRC) (revised in 2005), the Accounting Law of PRC (revised in 1999), and the Securities Law of PRC (revised in 2005), to perfect the framework of Chinese corporate governance. Specifically, according to these laws, the government and government authorities concentrated on how to allocate responsibility and accountability between the shareholders, the directors and the managers, how to make the managers align with shareholders’ interests, and how to design incentive mechanisms for managers in the firm. In addition, the Code of Corporate Governance of Chinese Listed Companies which aims to establish the basic principles for the corporate governance of China’s listed companies was issued by the China securities regulatory commission (CSRC) in 2002. The Code not only specified the shareholders’ rights, the role of the controlling shareholder and directors, but also further strengthened the information disclosure and transparency in Chinese listed companies. For instances there are some important requirements of corporate governance as follows:

1. Controlling shareholders own a duty of good faith toward the listed company and other shareholder. Controlling shareholders should be prevented from damaging the listed companies’ or other shareholders’ legal rights and interests.

2. A listed company shall be separated from its controlling shareholders in such as aspects as personal assets, financial affairs, business and accounting.

3. Directors shall faithfully, honestly and diligently perform their duties in the best interests of the company and all the shareholders.

4. A listed company shall formulate rules of procedure for its boards to ensure the board’s efficient functioning and rational decisions.

To date, a number of Chinese listed companies have steadily developed a modern corporate governance system to act as an engine for effective policy making and appropriate monitoring mechanisms. In order to illustrate the system, a simple representation of the governance structure of Chinese listed companies is given in Figure 1.1
1.2 The difference between Chinese and western corporate governance model

To summarize, China drew upon successful experience and mechanisms of western corporate governance and objectively improves the effectiveness of corporate governance practices. However, in order to comprehensively assess corporate governance, we should turn our attention to understand that institutional differences give rise to governance arrangements that are suitable, not in a universal sense, but rather for the individual firm and the context in which it is situated, because an astute appreciation of corporate governance should recognize that the governance arrangement in an individual company is situated in a historical, social and organizational context that is particular to that company (D. C. Hambrick, Werder, & Zajac, 2008; Yoshikawa, Tsui-Auch, & McGuire, 2007). Therefore, based on the western theoretical concepts of corporate governance, China has some unique governance characteristics in response to its economic situation in the transition and emerging economy.

Specifically, traditional agency theory as the dominant view of corporate governance emphasises the importance of agency relationship, which refer to “contracts under which one or more principal(s) engages another the agent to perform some service on their behalf which involves delegating some decision-making authority to the agent” (Jensen & Meckling,
1976), and suggests relationship between shareholders and managers is coordinated by the contract to determine rights of the managers and allocation of return within the firm. However, in the transition and emerging economy of China, the ultimate control of the listed companies still remain in the hands of China Communist Party (CCP) and the government, therefore, although Chinese government has replicate a set of western governance mechanisms to ensure that the shareholders can get an adequate return on their investment, application of the agency theory must incorporate considerations of political interference on corporate governance as well, because reducing the political costs is precisely the reason for expanding enterprise autonomy in the first place (Qian, 1996).

Furthermore, critiques of agency theory lead to variation in the corporate governance structure between China and western countries. Firstly, corporate governance with Chinese characteristics has been developed in the process of the reform of State-owned enterprises, therefore, the main differences are the government or state asset management agencies retaining a large percent of share of listed companies and still maintaining the ultimate control rights in Chinese listed firms. That is, Chinese firms are characterized by dominant shareholder (government or government authorized organizations) whose stockholding far exceed the second largest stockholder. For example, some scholars found that the single largest owner holds 36% of an average company’s shares, the biggest five owners held 52% of the total shares in Chinese listed companies (Liang & Useem, 2009). Second, because the CCP and government playing a leading role in the development of corporate governance framework, the selection and appointment process of directors and CEO is different from the western countries. That is, the appointment, evaluation and dismissal of directors and CEO are always made by the China communist party, central government and local government in Chinese listed companies. Finally, the political-determined governance model which results from Chinese traditional planned economic system creates a multiple-tier governance control line between principals and agents. Within this governance control line, the state-owned supervision commission is the representative agent of the state property and acts as the high-level government authority to supervise the operation of state-controlled corporations. In addition, there also exists the central or local government and government–controlled intermediaries between the commission and the state-owned listed companies. Therefore, the complicated line cannot show a direct and clear linkage between principal and agents and may hurt the effectiveness of corporate governance in Chinese list companies.
Table 1.1 summarizes the key difference between Chinese and western corporate governance from the perspectives of internal mechanism, external mechanism and governance environment as follows:

**Table 1.1  Key Differences between the Chinese and Western Corporate Governance Model**

<table>
<thead>
<tr>
<th>Internal mechanisms</th>
<th>Western corporate governance model (U.K. and U.S. model)</th>
<th>China’s corporate governance model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership structure</td>
<td>Dispersed ownership</td>
<td>Concentrated ownership</td>
</tr>
<tr>
<td>Shareholder type</td>
<td>Institutional investors (investment companies and pension funds)</td>
<td>Government and government authorized organizations</td>
</tr>
<tr>
<td>Board structure</td>
<td>Single tier board (board of directors).</td>
<td>Two-tier board (board of directors and supervisory board). The appointment and evaluation of directors are made by CCP and governments.</td>
</tr>
<tr>
<td>Independent directors</td>
<td>Professional experts (lawyer, accountant and academic scholars)</td>
<td>Appointed by state controlling shareholders</td>
</tr>
<tr>
<td>CEO duality</td>
<td>Separation of CEO and chairman</td>
<td>Both CEO and chairman are appointed by CCP and government</td>
</tr>
<tr>
<td>Compensation level and arrangements</td>
<td>The compensation is tied to firm performance</td>
<td>The compensation is not related with firm performance</td>
</tr>
</tbody>
</table>

**External mechanisms**

<table>
<thead>
<tr>
<th>Legal System</th>
<th>Good legal framework and enforcement; Sufficient shareholder protection</th>
<th>Weak legal system; insufficient protection of property rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate control market</td>
<td>Efficient capital market (mergers and takeovers; adequate transparency)</td>
<td>Immature capital market</td>
</tr>
</tbody>
</table>

**Governance environment**

<table>
<thead>
<tr>
<th>Economic regime</th>
<th>Capitalist societies; Market Economy</th>
<th>Government-dominated economy; Socialist market economy with Chinese characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance culture</td>
<td>Individualism; democratic politics</td>
<td>Collectivism and Guanxi (relationship); bureaucracy</td>
</tr>
</tbody>
</table>
In conclusion, the reform of corporate governance in China still confronted a dichotomy: is the government the critical reform actor or will the market serve as the central venue for restructuring (Jefferson & Rawski, 2002)? Thus, there appeared to be some features in the reform process of corporate governance. Firstly, the reform and state-owned enterprises (SOEs) mainly focus on the interaction relationship between the government, the enterprise and market. Secondly, the most important part of the reform is the separation of government and enterprise. Thirdly, the essential problem of the separation of government and enterprise is the separation of ownership and control in the SOEs; fourthly, while separating ownership from control, the SOEs should establish a good structure of corporate governance to protect the interests of the state-owned property right of the SOEs. Finally, the SOEs should design optimal incentive contracts that can encourage the executives to maximize the interests of state-owned property rights.

### 1.3 Problem Statements

During 30 years of economic reform, Chinese companies have gradually made some important breakthroughs to establish modern corporate governance. However, listed companies’ poor corporate governance is still a bottleneck in the development of the capital market. For example, the CLSA report rated China’s governance practices ninth among 11 Asian nations. Therefore, as Laura Cha (2002), the former Vice Chairman of the China Securities Regulatory Commission (CSRC), indicated, the concept of corporate governance has not been well developed or understood in China because China is in the transitional stage from a planned economy to a market economy.

Furthermore, some scholars argued that poor corporate governance is still widespread among Chinese listed companies. For instance, the listed company, SanJiu Medical and Pharmaceutical Co. misappropriated US$301.9 million, which amounted to 96% of the company’s net assets. Similarly, the GuangXia Industry Co. was investigated by the CSRC because it fabricated its financial report, earning the dubious label of the “Chinese Enron”. Therefore, scholars and practitioners have re-examined the limitations of the current governance system and further explored research on the relationship between corporate governance and performance from a broad perspective.

Zhou (2004) (Governor of the People’s Bank of China) summarized the current problems of corporate governance in China and raised some important issues in corporate governance development, such as the role of government in promoting corporate governance, the
selection of the corporate governance model, the problem of insider control and ownership ambiguity, the role of the party committee in corporate governance, the protection of stockholders’ interests and the role of independent directors in corporate governance.

Therefore, as discussed above, despite the reform of Chinese corporate governance that has borrowed a number of concepts and “best practices” from western developed countries and achieved some progress in corporate governance (e.g., listed firms have built boards of directors that are responsible for running the organization; and boards are required to have independent directors to keep their independence (G. Chen, Firth, Gao, & Rui, 2006)), the main challenge for Chinese companies is still that companies should further develop a good governance system to better respond to the needs of company development.

Furthermore, as Tam (1999) indicated, the measures that improve the function and effectiveness of the corporate governance across different countries are premised in certain economic, commercial and social norms and conditions, and are the product of market interactions and regulatory responses, therefore, the arrangement of corporate governance in China should be situated in Chinese historical, social and organization context.

To summarize the discussion above, the first problem in this study is described as follow: whether or not there is a positive relationship between corporate governance and firm performance in Chinese listed companies? That is, this research attempts to analyse whether the corporate governance model of western countries can apply fully in the emerging and transitional economy of China. Specifically, the relationship between corporate governance and firm performance is not only indicated that the firm with good corporate governance will receive higher firm performance, but also defined that the firm with better firm performance may choose to adopt the better framework of corporate governance.

In addition, scholars also use financial statement presentation as a mechanism to assist users in better identify and understanding the firm performance, because the financial performance is not only an analytical tool to indentify strengths and weakness within the company, but also an important monitoring device to uncover a potential problems in firm operations. Therefore, this thesis used ROE and profit margin which are adopted and applied as importance factors to assess the executives’ performance by the Chinese government or government authorized organization as proxies for firm performance, and attempts to measure the difference in firm perform affected by corporate governance in Chinese listed companies. Specifically, I
measure the ROE by using net income divided by the average of owners’equity; meanwhile, profit margin is measured by using net profit divided by revenue.

Although a number of scholars (B. Baysinger & Hoskisson, 1990b; A. A. Berle, Means, Weidenbaum, & Jensen, 1991; OECD, 2004) found that corporate governance has a strong impact on firm performance, these previous studies mainly focused on the governance structure in a corporate governance system and overlook the importance of the board process between corporate governance structure and firm performance, because the board interactive processes (such as cognitive conflicts, effort norms and use of skills and knowledge) build the linkage between corporate governance structure and firm performance, that is, governance structure diversity should lead to differential effectiveness and efficiency of interaction of board process, and then have different impacts on firm performance.

Meanwhile, upper echelon theorists (M. A. Carpenter, M. A. Geletkanycz, & W. G. Sanders, 2004a; D. C. Hambrick & Mason, 1984) have also found that the directors’ demographic characteristics, acting as proxies for their cognition, value and perception, can also influence the strategic choices and then have a strong impact on the effectiveness of interaction process of the board. Specifically, upper echelon theorists posited that organizational outcomes will be affected by the effectiveness of interaction process within top management team, which is determined by the cognitive bias and values of top managers, on the other hand, they used managerial demographic characteristics as proxies of the cognition and value and provided a detailed explanation about the effect of demographic heterogeneity of the top management team on firm performance, because the cognition and value cannot be measured directly and may be predicted by managerial demographic characteristics such as age, functional track, and tenure. Furthermore, the directors act as supra-top management team and play important roles in shaping the corporate strategy due to their apex position in the corporate pyramid. Therefore, directors’ demographic characteristics will reflect different cognition and value and then have a strong impact on the interaction among the members of board and then on the relationship between corporate governance structure and firm performance.

In summary, demographic heterogeneity of members of board will moderate the relationship between corporate governance and firm performance, as Cyert and March (1965) described as follows

“What characterized authoritative decision makers under different conditions? How do their experience and reference group identifications affect their decisions? How are
executive expectations determined? What differences are there between individual and group decision making? How do hierarchical making in business companies, in what respect does this affect the content of the decisions?” (pp. 20-21).

Thus, this study integrates directors’ demographic characteristics into the conventional corporate governance framework and examines the moderating effect of these intervening variables upon the relationship between corporate governance and firm performance.

To summarize, this study developed an integrated framework which not only enabled evaluation of the relationship between corporate governance and firm performance, but also examined the moderating effect of directors’ demographic characteristics. That is, I proposed that demographic characteristics can be regarded as intervening variables to influence the relationship between corporate governance and firm performance. As a result, this study opens a new avenue and provides new policy implications for corporate governance research from a wide-ranging perspective.

Starting from the first question, the research will further examine whether the demographic characteristics of directors can moderate the relationship between corporate governance and firm performance in Chinese listed companies.

1.4 Thesis Organization

The rest of the thesis is divided into five chapters. As discussed above, the thesis focuses on not only the relationship between corporate governance and firm performance in Chinese listed companies, but also the moderating impact of the demographic characteristics of directors on the relationship between corporate governance and firm performance. Thus Chapter Two summarises a literature review about corporate governance and the demographic characteristics of directors. That is, the review first discusses the definitions and theoretical bases of corporate governance from different perspectives. Secondly, this chapter discusses the linkage between corporate governance structure and firm performance. Thirdly, upper echelon theory is introduced to explain the impact of the demographic characteristics of directors on firm performance. Finally, the chapter integrates the directors’ demographic characteristics into the corporate governance system and encourages us to understand corporate governance from a comprehensive theoretical perspective.

Building on the literature review, Chapter Three develops the hypotheses concerning the relationship between corporate governance and firm performance and then the interaction of
directors’ demographic characteristics and corporate governance on the firm performance. Specifically, the chapter begins building a corporate governance index to examine the empirical relationship between corporate governance and firm performance from ownership and board perspectives, then, the argument concerns the moderating role of the demographic characteristics of the directors to hypothesize the interaction effects of corporate governance and directors’ characteristics on the firm performance. Chapter Four discusses the methodology and the sample selection, definition of variables and statistical analysis techniques. Chapter Five reports the empirical results and highlights the findings. The thesis concludes with Chapter Six, which discusses the results, conclusions, limitations and future research directions.

![Figure 1.2 Structure of the Thesis](image-url)
Chapter 2

Literature Review

This chapter is divided into six sections. The first provides the definitions of corporate governance. The second section discusses the theoretical base of corporate governance from different perspectives including agency theory, stakeholder theory, stewardship theory and resource dependence theory. In the third section, the review discusses corporate governance structure, such as ownership structure and board structure. The fourth section describes the link between corporate governance structure and firm performance. In the fifth section, I introduce upper echelon theory and explain the effect of demographic characteristics of the top management team on strategic choice and firm outcomes. In the final section, the review summarizes the prior discussions and posits an integrated research model, which indicates the moderating impact of the directors’ demographic characteristics on the relationship between corporate governance and firm performance.

2.1 Definitions of Corporate Governance

The fundamental insight on corporate governance can be traced back to Adam Smith. He (A. Smith, 1776) emphasized in his Wealth of Nations that:

“Being the managers of other people’s money than of their own, it cannot well be expected that they should watch over it with the same anxious vigilance with which partners in a private co-partner frequently watch over their own. Like the stewards of a rich man, they consider attention to small matters as not for their master’s honour and very easily give themselves a dispensation from having it.”

Furthermore, according to Berle and Means’s (1932) article on the separation of ownership and control, the objective of managers can not completely go along with those of owners, because of managerial self-interest and information asymmetries in the corporation. Therefore, the core problem of corporate governance is that the objectives of company managers often conflict with those of the shareholders who own the company (Jensen, 2000). Conventional corporate governance introduces a set of internal and external mechanisms that induce self-interested agents to maximize the value of the residual cash flow of the organization on behalf of the principals.
However, the failures of corporate governance lead scholars to further investigate the topic of corporate governance from a wide range of academic fields, as a result, researchers and practitioners have provided a large number of valuable insights into many aspects of corporate governance, and have different definitions of corporate governance from diverse theoretical perspectives. From conventional governance conceptual perspectives, some scholars demonstrated that the emphasis on corporate governance is the efficacy of the various mechanisms available to protect shareholders from the self-interested whims of executives, and agree that good corporate governance should explore the complementarities of institutional arrangements to reduce total agency costs (Shleifer & Vishny, 1997; Gillan& Starks, 2000).

In addition, Monks and Minow (2004) defined corporate governance as the relationship among various participants (including: chief executive officer, management, shareholders, employees) in determining the direction and performance of corporations, similarly Blair (1995) defined corporate governance as follows:

“The whole set of legal, cultural and institutional arrangements that determine what a publicly-traded corporation can do, who control them, how that control is exercised, and how the risks and returns from the activities they undertake are allocated.” (p. 3)

From systemic perspective, The OECD (2004) indicated the objectives, instruments and transmission mechanisms of corporate governance, which has become a useful and widely acceptable definition:

“Corporate governance involves a set of relationships between a company’s management, its board, its shareholders and other stakeholder, corporate governance also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined. Good corporate governance should provide proper incentives for the board and management to pursue objectives that are in the interests of the company and its shareholders and should facilitate effective monitoring.” (p. 11)

In 2008, Hambrick, Werder and Zajac (2008) suggested the new direction in corporate governance research and defined corporate governance as the structure and process by which an organization’s assets and activities are overseen. Specifically, they emphasised that scholars should consider corporate governance along a micro dimension (from the organization inward) and a macro dimension (from organization outward) and then analyze
corporate governance from three different perspectives: formal structure, behaviour structure and behaviour process. They also indicated that not only do the constituents of firms stand to gain or lose, depending on the quality and nature of corporate governance, but entire national systems can be propelled or stymied as well.

In summary, Gillan et al. provided the balance sheet model of the firm to capture the essence of corporate governance. The left side is composed mainly of the basics of internal governance including boards of directors, management and the financial structure. The right side comprises the elements of external governance arising from the firm’s need to raise capital. Therefore, the model addresses the detail relationship between capital provider and those who manage the capital.

![Corporate governance model](image)

Source: Recent development in corporate governance (Gillan, 2006)

Figure 2.1 Corporate governance model

In China, Qian (1996) defined corporate governance as a set of institutional arrangements that govern the relationship among several groups of stakeholders (investors [shareholders and creditors], managers and workers). Specifically, he proposed that scholars and practitioners should be concerned with three aspects of the structure of corporate governance:

1. How control rights are allocated and exercised;
2. How the directors and top managers are selected and monitored; and
3. How the incentives are designed and enforced.

In brief, the major issues of corporate governance focus on how to limit agency problems, protect shareholder and creditors, and also provide room for managerial initiatives. Li Wei-An (2008) also systematically defined corporate governance as the principal-agent relationship
between shareholders and the board of directors, and board of directors and the top managers. Further, he also indicated that a power check and balance system is necessary to monitor the behaviour of agents as well as to force them to make the effort for the realization of the principle’s maximum interests. In addition, Wu Jinglian (1994) provided the definition of corporate governance from the organization structure perspective, which is accepted by most Chinese scholars:

“The organizational structure consisting of the owners, board of directors and senior managers, a check and balance relationship is formed within that structure, through which the owner entrusts its capital to the board of directors, the board of directors is the highest level of decision making of the company and has the power to appoint, reward and penalise, and dismiss senior managers.” (p. 185)

To summarized the discussions above, corporate governance has attracted lots of attention of scholars and practitioners in a wide array of fields that include accounting, finance, management, economic and social science. Therefore, as some scholars indicate (D. C. Hambrick et al., 2008), the useful insights about corporate governance must have a broader scope, encompassing such complex matters as multiple stakeholder, board dynamics, managerial values and motives and national system.

2.2 Theory of Corporate Governance

2.2.1 Agency Theory

Agency theory remains the dominant theory of corporate governance, and owes its development to research conducted by Alchian and Demsetz (1972) and Jensen and Meckling (1976). Specifically, compared with classical economics, the theory considers the company as a productive function and coordinated operation through the exchange transactions in the market, and explains the production of the firm through a continually negotiated contract among an aggregation of individuals whose aims are to maximize their own utility (Learmount, 2002). Therefore, agency theory gives unique insights into information systems, outcomes uncertainty, incentives and risk (Eisenhardt, 1989) and is highly prevalent in the theoretical understanding of corporate governance.

The core of agency theory is the agency relationship, which refer to “contracts under which one or more principal(s) engages another the agent to perform some service on their behalf which involves delegating some decision-making authority to the agent” (Jensen & Meckling,
Specifically, the shareholders invest funds for productive use and then engage the managers to generate return on the funds in the company. Thus, the relationship between shareholders and managers is coordinated by the contract to determine rights of the managers and allocation of return within the firm.

The essence of agency theory rests upon resolving two problems which arise from agency relationships. The first is the agency problem arising when (a) the goals of the principal and agent conflict; and (b) it is difficult for the principal to verify what the agent is actually doing. The second problem is the risk sharing which derives from different attitudes toward risk between principals and agents, and causes the principals and agents to prefer different actions because of different risk preferences. (T. Eisenberg, Sundgren, & Wells, 1998a; Eisenhardt, 1989). Therefore, agency costs will be generated when the principals encourage managers to maximize the principals’ wealth rather than act in the managers’ own self-interests. Specifically, the principal can establish incentives mechanisms to limit aberrant activities by incurring monitoring costs. Meanwhile, agents will also incur bonding costs to guarantee that they will not take action harming the interests of the principals. The divergence of the decision between agents and principals cause reduction in the wealth of the principals, which is regarded as a residual loss. As a result, the sum of the principals’ monitoring expenditure, the agents’ bonding expenditure and the residual loss is defined as the agency cost (Jensen & Meckling, 1976). Therefore, agency theory focuses on how the principals can design incentives and monitoring mechanisms to influence the agents’ behaviour as well as minimize the agency costs. According to Eisenhardt (1989),

“Overall, the domain of agency theory is the relationships that mirror the basic agency structure of a principal and an agent who are engaged in corporative behaviour, but have differing goals and attitudes toward risk” (p. 59).

In China, based on agency theory, the fundamental problems of Chinese corporate governance are also identifiable as management incentives and management monitoring due to information asymmetry and the incompleteness of the contracts. However, the ultimate control rights of the selection and dismissal of top managers remained in the hands of the government, therefore, understanding this interaction between the effective control by managers and the ultimate control by the government is the key to exploring the problems of corporate governance (Qian, 1994). Furthermore, some scholars (Qian, 1994; L. C. Xu, Zhu, & Lin, 2005) argue that political control can cause not only higher political cost, but also inefficient interference in management to increase agency costs. Thus they expect that
political costs can be reduced by separating government from enterprises and that agency
costs can be mitigated by introducing non-government institutional shareholders and private
shareholders. In summary, the application of the agency theory in China should also include
consideration of political costs and government political interference (Chang & Wong, 2004;
Qian, 1996).

2.2.2 Stakeholder Theory

The philosophical antecedents of stakeholder theory can be dated back to the concepts of the
co-operative movement, mutuality and the intellectual foundations which describe company
as a bundle of human assets and relationships (Clarke, 1984, 1991; Penrose, 1959).
Nowadays, stakeholder theory owes its development to Freeman’s seminal text Strategic
Management: a Stakeholder Approach (Freeman, 1984). Freeman’s study not only defined
the concept of stakeholder, but also provided the explanation that a corporation takes
responsibilities for its stakeholders. Therefore, Freeman’s research presented a solid
foundation for the definition and construction of stakeholder models, frameworks and theories
(Clarkson, 1995). To date, a number of studies have highlighted the concept of stakeholders.
The idea of stakeholders of the corporation has now become commonplace in the
management literature, including academics and practitioners (T. Donaldson & Preston,
1995).

Specifically, based on the definition by Freeman (1984), the stakeholder is discribed as

“Any group or individual can affect, or is affected by, the achievement of a
corporation’s purpose. Stakeholders include employees, customers, suppliers,
stockholders, banks, environmentalists, government and other groups who can help or
hurt the corporation.”(p.46)

Clarkson (1995) not only gave a definition of stakeholders, but also classified them into
primary and secondary stakeholders in terms of similar interests, claims and rights. The
primary stakeholder group is necessary for the corporation to survive as a going concern and
includes the shareholders, investors, employees, customers, suppliers and public stakeholder
groups. The secondary stakeholder group is defined as those who affect or are affected by the
corporation. This group is essential for the survival of the corporation. In summary, both
groups can be seen as providing the company with critical resources (contributions) and, in
exchange, each group expects its interests to be satisfied by the companies (Hill & Jones,
The essence of stakeholder theory assumes that

“the firm as a system of stakeholders operating within the larger system of the host society that provides the necessary legal and market infrastructure for the companies’ activities, the purpose of the firm is to create wealth or value for its stakeholders by converting their stakes into goods and services” (Clarkson, 1994, p. 19).

Therefore, stakeholder theory involves three aspects that attempt to explain and guide the structure and operation of the corporation based on different methodologies, types of evidence and criteria of appraisal. The descriptive aspect is used to describe the specific characteristics and behaviour of the corporation. The instrumental aspect is applied to identify the connections between stakeholders, management and the achievement of traditional corporate objectives. The normative aspect focuses on the interpretation of the function of the corporation, including the identification of moral guidelines for the operation and management of the corporation (T. Donaldson & Preston, 1995).

In China, stakeholder theory has attracted more attention among scholars and policy makers. For instances, Li (2002) indicated that corporate governance should comprise a series of formal and informal institutions to coordinate the association among the stakeholders (including: shareholders, managers, employees, suppliers, government and communities). As a result, firms can enhance decision making to protect the interests of stakeholders. In addition, some scholars also discussed applying stakeholder theory from different perspectives. In addition, Li (2001) suggested that the stakeholders in corporate governance can maintain the continuity and stability in a firm’s development. Yang (2001) emphasized that the protection of stakeholders’ interests can improve the stability in the employee team and the relationship among the shareholders, managements and employees.

Furthermore, some scholars and policymakers proposed that China should follow the stakeholder theory framework to construct mechanisms for corporate governance. For instance, Yang and Zhou (2000) found that the firm should focus on the impact of stakeholders (such as shareholders, creditor, suppliers, customers and employees) on monitoring managers, because political interference has negatively impacted the effectiveness of boards in China. In addition, the State-owned Assets Supervision and Administration Commission of the State Council (SASAC) issued a series of regulations and policies to enhance the composition of board of directors and posited that the members of boards should contain the employee directors in order to protect the interests of the employees.
2.2.3 **Stewardship Theory**

Unlike agency theory which considers managers as opportunistic shirkers, stewardship theory defines the relationship between principal and agent based on other behavioural premises. Specifically, stewardship theory defines situations in which managers are not motivated by individual goals, but rather are stewards whose motives are aligned with the objectives of their principals (David *et al.*, 1997). As Donaldson (1997) indicated, given the potential multiplicity of shareholders’ objectives, a steward’s behaviour can be considered organizationally centred; that is, the steward in the organization should be motivated to make decisions that are in the best interests of the group and then the principals have interests that are well served by increasing organizational wealth. Simply, a pro-organizational steward is motivated to maximize organizational performance, thereby satisfying the competing interests of the shareholders.

On the other hand, the steward also realizes the balance between personal needs and organizational objectives and considers that personal needs are met through working towards organizational, collective ends. As Donaldson (1991) emphasized:

> “The steward’s opportunity set is constrained by the perception that the utility gained from pro-organizational behaviour is higher than the utility that can be gained through individualistic, self-serving behaviour. Stewards believe their interests are aligned with that of the corporation and its owners. Thus, the steward’s interests and utility motivations are directed to organizational rather than personal objectives.” (p. 56)

In China, some scholars have applied stewardship theory to explain the relationship between board and managers from the perspectives of social and psychological dynamics. (Fang & Guangjun, 2008; Peng, Zhang, & Li, 2007; Zhiyue & Shinong, 2007). Specifically, they indicated that the close social ties between directors and managers has a positive effect on the firm performance in terms of stewardship theory, because economic transactions in China are influenced more by social relationships such as common work experience and personal relationships rather than a formal contract. For example, common work experiences can promote the directors and managers to establish a comfortable communication pattern and reach an understanding about the firm’s condition. In addition, in Chinese firms, the CEO will consider the CEO duality as a reputation and protect it through good job performance (Tam, 1999; Tian & Lau, 2001). In summary, as Zhang (2008) suggested, state-owned enterprises should focus not only on the supervision for managers but also cooperation with them in order to improve firm performance.
2.2.4 Resource Dependence Theory

Resource dependence theory is organization theory that explains that an organization must have certain resources in order to survive and function. Hence, this theory suggests that a given organization will respond to and become dependent on those organizations or entities that control the resources which are critical to its operations in its environment (Casciaro, 2005).

In corporate governance, resource dependence theory provides an analytic foundation for the role of the board of directors. For instances, board size is a measure of an organization’s ability to form environmental links with critical resources in order to secure the success of the organization. Because, as some scholars indicate, the firm can increase the board size to improve its ability to extract critical resources which include external funding and leverage from its environment, and to deal with environmental uncertainty which is caused by the asymmetry of information and volatility. Alternatively, outside directors can also provide access to resources for the improvement of firm performance. For instances, an outside director from a financial institution can facilitate the company in securing lines of credit, likewise, the outside directors from law firms can provide the suggestions to effectively protect company assets (Boyd, 1990; Hillman & Dalziel, 2003).

In the Chinese case, some scholars have discussed the effect of corporate governance mechanisms on the firm’s outcomes based on resource dependence theory. For example, Peng et al. (2003) proposed that the resource dependence function is more pronounced for Chinese boards than in developed countries because of the Chinese cultural propensity of depending on the relationship (Guanxi) to get things done. Other scholars (Keister, 2000; Park & Luo, 2001) also found that managerial networks such as board interlocks have a positive effect on the firm performance in Chinese firms.

2.2.5 Concluding Remarks

The literature review has discussed the theoretical bases of corporate governance from a wide range of different and competing perspectives. Agency theory is still the dominant theoretical paradigm of corporate governance and it influences organization structure and business policy. However, as Daily, Dalton and Cannel (2003) indicated, other theoretical perspectives can be regarded as important complements to agency theory, that is, multi-theoretical approaches are essential to perfect the corporate governance.
2.3 Corporate Governance Structure

The separation of ownership and control leads to potential conflicts of interest between shareholders and manager. Corporate governance structure acts as a mechanism available to protect shareholders from the self-interest of executives and assures alignment of the interests of managers with those of shareholder (A. Berle & Means, 1932; Hart, 1995b). Furthermore, the ownership structure and the board structure are considered as the central control mechanisms for monitoring the behaviour of managers and have currently been the important debated issues in corporate governance.

However, as some scholars (Demsetz & Villalonga, 2001; Hermelin & Weisbach, 2003) indicate, there exists different types of ownership structure and board structure across firms because corporate governance structures are endogenously determined by trade-offs between the monitoring costs and benefits of effective monitoring for different firms. Furthermore, as Shleifer and Vishny (1997a) argued, most available research on corporate governance comes from the western developed countries, and at the time of their writing there was little research on corporate governance in developing countries, although this position is changing. Therefore the following will discuss not only the development of corporate governance structures in western countries, but also the characteristics of corporate governance structures in the transition and emerging economy of China.

2.3.1 Ownership Structure

A well–designed ownership structure is an important approach to influence the operating strategy and then improve the firm’s value. Some academics have found that ownership concentration has a positive impact on firm performance because the concentrated ownership can counter the agency problem in countries with a low level of investor protection (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1998; Shleifer & Vishny, 1997a). For example, Shleifer and Vishny (1986) explained that concentrated ownership in the firm can mitigate free-rider problems where the ownership has been dispersed because the small owners may not pay attention to monitoring the performance of the management in a corporate with a large number of minority shareholders. Similarly, Grossman and Hart (1980) explained that, if the ownership is widely dispersed in the company, shareholders will have not adequate incentives to devote resources to supervise the management team, furthermore, empirical studies have also reported that there is a positive relationship between ownership concentration and firm performance(Agrawal & Mandelker, 2009; Huddart, 1993).
However, other scholars (Demsetz & Lehn, 1985; Holderness, 2005) indicate that concentrated ownership has no significant impact on firm performance, because large shareholders have a large enough stake to make use of resources to advance their interests at the expense of other minority shareholders; that is, concentrated ownership may transfer resources out of companies for the benefit of controlling shareholders. For instance, Cho (1998) and Short (1994) found that there was no systematic relationship between ownership structure and firm outcome based on the empirical results.

China has unique ownership characteristics compared with western countries. Specifically, the shares are divided into state-owned, legal entity and individual shares in terms of China’s company law. The state-owned shares are held directly by central government, local government and/or their associated ministries; legal entity shares are owned by state-owned enterprises or non state-owned enterprises; and individual shares are held by the natural persons.

Furthermore, scholars also draw attention to two different dimensions of ownership structure in Chinese listed firms compared with those in the western countries:

1. The ownership of Chinese listed companies is highly concentrated, e.g., the single largest owner holds 36% of an average company’s shares, the biggest five owners held 52% (Liang & Useem, 2009).
2. The ultimate control rights in Chinese listed firms are maintained by the government or state asset management agencies because the state-owned shareholders’ stockholding far exceeds the other stockholders in Chinese listed firms. More specifically, as shown in Table 2.1, the top two shareholders usually hold nearly two-thirds of the total shares in their company. Therefore, the political control has a strong impact on the effectiveness of corporate governance in Chinese listed companies.

On the other hand, some Chinese scholars (Z. Bai, 2002; Y. Zhang, 2002) suggested that the Berle and Means’ model of dispersed ownership should be the ideal for corporate governance and believe that big shareholders often manipulate most of the business operation in the companies and lead to internal personal control. Therefore they argue that a dominant single shareholder with a large amount of shares is a serious problem in Chinese companies.
Table 2.1 Ownership Structure of Chinese Enterprises

<table>
<thead>
<tr>
<th>Name of Bank</th>
<th>Name of Shareholder</th>
<th>Percentage of Total Shares (%)</th>
<th>Nature of Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICBC</td>
<td>Central Huijin</td>
<td>35.41</td>
<td>State-Owned Shares</td>
</tr>
<tr>
<td></td>
<td>MOF</td>
<td>35.33</td>
<td>State-Owned Shares</td>
</tr>
<tr>
<td>CCB</td>
<td>Central Huijin</td>
<td>48.17</td>
<td>State-Owned Shares</td>
</tr>
<tr>
<td></td>
<td>Bank of America</td>
<td>19.13</td>
<td>Foreign Legal Person</td>
</tr>
<tr>
<td>BOC</td>
<td>Central SAFE</td>
<td>67.52</td>
<td>State-Owned Shares</td>
</tr>
<tr>
<td></td>
<td>HKSCC</td>
<td>12.24</td>
<td>Foreign Legal Persons</td>
</tr>
<tr>
<td></td>
<td>RBS China</td>
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<td>Foreign Legal Persons</td>
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<tr>
<td>ABC</td>
<td>MOF</td>
<td>39.12</td>
<td>State-owned shares</td>
</tr>
<tr>
<td></td>
<td>Central Huijin</td>
<td>40.03</td>
<td>State-owned shares</td>
</tr>
</tbody>
</table>


2.3.2 Board Structure

Board of directors plays an important role in corporate governance and is responsible for monitoring and advising managers on behalf of shareholders, that is, the board of directors is the significant instrument through which shareholders can affect the behaviour of managers, and make the company’s interests align with shareholders’ value. Therefore, a good board not only can inspect the managers’ harmful behaviour through its monitoring function, but also can help management make good decisions through its advising function (Adams & Ferreira, 2007; Linck, Netter, & Yang, 2008; Raheja, 2009). Specifically, the research on board structure concentrates on three aspects: board size, board composition and board leadership structure. Board size is the number of directors on the board; board composition refers to the proportion of the independent directors on the board; and the board leadership structure is whether the CEO is also the chairperson of the board.

2.3.2.1 Board size

Board size has been studied extensively by the scholars and policymakers, because the number of directors on the board can affect the effectiveness of board functioning and thus corporate performance, however, there are different views on the impact of board size on firm performance. Specifically, some scholars have found that smaller boards are more effective than larger boards. For example, Yermack (1995) found that there is a negative relationship between Tobin’s Q and board size. Similarly, Eisenberg (1998a) indicated that smaller boards are linked to higher firm value because smaller boards are more cohesive, more productive and can monitor the firm effectively. Furthermore, scholars also note that larger boards are not good monitors because of social loafing and higher co-ordination costs (Jensen, 1994;
Lipton & Lorsch, 1992). In addition, Cheng (2008) found that larger boards can lead to lower variability of firm performance.

Conversely, other scholars argue that there is a positive relationship between larger boards and firm performance because they not only offer better advices for strategic decisions, but also reduce the negative effect of CEO domination. For example, Dalton, Daily, Johnson and Ellstrand (1999) argued that in larger boards, directors can provide oversight over managerial decisions and activities. Similarly, Agrawal and Knoeber (2009) noted that larger boards can bring broad experience and expertise to meet the firm’s needs.

2.3.2.2 Board composition

The central point of studies of board composition is the proportion of independent directors in the boardroom. Because independent directors are the members of boards who are not employed by or engaged with the firm, and have no disqualifying relationship with the company (Zattoni & Cuomo, 2008), the board should have a majority of independent directors in order to prevent the firm from being dominated by the firm’s managers (Conyon, 2008; Fama & Jensen, 1983b; Johnson, Hoskisson, & Hitt, 1993). Scholars and policy makers have provided evidence to support this perspective. For example, Baysinger and Bulter (1985b) found that firms with a higher proportion of independent directors led to superior performance. In addition, Bozes and Dia (2007) analyzed the relationship between the board composition and company performance in 14 Canadian SOEs, and found that the SOEs with a larger proportion of independent directors on their board had a positive impact on firm performance compared with SOEs with a small proportion of independent directors.

However, other scholars held different views on the effect of independent director ratio on firm performance. For instance, Bhagat and Black (2007) studied the relationship between board composition and company performance—Tobin Q, ROA, Sales/Assets, and long-term stock returns based on 828 American companies in 1991, and found that, although a company with poor performance has a tendency to appoint more independent directors, more independent directors on corporate boards would not improve the corporate governance and cannot lead to improved performance. Therefore, the findings on the relationship between the board composition and firm performance are mixed.

2.3.2.3 Board leadership structure

Another important factor for effectiveness of the board of directors is CEO duality which refers to one person serving both as a company’s CEO and board chairman. Can CEO duality
influence the performance of the firm? According to agency theory, researchers suggest that separation of the CEO and the chairman of the board can facilitate more effective monitoring and control of the CEO because other directors cannot easily assess the performance of the CEO of the firm, when the CEO also serves as chairman of the board (Fama & Jensen, 1983b, 1983c; Finkelstein & D’Aveni, 1994). Furthermore, Jensen (1994) indicated that it is difficult for the board to effectively perform its critical function without the direction of an independent leader. Macavoy and Millstein (2004) also emphasized that the failure of independent board leadership gave rise to challenges in connection with directors ‘duty of good faith’.

Conversely, other scholars provided support for CEO duality. For instance, they argued that CEO duality can facilitate decision making because CEO duality can create a clear line of authority and responsibility in the firm (J. Galbraith, 1977; Massie, 1965). Similarly, scholars found that non-duality can disrupt the CEO’s ability to adapt to the environment and make it difficult for the firm to take any decisive actions (Mintzberg & Waters, 1990). From a practical perspective, the findings of some empirical papers also support the views on the benefits of CEO duality. For instance, Faleye (2007) suggested that requiring all firms to separate the CEO and chairman duties may be counterproductive and could not produce the desired results. Dahya et al. (2009) found that companies splitting combined CEO/chairman positions did not show any absolute improvement in performance compared with various peer-group benchmarks. Briefly, previous studies have not reached a consensus on whether a firm should adopt the CEO duality in the boardroom or not.

### 2.3.2.4 Board structure in China

The corporate governance reform in Chinese companies learned from the successful experience of the board structure in the western corporate governance model and aimed to design the structure of the board with Chinese characteristics to improve the effectiveness of corporate governance (Xiao, Dahya, & Lin, 2004). Thus, the government gradually issued a series of regulations and policies in an attempt to perfect the structure of the board of directors. For instance, the Chinese government stipulated Company Law in 1993, which not only required that listed companies must set up a board of directors to manage the companies on behalf of the shareholders, but also defined the responsibilities and rights of the board of directors in Chinese firms. In addition, the Code of Corporate Governance for Chinese listed company which is issued in 2002 also emphasized that listed companies must appoint independent directors and establish specialized professional committees including the audit
committee, nomination committee and remuneration committee in order to improve the governance framework.

More specifically, regarding the board size, the revised corporate law of China (2005) did not impose a specific requirement for the size of boards, but stipulated that the size of board in the companies should be 5 to 19 members. However, the empirical findings on the board size in China are also mixed and are similar with those in western countries. For instance, Cui and Lu (2008) found there is a positive relationship between corporate board size and accounting information transparency. In contrast, Sun (2000) indicated that there is a negative relationship between board size and firm performance. Similarly, Yu (2001) and Zheng (2004) found there is no significant relationship between board size and firm performance, in addition, Yu & Chi (2004b) and Qu (2007a) provided a reverse U-shaped relationship between board size and performance in Chinese listed companies.

In China, CEO duality is regarded as one important barrier to influence the effectiveness of corporate governance. However, the empirical studies also reported mixed findings on the relationship between CEO duality and firm performance in China. For example, Song et al. (2006) found that there was a negative relationship between CEO duality and firm performance. Similarly, the finding was supported by Bai et al. (2004). However, Tian and Lau (2001) reported that CEO duality had a positive effect on firm performance. In addition, Wu et al. (2001) and Yu et al. (2002) noted that there was no significant relationship between CEO duality and firm performance based on their empirical tests.

Independent directors are also in the centre of the board structure in Chinese firms, thus the government issued a number of regulations and rules to specify the requirements and qualification of independent directors in Chinese listed companies. Specifically, in 2001, the CSRC issued the regulation ‘Guideline for Establishing an Independent Directors System for Listed Companies’, which not only required that at least one-third of the board of each listed company should be independent, but also indicated that independent directors must spend enough time to perform their duties in the company. Furthermore, the Code of Corporate Governance (CSRC, 2002) emphasised the independence and responsibility of independent directors in corporate governance. For example, the Code indicated that

1. An independent director shall be independent from the listed company and the company’s shareholders;
2. Independent directors shall bear the duties of good faith and due diligence toward the listed company;
3. Independent directors shall protect the interests of minority shareholders; and
4. Independent directors shall carry out their duties independently and shall not subject themselves to the influence of the company-related entities or persons.

From the practical perspective, some scholars also indicated that independent directors have a positive impact on the firm performances. For example, Peng (2004) found that outside directors were related to improved organization performance measured by sales growth based on 405 listed Chinese companies from 1992 to 1996. Choa and Ruib (2009) studied the effect of independent directors in Chinese listed companies from 1999 to 2003 and suggested that the percentage of independent directors on the board had a positive effect on the firm performance. However, other scholars demonstrated that independent directors can not significantly improve the firm performance. For instance, Tian and Lau (2001) found that there was no significant relationship between the proportion of independent directors and firm performance in Chinese listed companies, similarly, Peng et al., (2004) reported that the independent directors had little impact on firm performance measured by return on equity and sales growth.

To summarize the discussion above, Table 2.2 summarizes the composition of boards of directors and showed the characteristics of Chinese board during the period 2007 to 2009 according to the report of corporate governance issued by Chinese Academy of Social Science (CASS) and Protiviti in 2010.

<table>
<thead>
<tr>
<th>Number of Directors</th>
<th>2009</th>
<th>2008</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board of Directors</td>
<td>11.65</td>
<td>11.15</td>
<td>11.45</td>
</tr>
<tr>
<td>Executive Directors</td>
<td>2.91</td>
<td>2.97</td>
<td>2.68</td>
</tr>
<tr>
<td>Non-Executive Directors</td>
<td>4.67</td>
<td>4.31</td>
<td>4.87</td>
</tr>
<tr>
<td>Independent Directors</td>
<td>4.07</td>
<td>3.87</td>
<td>3.9</td>
</tr>
</tbody>
</table>

Source: Corporate governance rating of Chinese top 100 listed companies (Protiviti, CASS.2010)

2.3.3 Concluding Remarks

According to the theoretical bases of corporate governance, this section introduced corporate governance structure and identified the strong impact of governance structure on firm
performance. Specifically, this section mainly discussed the conception and characteristics of
the ownership structure and the board of directors and emphasize that they play important
roles in corporate governance.

However, current researches showed that the relationship between governance structure and
firm performance is mixed and complicated and suggested that scholars should explore the
comprehensive methods to study the effectiveness of corporate governance. Therefore, in
order to clearly explain the link between corporate governance structure and firm
performance, we will pay close attention to the corporate governance process that establishes
the link between corporate governance structure and firm performance. Specifically, scholars
should incorporate the research on interving variable of the governance process to explain
how corporate governance structure influences firm performance. Furthermore, because the
boards of directors are viewed as the most important component of corporate governance and
board process are at the heart of the governance process, some scholars (Finkelstein &
Mooney, 2003; Pye & Pettigrew, 2005) emphasized we need to know more about board
processes—what do directors do in the interaction process and how does the interaction among
the directors influence the relationship between governance structure and firm performance?
Furthermore, we should know what are the optimal board conditions and practices for task
fulfilment, and how should board be constituted to meet the optimal conditions? This is the
topic to which we now turn.

2.4 Link between Corporate Governance Structure and Firm Performance

The debate on the relationship between corporate governance structure and firm performance
indicated that previous studies often made great inferential leaps from input variables such as
board composition to output variables such as firm performance, and overlooked the
importance of corporate governance process which presumably built the link between input
and output, and directly affect the effectiveness of corporate governance structure. Therefore,
in order to comprehensively understand the effect of corporate governance structure on firm
performance, scholars suggested that we should focus on the impact of the corporate
governance process on the relationship between corporate governance structure and the firm

Furthermore, board processes are regarded as the centre of the governance process and play
an important role in influencing the effectiveness and efficiency of corporate governance
structure. Specifically, as some scholars demonstrated, differences in cognitive conflicts,
effort norms and use of knowledge and skills in board process will affect the effectiveness of the monitoring and advisory functions of corporate board (Finkelstein & Hambrick, 1996; Stiles & Taylor, 2001), and at last the relationship between corporate governance structure and firm performance.

Thus, this study will build a theoretical framework about corporate governance structure, board processes and firm performance to describe how the corporate governance affects firm performance. The links in Fig 2.2 shows that the effectiveness of corporate governance relies on not only the optimal governance structure, but also the social-psychological processes including board participation, critical discussion and exchange of information (Jackson, 1992; Milliken & Vollrath, 1991).

To summarize discussions, differences in corporate governance structures may experience divergent interaction processes of boards of directors; furthermore, the effectiveness of divergent interaction may determine the quality of decision making and ultimately affects firm performance. Thus the following section will introduce the model of board process and discuss in detail how corporate governance structure influences the firm performance through the interaction processes within members of board.

1. Board process

In order to study the impact of intervening board processes on the association between governance structure and firm performance (Finkelstein, Hambrick, & Cannella, 2008), the research will focus on what boards of directors do and investigate the actual behaviour of boards. Mace(1971) summarized the behaviour of boards and described corporate boards’ processes in practice as follows:

"Directors selected are usually heads of equally prestigious organizations with primary responsibilities of their own ... Most boards of directors serve as advisors and counselors to the presidents ... Most boards of directors serve as some sort of discipline for the organization – as a corporate conscience ...
A few boards of directors establish company objectives, strategies and broad policies. Most do not ... A few boards evaluate and measure the performance of the president and select and de-select the president. Most do not." (p. 107)

Consistent with these descriptions, Fama and Jensen (1983a) summarized that the essential responsibility of the directors is decision control in the governance process. That is, they
allocate the decision-making process into four steps so that the board acts as the control mechanism to reduce the potential divergence of interests between corporate management and shareholders in the modern corporation by the:

“1. **Initiation**: generation of proposals for resource utilization and structuring of contracts;
2. **Ratification**: choice of the decision initiatives to be implemented;
3. **Implementation**: execution of ratified decision; and
4. **Monitoring**: measurement of the performance of decision agents and implantation of rewards” (p.303)

The initiation and implementation of decisions are combined with decision management and allocated to the responsibility of managers. At the same time, the ratification and monitoring of decisions are also combined with decision control and then become the responsibility of the board of directors (Fama & Jensen, 1983b).

Furthermore, some scholars have explored how the boards act as groups to be responsible for the decision control in order to open the ‘black box’ of board process and dynamics (R. W. Leblanc, 2004). That is, how do boards perform their functions in corporate governance? What are the mechanics by which the boards do their jobs (Adams, Hermelin, & Weisbach, 2010)? Thus, scholars explained that the effectiveness of the process depended on three specific board processes: cognitive conflict, efforts norms and use of knowledge and skill (Finkelstein & Mooney, 2003; Forbes & Milliken, 1999; R. Leblanc & Schwartz, 2007).

**1.1 Cognitive conflict**

Cognitive conflict refers to differences in judgements about a task or disagreement about content of a task among directors. That is, directors who face complex issues and decisions always characterize problems differently and express varying opinions about solutions to problems, which leads to cognitive conflict on the board and then affect the managerial role of directors in the strategic decision control and the quality of strategic decisions through consideration of more alternatives (Eisenhardt, Kahwajy, & Bourgeois, 1997; Forbes & Milliken, 1999). Therefore, differences in corporate governance structure will lead to different levels of cognitive conflict in the boardroom and have important effects on the quality of decision control. For example, some organizational behaviourists have found that large boards will become difficult to be coordinated effectively and will hamper the board’s ability to extract and use its members’ potential contribution, because they found that cognitive conflict
of large boards may diminish interpersonal attraction among directors and also make them reduce their commitment to the board (Nemeth & Staw, 1989; Reality, 2006).

1.2 Effort norms

Effort norms are a group-level construct and refer to a group’s shared beliefs regarding the level of effort which each individual is expected to put toward a task (Wageman, 1995). That is, the effort is the intensity of an individual’s task performance behaviour; the norm may have a strong impact on the member’s behaviour. Therefore, a strong effort norm can enhance the effort of directors to a higher firm performance because the higher effort norms can promote the directors to devote a large amount of time and energy to evaluate the strategic decision alternatives and monitor the top managers (Forbes & Milliken, 1999).

To date, a number of studies have showed that the governance structure can affect the effort norms to improve or reduce firm performance in different ways. For instance, scholars have suggested that a firm should increase the proportion of independent directors in the boardroom because independent directors can show that the firm is doing a good job to enhance effort norms among inside directors. Similarly, they also found that CEO duality can lead to higher effort norms than the separation of CEO and chairman (Goodstein & Boeker, 1991; Pye & Pettigrew, 2005).

1.3 Use of knowledge and skills

Use of knowledge and skills refers to the board’s ability to apply the knowledge and skills to its tasks (Amason, 1996; Amason & Sapienza, 1997). That is, directors with different backgrounds can bring different knowledge and skills to influence the effect of corporate governance on firm performance. Therefore, differences in corporate governance structure will show the different results on the use of knowledge and skills and, in turn, affect the effectiveness of decision control in the firms. For example, some scholars (e.g., Cohen & Frazzini, 2008) suggest that a firm should increase the number of independent directors on the boards because the independent directors can bring the important information about business practices and policies to improve capability of problem-solving and facilitate the group discussion. In addition, other scholars also emphasized that board size can influence performance of the board because members of the board can provide a large amount of expertise and knowledge in terms of their different backgrounds which contribute to the quality of the strategic discussion on the board (Harris & Raviv, 2008).
2. Concluding remarks

Understanding the linkage between corporate governance structure and firm performance is among the most important areas of corporate governance research. As discussed above, corporate governance is treated as a structure and process that exists in oversight roles and responsibilities in the corporate context (D. C. Hambrick et al., 2008). Therefore, the study describes the relationship between the corporate governance structure and the board process, and between the board process and firm performance, and furthermore shows evidence of a nascent governance structure-board process–firm performance framework to explain in details how the corporate governance structure affects the firm performance, as figure 2.2 illustrates.

Although this framework emphasised the importance of understanding the roles of boards in our understanding of firm behaviour with respect to setting policy to regulate the corporate activities (Adams et al., 2010), Dalton and Daily(1999) indicated that results on the association between governance structure and performance are still vexing, contradictory, mixed and inconsistent. Hence, corporate governance structure can be regarded as the necessary, but not sufficient, conditions for the firm performance improvement. That is, studies on the role of board processes can help academics clarify the complexity of governance structure including the ownership structure and board design; in the meantime, these studies also can encourage us to consider other critical factors which can intervene in the interaction processes of the board of directors and influence the effectiveness of corporate governance structure.

Therefore, various intervening board processes will influence the impact of governance structure on firm performance through cognitive conflict, efforts norms and use of knowledge and skills. At the same time, a number of upper echelon scholars (Andres & Valletlado, 2008; M. A. Eisenberg, 1976; Linck et al., 2008) also suggested that we should draw attention to the impact of demographic characteristics of the directors on the decision making in the boardroom. Hence, this research integrates the demographic characteristics of directors (such as age, functional track and tenure) into the corporate governance framework to explore new ways of improving corporate governance (D. C. Hambrick & Mason, 1984). Next, I turn to the upper echelon theory.
Source: an integrated model of corporate governance (Fama & Jensen, 1983a, 1983b; Finkelstein & Hambrick, 1996)

Figure 2.2 The relationship between governance structure, board process and firm performance
2.5 Upper Echelon Theory

Upper echelon theory, originally developed by Hambrick and Mason in 1984, has occupied an important place in organization research and offers another explanation of how a firm’s strategy emerges from interactions in a complex environment. Three important tenets provide the foundation for upper echelon theory (M. A. Carpenter, M. A. Geletkanycz, & W. M. Sanders, 2004b):

1. Strategic choices in the firm are reflections of the values and cognitive biases of top executives;
2. Values and cognitive biases are a function of the top managers’ characteristics including age, functional track and tenure; and, as a result;
3. Significant outcomes will be related to these characteristics of top managers.

Specifically, firstly, the theory lie in the bounded rationality which argues that managerial strategic choices are affected by the natural limitation of managers as human beings (Cyert & March, 1963). Secondly, the theory emphasises that demographic heterogeneity of top management team (TMT) will have a significant impact on organizational performance, because they inject a great deal of their experience, personalities and value into their behaviour and often study the world through the lenses of their personal histories, background, knowledge, values and other personal biases (Hambrick and Mason 1984).

These may be described by Finkelstein and Hambrick (2008) as follows:

“In the face of the complex, multitudinous, and ambiguous information that typifies the top management task, no two strategists will identify the same array of options for the firm; they will rarely prefer the same options; they almost certainly will not implement them identically. Biases, egos, aptitudes, experiences, and other human factors in the executive ranks greatly affect what happens to companies. This is not to say that managers are weak or sinister, only that they are human and limited.” (p. 5)

In summary, this theory illustrated that the impact of top managers’ demography on the cognitive process will affect strategic choice and firm performance and reveals the linkage of the situation, demographic characteristics, strategic choice and outcome in the firm. Furthermore, because the directors are defined as supra-top management team with involvement in the decision making, the directors’ demographic characteristics should reflect
their cognitive biases and value, and can significantly affect the information processing and strategic choice and then the firm performance (Carpenter et al., 2004a).

Therefore, upper echelon theory offers us a new way to enrich the corporate governance framework and proposed that insights about corporate governance should have a broad scope that encompasses quite complex matters such as the demographic characteristics of directors in corporate governance. That is, this theory showed that it is difficult for scholars and policymakers to understand the effectiveness of implementation of relevant governance mechanisms in the organization unless they concern the personal demographic characteristics of directors, because, when directors often faces a large number of internal and external forces in the complex environment, directors’ demographic characteristics will affect directors’ performance and behaviour in the board process and then the relationship between corporate governance and firm performance. (Huse, 2007; Marnet, 2008)

In the following section, I review the literature on upper echelon theory and explain how the directors’ demographic characteristics affect the firm performance.

2.5.1 Theoretical Base of Upper Echelon Theory

Upper Echelon perspective is based on the bounded rationality which is different from the theoretical base of the agency theory. Specifically, the agency model of corporate governance of organizations depends largely upon the conventional assumption that economic man is rational and can make optimal decisions. However, the mixed results showed that research about corporate governance should relax the assumptions of agency theory and acknowledge the bounded rationality of human beings because the strategic choices will be affected the level of cognitive bias and value of the top management team in the complex environment. Therefore, I should discuss the difference between the bounded rationality and economic man and pay attention to their impact on cognitive bias and value of the directors.

According to the classical economic theory of organization, man is assumed to be economic or rational and always makes “optimal” choices in a highly specified and defined environment. Specifically, the theory assumes that (March & Simon, 1958):

“1. All the alternatives of choice are given;
2. All the consequences attached to each alternative are known;
3. The rational man has a complete utility-ordering for all possible sets of consequence.” (p. 128)
Therefore, rational man operating in organizations are expected to generate options prospectively and select the best or optimal alternative for reaching a particular goal (March et al., 1958).

However, there are some problems in the model of rational man. For example, rational man will choose different alternatives when he lacks enough information to estimate the probability of outcomes. That is, as some scholars have indicated (March et al., 1958) that rational man always uses a simplified model to capture the main features of a problem and, as a result, cannot capture all the complexities due to the limits of human intellectual capacities. Therefore, Simon (1963) introduced the concept of bounded rationality, which proposed that optimal choice is limited or restricted by the limited mental abilities of organizational actors and their institutional practices.

Specifically, decision makers in an organization often generate potential alternatives or solution for the problems. However, due to their limited mental capacities, they cannot analyze all alternatives and solutions in the complexity of the environment. As a result, they can only adopt a ‘satisficing’ rather than an optimizing strategy; that is, they can only discover satisfactory solutions in relation to aspiration levels (Dequech, 2001). As Simon (2000) explained:

“Bounded rationally is simply the idea that choices people make are determined not only by some consistent overall goal and the properties of the external world, but also by the knowledge that decision maker do and don’t have of the world, their ability or inability to evoke that knowledge when it is relevant, action, to cope with uncertainty and to adjudicate among their many competing wants. …consequently, rational behaviour in the real world is as much determined by the inner environment of people’s minds, both their memory contents and their processes as by the outer environment of the world on which they act, and which acts on them.” (p. 25)

Hence, the bounded rationality theorists provided a new explanation of the behaviour of man, and indicated that the choices which are generated by decision makers in organizations cannot be regarded as optimal solutions because the choices can only reflect a certain situation or condition that is determined by the factors in the history and social environment, and will be influenced by decision makers’ cognitive biases, value and interest.

Based on bounded rationality, some scholars build the upper echelon theory and argued that managerial choices are often affected by the natural limitations of managers as humans not
complying with the rational motive that is used by classical organization theory, and further establish a theoretical framework in which executive cognition, values and perceptions influence the process of strategic choice and ultimately performance outcomes, because the reason is that they believe that managerial values and perceptions are limited by bounded rationality, which is the type of rationality that people resort to when the environment in which they operate is too complex compared with their limited mental abilities (Carpenter et al., 2004b).

2.5.2 Theoretical Model of Upper Echelon Theory

Upper echelon theory indicates that the composition of the top management team is the determinant of firm outcomes and proposes that the demographic characteristics of the top management team will predict the performance of companies. That is, top managers’ decision processes will be affected by their own cognitive biases, attitudes and values, because their cognitive biases, values and attitudes not only limit top executives’ field of vision and selective perception, but also filter information through the lens of cognition in the process (D. C. Hambrick & Mason, 1984). Furthermore, because cognitive biases, values and attitudes are difficult to reliably measure, scholars used demographic variables (including age, tenure, education and functional track) as proxies for the quality of cognitive biases, values and attitudes and can discuss the impact of top management team (TMT) demographic characteristics on firm performance (Richard & Shelor, 2002a).

Specifically, upper echelon theory (D. C. Hambrick & Mason, 1984; Knight et al., 1999) has two interconnected parts: the first is that executives act on the basis of their personalized interpretations of the strategic situation they face; and second, personalized constructs are a function of the executives’ experiences, values and personalities. Furthermore, Hambrick et al., (2005) explain that the mechanism which converts executives’ biases into behaviours is an information filtering process. That is, executives’ characteristics serve to filter and distort information in a three-step process: executives’ experiences, values and personalities affect their:

‘(1) Field of vision (the directions they look and listen);

(2) Selective perception (what they actually see and hear); and

(3) Interpretation (how they attach meaning to what they see and hear.)’ (p.111)

In summary, because the situation consists of a series of more complex phenomena than the executive can understand, the executives engage in the three-step information filtering process
to achieve a highly personalized constructed reality on the basis of their orientation including a set of the psychological characteristics (including: values and personality) and observable experiences (including: age, functional background and so forth).

1. Limited field of vision

As the first step of the filtering process, executives confront far more stimuli than those they can comprehend. However, they vary widely in how much they can scan in the environment and have different abilities to analyse external events and trends due to their limited focus of attention (Finkelstein, Cannella, et al., 2008; Finkelstein, Hambrick, et al., 2008; Simon, 2000). That is, as Ocasio (1997) emphasised, decision makers are selective and constrain their attention to a limited set of stimuli, because physical, economic and institutional factors impinge upon the environment of the decision. For instance, Chattopadhyay et al. (1999) found that a top executive’s network of contracts is an important factor in influencing their field of vision because top executives receive and distribute information through their network. Therefore, a CEO who has a network in industry associations is different from a CEO who does not have a lot of intra-industry ties (Geletkanycz & Hambrick, 1997).

2. Selective perception

As a second step of the filtering process, selective perception is the process by which executives perceive a portion of the stimuli based on their field of vision. Thus the effective filtering process should integrate the relevant information into the perception foreground and delete the irrelevant information to the background (Starbuck & Milliken, 1988).

Specifically, Starbuck et al. (1988) describe selective perception as the noticing process that can classify stimuli as signals and noise, and found that the noticing result is a combination of characteristics of stimuli and the characteristics of perceivers. However, the characteristics of perceivers also influence both the availabilities of stimuli and the abilities of stimuli to attract attention (Wohlwill & Kohn, 1976). That is, some information within the executives’ field of vision is meaningful and engaging; other information will escape the executives’ attention entirely. Therefore, decision makers will only see a portion of what they watch and hear a portion of what they listen to (Schroder, Driver, & Streufert, 1967; Starbuck & Milliken, 1988).
3. Interpretation

As a third step of the filtering process, interpretation is the process by which the executives interpret meaning to stimuli and has distinct aspects including comprehending, understanding, explaining and attributing, extrapolating and predicting. Specifically, in this step, top managers are studied to see how they categorize stimuli and how they apply stimuli to draw conclusions (Starbuck & Milliken, 1988). For example, Dutton and Jackson (1987) emphasised that interpreting stimuli as issues as either a threat or an opportunity can influence both subsequent information processing and the motivation of key decision makers. Similarly, other scholars demonstrated how executives categorized the stimuli, and found that CEOs can categorize ill-structured problems faster than MBA students and also had greater variance in the number of categories used in terms of their well-developed heuristics in the early stage of decision-making (Day & Lord, 1992).

To sum up, in the first and second steps of the filtering process, because executives cannot understand every aspect of the environmental and organizational stimuli, they selectively perceive and filter environmental stimuli on the basis of their orientation which affects their field of vision. In the third step of the process, the executives interpret meaning to the stimuli that have been noticed. Consequently, the executives arrive at a different understanding of a given situation in terms of their own personal orientation.

Figure 2.3 describes the relationship between TMT demographic diversity and firm performance and proposes a theoretical framework that describes the interactive effect of the variables of demographic diversity and organization or environmental context on the major dimensions of the company performance. The left side represents the strategic situation, potential environmental and organizational stimuli. The right side characterizes strategic choice, such as major choices made formally, competitive action associated with strategy and important administrative choice (Child, 1972). The middle of the model is the information filtering process through which executives construct the selective perception of the strategic situation and determine what should be done. In the process, executives’ demographic characteristics are regarded as the one of the determinants of the strategic choice and of organizational performance through the strategic choices. That is, March and Simon (1963) indicated that decision makers bring their own set of “givens” to an administrative situation. These givens reflect not only the decision makers’ cognitive biases but also their own values and serves to filter and distort the decision makers’ perception of situations both inside and outside the organization (D. C. Hambrick & Mason, 1984).
In China, scholars have also drawn attention to studies about the top management team from different perspectives; specifically they discuss not only the theoretical base of upper echelon theory, but also amended its conceptual framework to enhance the theory. For instance, Cui and Hu (2007) indicated that upper echelon theory establishes the relationship among TMT’s demographic characteristics, strategic outcome and firm performance based on the following assumptions,

1. The psychological structure of TMT influences the process of decision making;
2. The psychological structure is characterised by bounded rationality;
3. The demographic characteristics of TMT can reflect on the psychological structure of TMT; and
4. The demographic characteristics of TMT can influence the firm performance.

In addition, Jiao(2003) indicated that the firm should focuses on not only the top manager’s demographic characteristics, but also the reform of institutions which has a significant impact on performance of top managers in order to improve the effectiveness of the top management team. Furthermore, Sun and Wu (2003) summarized the literature about upper echelon theory during the period 1984 to 2001 and established an amended theoretical framework which can be regarded as a useful supplement to upper echelon research. Specifically, their framework summarized some of the relevant studies and emphasised that the TMT process can act to mediate the relationship between team diversity and firm performance. For example, Simons et al. (1999) found that debate in the process can mediate the interactive effects of diversity and decision comprehensiveness. Knight et al. (1999) noticed that demographic diversity affected the firm outcomes through two processes: interpersonal conflict and agreement seeking. Similarly, other scholars (O’Reilly iii, Snyder, & Boothe, 1993) demonstrated that TMT homogeneity is related to better team dynamics and more efficient firm adaptation to change in the TMT process. Furthermore, their study intergrates the culture and organizational environment into the theoretical model to enrich our understanding of upper echelone theory.

To summarize the discussion above, the upper echelon theoretical framework has established a clear relationship between top management team diversity, strategic choice and firm outcome, and calls for more attention to the impact of demographic charateritics heterogeneity of top management team on the firm performance.
4. Interaction process within the top management team

According to upper echelon theory, the top management team members depend on their cognitive biases and value to interpret the situation and then decide on the appropriate response to the important stimuli, at the same time, they will also discard information that is less important when the top management team faced complexity in their tasks (Weick, 1979). However, because it is difficult to gain access to the psychological dimensions of the top management team and their actual behaviour and to accurately assess the values and cognition of the team, some scholars suggested that the demographic characteristics of the top management team can be regarded as causal variables to be used as proxies for the cognitive biases and value, which can help us to overcome the difficult problem of gaining access to executives to measure the psychological and group dynamic variables. For example, Pfeffer (1983) indicated that demography can be considered as an important causal variable that affect a number of intervening variables and processes and then a number of organizational outcomes. Hambrick and Mason (1984) also indicated that a manager’s personal experience and values can be inferred from observable demographic characteristics. Therefore, policymakers and scholars have further studied the interaction process among the members of the top management team based on demographic characteristics.

Specifically, some scholars described in detail the interaction of members of TMT with heterogeneous demographic characteristics, and indicated that heterogeneous demographic characteristics of top managers have a positive effect on their perception, interpretation and strategic choice. For instance, Wanous and Youtz (1986) discussed the effect of heterogeneous characteristics on creativity and indicated that different members in a group have different recommended solutions because of their different views on the strategic situation, consequently, the diverse solutions enhance the quality of the decision making, similarly Carpenter (2002) found that the diversity of information sources and perspectives have a positive impact on cognition and perception and also suggested whether each perspective holds true about the situation based on the level of complexity that top management team faced. In addition, Glick, Miller and Huber (1993) proposed that the diversity of the top management team influenced the open system effectiveness through the comprehensiveness of decision making, communication and cohesion, ultimately improving the firm’s outcomes. Similarly, Geletkanycs and Hambrick (1997) indicated that the informational and social effect of externalities of top managers was reflected in the degree to which the firm’s strategy conforms to strategic objectives.
However, other scholars argue that the interaction of TMT with demographic heterogeneity negatively impacts team functioning and social integration in top management team. For example, Amason (1996) indicated that heterogeneous demographic characteristics increased conflicts to weakened the ability of the group to work together because conflict may be an impediment to consensus and affective acceptance. Ancona and Caldwell (1992) explained that diversity in the top management team reduced group identification and cohesiveness because it negatively influenced the internal task process and external commutation. Additionally, Bunderson and Sutcliffe (2002) found that demographic heterogeneity reduced communication frequency and was negatively associated with information sharing for the top management team.

To summarize the discussion above, interaction effects of demographic heterogeneity in top management team are mixed, the potential reasons are that there are another two important issues to influence the effect of TMT heterogeneity on the firm functioning. The first is life stage of the top management team. As Chatman and Flynn (2001) indicated, there is a negative impact of diversity on decision making at the initial stage of a team’s life, but the negative effects will be reduced over time. The second is that we should draw attention to the effects of group-level diversity on the firm outcome because the research on diversity is defined as involvement in interaction and decision within a team (Pelled, Eisenhardt, & Xin, 1999).

In sum, this section discussed the interaction process within top management team. In the next section, this study will document a number of empirical studies of the effects of the TMT’s demographic heterogeneity on firm outcome, and has presented a complex picture about the relationship between TMT heterogeneity and firm performance.
Executive orientation → filtering process → organizational outcome

Source: upper echelon: the organizations as reflections of its top managers (D. C. Hambrick & Mason, 1984)

Figure 2.3 Theoretical Model of the Top Management Team decision process
2.5.3 The Effect of the Top Managers’ Demographic Characteristics on Firm performance

Since the upper echelon theory emerged in 1984, there is a large number of empirical literatures to study whether the top management team’s demographic characteristics can be a strongly linked to organization performance. More specifically, following upper echelon theory, some scholars indicated that heterogeneous demography in the top management team can create differential information collection and solution generation, and then contribute to the organization performance (D. C. Hambrick & Mason, 1984). That is, TMT along with the demographic characteristics heterogeneity strongly affects the cognitive processing capability of the TMT and consequently the strategic outcome of the firm.

Therefore, using a composite measure of TMT heterogeneity, some academics have reported that there is a significant link between TMT heterogeneity and the firm performance. For example, Bantel and Jackson (1989) examined the impact of the demographic characteristics of the TMT on the innovative banks and found that heterogeneity of education and functional background had a positive effect on the innovation in banking. Wiersema and Bantel (1992) reported that top managers’ cognitive perspectives which is measured by the top management team’s demographic characteristics including age, organizational tenure and educational level were linked to their propensity to change corporate strategy. In addition, Tihanyi, Ellstrand, Daily and Dalton (2000) found that the average tenure, education, international experience and tenure heterogeneity in top management team were positively related to the global strategic posture. Bergh (2001) also examined the relationship of the impact of the tenure of the executives on successful acquisitions and indicated that long-tenured executives were positively associated with acquisition performance.

However, other empirical results indicated that there are some disadvantages in the demographic characteristics heterogeneity of the TMT. Firstly, demographic characteristics heterogeneity may affect the TMT cohesiveness and caused interpersonal conflicts among the member of the TMT because heterogeneous TMTs may vary in attitudes and values on their environment (Bantel & Jackson, 1989). Secondly, some scholars indicate that demographic characteristics heterogeneity may also negatively influence the social integration and communication that are the main drivers of firm performance because, top managers who have not similar backgrounds can not share common life experiences and values and may not find the experience of interaction with each other easier, which negatively affects speedy and efficient coordination in the decision making (D. C. Hambrick, Cho, & Chen, 1996).
At the same time, a number of empirical studies also show a negative or insignificant relationship between heterogeneous TMTs and firm performance. For example, Smith et al. (1994a) found that the impact of TMT function experience heterogeneity on the return on investment was negative. Michel and Hambrick (1992) indicated that the relationship between various measures of TMT heterogeneity and firm performance were not significant and found that average tenure and homogeneity in core function experience could increase firm performance. Hambrick et al. (1996) noted that heterogeneous teams with difference functional backgrounds, education and tenure were slower in their actions and responses and less likely than homogeneous teams to respond to competitors’ initiatives.

In the case of China, scholars have also enriched the research perspective on the effect of TMT demographic characteristics on firm performance over the last decade. For instance, some scholars found the positive effect of top management team’ heterogeneity on firm performance. Li et al., (2009) found a positive effect of cognitive conflict in the top management team on entrepreneurial strategy making in China’s technology industries and suggested that a TMT with a higher level of cognitive conflict will be more entrepreneurial in its strategic decision making. Similarly, Xiao (2008) studied the association between the background characteristics of the TMT and fund performance in China’s mutual funds. The results showed that the financial experience and educational background of the TMT had a positive effect on the fund performance.

However, other Chinese scholars have demonstrated that TMT’ demographic heterogeneity has a negative impact on the firm performance. For example, Zhang (2006) studied the impact of heterogeneous TMT on firm performance based on 356 Chinese listed firms during the period 2001-2002, and found that tenure heterogeneity and functional heterogeneity of the TMT were negatively related to firm performance. Similarly Wei and Wang (2002) found that the heterogeneity of TMT’ characteristics (including: age, educational background, and work experience) had not significantly impacts on firm performance in China’s listed companies.

2.5.4 **The Effect of the Board Directors’ Demographic Characteristics on Firm Performance**

Upper echelon theory is utilized not only to explain the impact of the top management team characteristics on the firm outcomes, but also to propose the importance of the demographic characteristics of directors on the firm performance, because, as Finkelstein and Hambrick (1996) indicated, the directors can also be defined as supra-top management team with involvement in the strategic decision making. That is,
“Boards can directly affect strategy through involvement of their members on the committees, recommendations to top management, and oversight of executive decisions. Boards can indirectly affect strategy by reducing interorganizational dependencies and by conveying information about other firm’s strategies.” (p. 240)

Furthermore, they (Finkelstein & Hambrick, 1996) described the main responsibilities and functions of the board of directors, and emphasized that board plays an important role in the company. First, boards of directors play a monitoring role for the firm, e.g., they can monitor the managers’ compensation and performance to supervise the proper use of the firm’s wealth. Secondly, directors are the most important actors in determining strategic direction and improving decision making in the firm. For example, some scholars (Hillman & Dalziel, 2003) point out that directors can act as boundary spanners in the environment to secure resources for the organization and provide strategic advice to aid the performance in firm. Similarly, they also found that directors can reduce the negative impact of environmental uncertainty on firm performance through connecting the firm to the outside community and bringing in information, skills and legitimacy to the firm.

Therefore, scholars have extended upper echelon theory to research on the demographic characteristics of the boards of directors. That is, they indicated that directors’ demographic characteristics will significantly influence the strategic decision making and are highly related to firm outcome. For instance, Pfeffer (1972) found that board members with different constituencies can provide critical resource to improve the effectiveness of decision making in the firm. Kosnik (1990) indicated that heterogeneity of directors’ background can promote the airing of different perspectives for the evaluation of managers proposals and then produce different solutions to the problems and multiple decision criteria for strategic decisions. Golden and Zajac (2001) argued that certain demographic characteristics of the directors can have a strong effect on strategic change in the firm and found that the average age of the board members was associated with strategic change and there was a curvilinear relationship between occupational heterogeneity and strategic change.

However, Kosnik (1990) also posited that demographic heterogeneity in the board of directors will impede the group thinking process of the board and its efforts to make strategic decisions because the greater heterogeneity of the directors led to greater potential conflicts of interest based on directors’ different definitions of firm objectives and policies (Powell, 1991). Golden and Zajac (2001) indicated that, beyond a certain point, the benefit from the
occupational heterogeneity would be outweighed because of conflict and disagreement in the boardroom.

In Chinese cases, Cheng, Chan and Leung (2010) examined the effect of chairperson’s demography on the firm performance. They found that the chairperson possessing higher education could generate more superior firm performance; however, the gender and tenure of chairperson had no significant effect on the firm performance. Xiao (2008) focused on the management demography of board members in Chinese mutual fund sector and noticed that the financial background of the independent directors and the education heterogeneity of board members were positively related to fund performance.

2.6 Concluding Remarks

As discussed above, firstly the chapter has reviewed corporate governance from various theoretical perspectives including agency theory, stakeholder theory, stewardship theory and resource-dependence theory, and described the central mechanisms of corporate governance: ownership structure and board of directors. Second, I has also explained that the linkage between governance structure and firm performance through the board process. Finally, this chapter introduced upper echelon theory and explains the impact of cognition, values and perceptions of top management team and board members on the process of strategic choice. Furthermore, because cognition, values and perceptions are difficult to evaluate in the firm, upper echelon theorists suggest that demographic characteristics can be used as proxies for cognition, values and perception and discuss the effect of demographic heterogeneity in top management team on the firm performance.

Hence, the chapter found a major gap between corporate governance and upper echelon theory. That is, previous literature largely discussed the impact of corporate governance or the top management team’s demographic characteristics on the firm performance separately. I have found little or no research that integrates two areas in one conceptual framework, that is, few scholars drew attention to the interactive effect between directors’ demographic characteristics and corporate governance on the firm performance. Thus, this study integrates upper echelon theory into the relationship between corporate governance and firm performance and explains how the interaction of the directors’ demographic characteristics and corporate governance influence the firm performance.

More specifically, following the logic of the ‘input-process-output’ sequence, governance structure influences firm performance through the interaction effect in the board process.
because, when individuals are grouped and arranged in a particular way and in a specific framework, they behave differently from a group structured in a different way (Becker & Baloff, 1969), that is, differences in board size, board independence and CEO duality will trigger differences in the cognition, efforts norms and the use of skills and knowledge within board processes and will have different effects on firm performance (B. Baysinger & Hoskisson, 1990a; Carpenter & Westphal, 2001). Therefore, this chapter establishes an integrated paradigm for contributing to the knowledge of corporate governance.

However, a continuing series of corporate governance failures indicated that the key to constructing an effective corporate governance model is still to understand comprehensively how corporate governance can effectively improve the firm performance through strengthening the function of the board of directors, therefore, Jensen (2000) pointed out that scholars and practitioners should identify the factors that lead to the failures or successes of corporate governance from broad perspectives. That is, research on corporate governance should not only recognize accurate positive theories of cause-and-effect relationships, but also understand normative propositions and decisions based on them in corporate governance (Van Frederikslust, Ang, & Sudarsanam, 2007).

In the meantime, upper echelon theorists focus on the effect of demographic characteristics on firm performance and provided another meaningful ways to investigate the important intervening variables of the association between corporate governance and firm performance. That is, when corporate governance structure influences firm performance through interaction process of the board (such as cognitive conflicts, effort norms and use of skill and knowledge), directors’ demographic characteristics which are regarded as proxies for their cognitions and values also will influence the effectiveness of the board process and then moderate the relationship between corporate governance and firm performance. For instance, the heterogeneity of age, functional track and tenure will not only affect the effectiveness of the use of skill and knowledge, but also lead to the significant cognitive conflict among the members of board, because the demographic heterogeneity will not only increase the difficulties in understanding alternatives for strategic decision, but also hamper the effectiveness of debate and communication within board of directors (Pelled, 1996). Similarly, some scholars also find that board members with different demographic characteristics cannot share a language that reflects similarities in interpreting, understanding and responding to information, and consequently have a negative impact on effort norms in the boardroom (Goodstein, Gautam, & Boeker, 1994).
Therefore, this study will improve our understanding how the corporate governance structure can affect firm performance, and elaborate on the original framework of corporate governance through adding the demography of directors to the framework of corporate governance. That is, as in Figure 2.4, this study will combine demographic characteristics with the linkage between corporate governance and firm performance and reflect the directors’ demography as significant moderating variables to influence the effectiveness of corporate governance.

To summarize the above discussion, the focus of the study is not only the relationship between corporate governance and firm performance, but also the moderating effect of demographic characteristics on the relationship. Hence, the research will go beyond conventional corporate governance models by examining the characteristics of directors as an important moderator of the association between corporate governance structure and firm performance and aim to get a profound insight into the effectiveness of corporate governance. Therefore, this is an opportunity to not only contribute to the research on the theoretical bases of corporate governance, but also develop a comprehensive model to perfect the practices of corporate governance.

In the following chapter, my first objective is to evaluate the impact of corporate governance on the firm performance. My second is to investigate whether directors’ demographic characteristics can moderate the strength of the relationship between corporate governance and firm performance. That is, it is hoped that the interaction of directors’ demographic characteristics and corporate governance can provide a holistic picture of the development of corporate governance. Next, this study will suggest a series of hypotheses in terms of this integrated theoretical framework and then provide the empirical evidence to validate the theoretical framework that explain the interactive effect of directors’ demographic characteristics and corporate governance on firm performance.
Corporate Governance Structure

- Ownership structure

Board Structure
- CEO duality
- Independent director ratio
- Board size

Board Process
- Cognitive conflict
- Effort norms
- Use of knowledge and skills

Firm Performance
- ROE, Profit Margin

Director’s Demographic Characteristics

Source: graphical display based on Hambrick & Mason (1984), Baysinger & Hoskisson (1990b) and Fama & Jensen (1983b)

Figure 2.4 The Integrated Conceptual Framework
Chapter 3

Hypotheses

3.1 The Relationship between Corporate Governance and Firm Performance

During past decades, scholars designed corporate governance mechanisms to discipline managers through monitoring and advising by the board of directors, because managers are self-interested, risk averse and pursue their own goals that may diverge from those of the shareholders. Therefore, as discussed above, good corporate governance should effectively improve the firm performance (Hammer & Champy, 1993; Hart, 1995a; Williamson, 1996).

Specifically, scholars have provided explanations for the positive effect of corporate governance on firm performance. For example, some scholars have found that corporate governance can increase the managerial efficiency of capital and then improve the performance of firms. Shleifer and Vishny (1997b) indicated that a firm with effective corporate governance can invest in profitable projects and then increase the efficiency of operation and higher cash flow. In addition, scholars also discuss the relationship between corporate governance and financial performance from the reputation building perspective; for instance, Durnev and Kim (2005) noted that firms with higher governance and transparency ranking will have a higher valuation in the stock market.

However, other scholars have different views on the relationship between corporate governance and firm performance. For example, Cremers and Ferrell (2009) examined the effects of corporate governance on the firm’s operational performance and found a negative association between corporate governance and firm performance. Similarly, Larcker, Richardson and Tuna (2007) also found that the relationship between governance and accounting outcome was inconsistent. In sum, the empirical results corporate governance presented mixed impacts of corporate governance on firm performance.

In China, the research on the relationship between corporate governance and financial performance has also attracted greater attention of scholars and policy makers during the past three decades. For example, from academic perspectives, Qian (1996) introduced in detail the Chinese enterprise reform and discussed the agency problem and political control in corporate governance and emphasised the important effect of corporate governance on the performance improvement in Chinese firms. Similarly, Schipani and Junhai (2001) identified patterns in the evolution of the system of corporate governance and offered some suggestions to improve the effectiveness of corporate governance. In addition, from practice perspectives, Chen
(2005) not only described the main characteristics of Chinese corporate governance, but also focused on the impact of ownership structure on the IPO under pricing, financial performance and debt finance in China. Xu and Wang (1999) indicated that there was a positive relationship between ownership concentration and firm profitability and emphasized the importance of large institutional shareholders in Chinese listed firms.

In summary, a large number of studies have investigated the impact of corporate governance on the financial performance or market valuation in both the developed market and emerging economy. However, findings showed that effect of corporate governance on the firm outcome are complicated and mixed based on a single mechanism of corporate governance. Therefore, this study will combine some important mechanisms into a corporate governance index and examine the effect of corporate governance on financial performance from a comprehensive perspective.

3.1.1 Corporate Governance Index

During past decades, many studies have evaluated the quality of corporate governance based on particular single aspects of corporate governance, such as board size, independent directors and concentrated ownership. However, corporate governance failures emphasized that academics and policymakers should assesses the quality of corporate governance from a comprehensive perspective and focus upon multiple corporate governance mechanisms from a systemic perspective, because each single governance mechanisms has its own limitations which can’t meet the needs of the changing environment. Therefore, Black, Jang and Kim (2006) examined the effect of corporate governance on financial performance in the Korean firms from a wide-ranging perspectives which includes shareholder rights, board structure, board procedures and ownership structure. Similarly, Bhagat and Bolton (2008) found that good corporate governance is strongly related to the financial performance by testing the inter-relationships among corporate ownership structure, CEO–chair separation, board independence and stock ownership.

However, today, the dominant measure to evaluating the quality of corporate governance is to construct a composite index because it can comprise multiple dimensions of a firm’s corporate governance structure. Therefore, a large number of scholars and policymakers have adopted the corporate governance index to investigate the relationship between corporate governance and firm performance. For example, Black (2001) found that there is a strong association between a corporate governance index and the firm value in Russian listed companies. Black et al. (2006) also found that companies with better corporate governance
had better Tobin’s Q, and indicated that the CLSA corporate governance index increasing by 10% led to a firm’s market value increasing by 13.3%, meanwhile, other scholars (Khanna, Kogan, & Palepu, 2006; Klapper & Love, 2004) supported similar findings of the positive impacts of corporate governance on firm performance based on the CLSA corporate governance index. In addition, Gompers, Ishii and Metrick (2003) also established a corporate governance index using 24 anti-takeover provisions and indicated that the firm with good shareholder rights outperformed the firm with bad shareholder rights. Using the corporate governance index as a measure, Core, Guay and Rusticus (2006) constructed a corporate governance index based on the code of German corporate governance and showed a positive relationship between corporate governance and financial performance in German public companies.

In China, Li (2008) emphasised that the evaluation extent and standards of the quality of corporate governance should be changed with different corporate governance environments. Therefore, corporate governance evaluation in China will integrate the western successful experience in corporate governance into the institutional environment and market conditions of Chinese listed company.

Specifically, with economic reform and corporate governance development, Chinese scholars have constructed a corporate governance index from different perspectives that is suitable for the China’ governance environment in order to evaluate the effect of corporate governance on the firm performance in Chinese listed companies. For instance, Li et al. (2005) established a comprehensive governance evaluation system and constructed a governance index to investigate the impact of corporate governance on firm performance, consequently they found that there is a strong relationship between corporate governance and firm performance in Chinese listed companies. Similarly, Bai (2002) also constructed a corporate governance index to reflect the overall level of corporate governance practices in Chinese listed firms and emphasized that better-governed firms are associated with higher market valuation. In addition, Pan (2004) developed a corporate governance index to assess the quality of corporate governance and indicated that there is a statistically significant relationship between the quality of corporate governance and financial performance in China.

However, in previous studies, scholars built the corporate governance index from a certain perspectives because they can not incorporate all the governance characteristics into one index, therefore, this study will take a different approach from previous research and establish a corporate governance index from the perspectives of ownership structure and board structure.
to investigate whether corporate governance has an impact on firm performance in Chinese listed firms, because the owner structure and board structure are the most mechanisms to improve the effectiveness of corporate governance. Furthermore, based on the above discussion, this study hypothesize that there is a positive relationship between corporate governance and firm performance in Chinese listed firms, so the first hypothesis is:

\[ H_1: \text{There will be positive relationship between firm performance and corporate governance in Chinese listed companies.} \]

3.2 The Moderating Effect of Directors’ Demographic Characteristics on the Relationship between Corporate Governance and Firm Performance

As discussed above, research has considered the implication of the impact of corporate governance on the firm performance from the perspectives of board structure and ownership structure. However, this study will continue to examine the moderating impact of directors’ demographic characteristics on the relationship between corporate governance and firm performance and expect to open a new window to understand what is really going inside the boardroom, and to investigate the nature of the interactions of board members because directors’ demographic characteristics influence corporate governance effectiveness in not only fulfilling the key roles of advice for the strategic decision but also monitoring of the managers within the framework of governance structure (Forbes & Milliken, 1999). That is, this study suggested a theoretical model of interaction effect between directors’ demographic characteristics and corporate governance to bridge some of the gaps that currently influence the theorizing about corporate governance.

Specifically, in China, previous research mainly followed the single path of agency theory and focused only on the role of corporate governance structure (such as the board size, independent directors and CEO duality) in affecting the effectiveness of corporate governance as a result, Chinese scholars did not draw attention to the other critical intervening factors that can also influence the relationship between corporate governance structure and firm performance. Thus, the study will broaden the focus beyond the role of director monitoring and consider theoretical perspectives other than agency theory.

Meanwhile, Upper echelon theory has also attracted the attention of some Chinese scholars because it may provide a theoretical foundation for the effect of directors’ demographic characteristics on the association between corporate governance and firm performance in Chinese listed firms. Specifically, the theory indicated that the directors’ demographic
characteristics including age, functional track and tenure, are important factors affecting the firm performance because they can influence the cognitive biases, interests and values of the directors and thus lead to different strategic choices in decision making (D. C. Hambrick & Mason, 1984).

Therefore, as discussed above, corporate governance acts as a system not only to gather and analyze information about the interaction between principals and agents, but also to design and implement the regulations for coordination among shareholders, board of directors and managers (Van Ees, Gabrielsson, & Huse, 2009). Taken together, this study will re-construct an integrated framework between directors’ demographic characteristics, corporate governance and firm performance and expect that the directors’ demographic characteristics may have strongly impacts on effectiveness of corporate governance in China.

Especially after the decades of economic reform, China has gradually transformed from a centrally planned into a market economy and established the basic framework of corporate governance in the listed firms. However, China adopted alternative ways of the improvement of corporate governance compared with those of western countries. Specifically, the development of corporate governance not only learn from international institutional arrangement which is recognized as “best practice”, but also improve the government-business relationship through transforming state-owned enterprises and establishing the rule of law to govern the relationship (Qian & Wu, 2003). Thus, the moderating effect of heterogeneity in demographic characteristics may be somewhat different from that in western countries.

To summarize, this study intends to integrate upper echelon theory into the corporate governance system in Chinese listed companies, that is, the research will examine the interactive effect of directors’ demographic characteristics and corporate governance on firm performance, and then help overcome a current myopia within the research on the corporate governance. As a result, this study expects that the integration of the corporate governance system and upper echelon theory will not only comprehensively reflect the current condition of corporate governance, but also can overcome the theoretical weakness of corporate governance. In addition, the interaction effect between directors’ characteristics and corporate governance also can explain why so many previous empirical studies of corporate governance and firm performance have yielded mixed or insignificant results in China compared with western countries. Next, the following will suggest a series of hypothesis to examine the moderating impact of director’s demographic characteristics.
3.2.1 Average Age

The age of board members has been identified as an important demographic characteristic linked to interaction process within members of board and then have a strong impact on the relationship between corporate governance and firm performance. Specifically, as Ryder (1965) indicated, age is an important demographic attribute that can influence a person’s background and experiences outside the employing organization and can be used to predict an individual’s non-work-related experience. Similarly, Richard and Shelor (2002b) defined age as a proxy for perspectives, belief system, network and affiliations. Therefore, some scholars indicated that older directors may be more conservative and exhibit better judgement in the decision making process because they will take longer to reach decisions, seek greater amounts of information and diagnose the value of information more accurately (Daboub, Rasheed, Priem, & Gray, 1995; Stevens, Beyer, & Trice, 1978).

However, other scholars (Gummer, 1986; Wiersema & Bantel, 1992) argued that directors’ age has a negative impact on the ability to integrate information in making decisions and having confidence in decisions, because older directors have a psychological commitment to the organizational status quo and may be at a point in their lives at which financial security and career security are important, as a result, the older directors cannot grasp new ideas and learn new behaviours to adapt the change in their environment.

Furthermore, as some scholars posit (Hambrick, 1984; Menkhoff, 2006), the qualities of younger men such as energy, drive and a willingness to accept to change, will be advantageous to a company, because younger men can expend more physical and mental effort on promoting change and explore the new knowledge to improve firm performance. Therefore, younger directors will not only consider that there is more pressure for change and innovation than did older directors, but also challenge the existing system and authority more than older directors.

Therefore, average age will influence the cognitive conflict, effort norms and use of knowledge in the board process and has different moderating impacts on relationship between corporate governance and firm performance; overall, the following null hypotheses are suggested:

\[ H_2: \text{The relationship between corporate governance and firm performance is not stronger when the average age of directors is higher as opposed to when it is lower in Chinese listed companies.} \]
3.2.2 Age Heterogeneity

As has been discussed above, some scholars suggested that age heterogeneity can increase the variety of perspectives and expand the breadth of information to enhance the strategic decisions, because different age of directors reflects the different cognitive biases and values (Richard & Shelor, 2002b; Williams & O'Reilly, 1998). Therefore, heterogeneity in the age of the board will affect the interaction process of board members to strengthen the relationship between corporate governance and firm performance.

However, other scholars argued that age heterogeneity will trigger a variety of attitudes and values and could increase the conflict among the members of the board. As a result, greater heterogeneity in age will decrease the efficiency of decisions and hinder the effectiveness of the interaction within the board (Pfeffer, 1983). On the other hand, scholars (Richard & Shelor, 2002b) also explain that directors with similar ages will have perceptions and cognitive biases in common and this can lead them to share the same attitudes and beliefs and can improve their communication and cohesion, which leads to building speedy and efficient coordination in decision making. Therefore, the homogeneous age of the board will bring about more coordination among the board members and ultimately result in improving the relationship between corporate governance and firm performance.

In sum, scholars have different views on the moderating effect of age heterogeneity on the relationship between corporate governance and firm performance; I will adopt the null hypothesis concerning the moderating effect of age heterogeneity:

\[ H_3: \text{The relationship between corporate governance and firm performance is not stronger when the age heterogeneity of directors is higher as opposed to when it is lower in Chinese listed companies.} \]

3.2.3 Functional Heterogeneity

The functional background has also been identified as an important demographic characteristic of the members of board, because the members of the board bring his or her job orientation that developed from experience in some function and define the problems based on the activities and goals of their own areas (D. C. Hambrick & Mason, 1984). For example, as scholars (Eisenhardt, Kahwajy, & Bourgeois, 1998) explain, directors who have grown up in sales and marketing see opportunities and issues from different vantage points that differ from those who have engineering experience.
Therefore some scholars suggest that heterogeneity in functional background will improve effectiveness of board process and then influence the impact of corporate governance on firm performance, because heterogeneity in function is linked to diversity in board members’ knowledge and skills and push directors to consider their strategic decision from a company-wide perspective (Finkelstein, Hambrick, et al., 2008). For example, Wiersema and Bantel (1993) suggested that functional heterogeneity can improve the decision quality through increasing the variety and number of relevant environmental sectors. Similarly, Milliken and Martins (1996) found that a functionally diverse team will be better linked into external networks and have greater access to information. In addition, Drach and Somech (2001) posited that function heterogeneity will facilitate team innovation and creativity.

On the other hand, other scholars argued that functional heterogeneity will be associated with differences of opinion and perspectives and will negatively influence the board interaction process and then the effectiveness of corporate governance, because members of the board always defined the problem in terms of the activities and goals of their own areas and influence the effectiveness of their communication (D. C. Hambrick & Mason, 1984). For example, Pelled, Eisenhardt and Xin (1999) found that heterogeneous functional background increased the task conflict because director with greater functional heterogeneity held a multiple belief structure about a variety of information and led to incongruent task perceptions. In addition, Hambrick et al., (1996) indicated that heterogeneity in the function of board members will slow an organization’s speed in executing its actions because disparate perspectives and vocabularies in a heterogeneous team will make communication and decision making cumbersome. At the same time, they (D. C. Hambrick et al., 1996) also found that function heterogeneity is negatively related to the firm’s response generation speed and executive speed because the design, negotiation and elaboration of high-magnitude responses from heterogeneous team took much more time than from homogeneous team.

Therefore, the function heterogeneity will be an important moderator and also has different moderating impact on the relationship between corporate governance and firm performance; I shall again adopt the null hypothesis:

\[ H_4: The relationship between corporate governance and firm performance is not stronger when the functional heterogeneity is higher as opposed to when it is lower in Chinese listed companies. \]
3.2.4 **Average Tenure**

The directors’ tenure is viewed as a proxy for directors’ commitment to the status quo, informational diversity and attitudes toward risk and may be the most significant demographic variable which can influence the interaction quality of board members (Finkelstein & Hambrick, 1990b). Specifically, some scholars noted that there is a positive effect of long-tenured directors on the interaction quality within the board. First, directors with long tenure will facilitate greater social interaction and cohesion because they have spent more time with each other to learn how to get along and communicate with each other (K. G. Smith et al., 1994b). Secondly, long-tenured directors will have a greater shared understanding of their organization and industry; that is, they can comprehend the specific idiosyncrasies, strengths and weaknesses of their organization and key issues in the industry. Thirdly, longer tenure will lead to increased integration and opportunity for shared management values and, in turn, will be cohesive and trusting (Eisenhardt & Schoonhoven, 1990; Michel & Hambrick, 1992; K. G. Smith et al., 1994a).

On the contrary, other scholars indicated that long-tenured directors have a negative impact on the quality of the interaction within members of board. First, directors with long tenure will resist changing their behaviour and lessen the likelihood that they will challenge the status quo because tenure is related to the increased rigidity and commitment to established policies and practices (Katz, 1982). Secondly, long tenure will reduce the adoption of unique strategies and lead to a lower likelihood of organizational and strategic change and, consequently, bring the organization into general conformity with industry tendencies (Finkelstein & Hambrick, 1990a). Thirdly, directors’ longevity will lead to increasing isolation from outside sources of information and make the firm restrict information processing through the establishment of routines for solving the problems, consequently, firms cannot develop appropriate strategies to meet environmental challenges (Boeker, 1997).

Therefore, the average tenure will influence the level of cognitive conflicts, effort norms and use of knowledge and skills and then have different moderating effect on the strength between corporate governance and firm performance, the following null hypotheses are suggested:

**H₅:** The relationship between corporate governance and firm performance is not stronger when the average tenure is higher as opposed to when it is lower in Chinese listed companies.
3.2.5 Tenure Heterogeneity

In addition to average tenure, the heterogeneous tenure also qualifies as an important demographic characteristic moderating the relationship between corporate governance and firm performance. Specifically, some scholars noted that heterogeneous tenure has a positive impact on interaction quality. For example, as Katz (1982) indicated, directors of heterogeneous tenure have different attitudes toward an organization and its strategy, as a result, they will create more different information collection, understanding and interpretation to generate different solution generation and promote organization and strategy change (Dutton & Duncan, 1987). Similarly, Wiersema and Bantel (1992) indicated that the directors of heterogeneous tenure are more open to change because they are more creative and rely on a broader set of information and perspectives when making strategy.

Conversely, other scholars found that heterogeneous tenure have a negative impact on the interaction process within members of boards and then on the relationship between corporate governance and firm performance. For example, they indicated that tenure heterogeneity will produce different interpretation of events and lead to the conflict of communication because tenure is regarded as an important determinant of a person’s communication patterns within the group, (Allen & Cohen, 1969a; Zenger & Lawrence, 1989). Furthermore, they also demonstrated that directors with homogenous tenure will have a single frame of reference, which seals them off from portions of the environment and have similar outlooks (Allen & Cohen, 1969b; March et al., 1958), and as a result, facilitates communication because group tenure similarity will affect the nature and extent of communication in the group (Campion, Medsker, & Higgs, 1993; Wagner, Pfeffer, & O'Reilly Iii, 1984).

Therefore, tenure heterogeneity may influence the effectiveness of cognitive effects, effort norms and use of knowledge and skills in the board process, and strengthen or weaken the link between corporate governance and firm performance; overall, I shall adopt the null hypothesis:

\[ H_0: \text{The relationship between corporate governance and firm performance is not stronger when tenure heterogeneity is higher as opposed to when it is lower in Chinese listed companies.} \]
3.3 The Research Framework

A summary of all hypotheses in this study is listed in Fig 3.1.

![Research Framework Diagram]

**Figure 3.1 The research framework**
Chapter 4
Sample and Methodology

The sample in this study is drawn from the Shanghai Stock Exchange index 180 (SSE 180), which is a benchmark index that reflects the condition of the Shanghai capital market. The SSE 180 was launched in 2002 and selects those listed firms that best represent their industry’s population by size and liquidity. Specifically, the index consists of 180 listed firms on the Shanghai stock exchange and is classified into 10 industries based on the Global Industry Classification System developed by Morgan Stanley and Standard & Poors (such as energy, materials, industrials, consumer discretionary, consumer staples, health care, financials, information technology, telecommunication and utilities). By the end of 2005, the SSE 180 stocks accounted for 67% of the market capitalization and 53% of the RMB trading value of the Shanghai Stock Exchange (Lee, Li, & Wang, 2010).

This study uses 2004 as the sample base year because that was when the OECD issued the revised principles on corporate governance to further improve the concept of corporate governance. Thus I attempted to examine all listed firms in SSE index 180 during the period 2004 to 2008. A complete review of the prospectuses and annual reports found that only 155 of the listed firms had complete information about board size, block shareholders’ holding, independent directors’ ratio, CEO duality, directors’ ages, directors’ functional track and directors’ tenure. This resulted in a sample of 684 annual observations for the period 2004 to 2008.

4.1 Independent Variables

4.1.1 CG Index:

As discussed above, board structure and ownership structure are regarded as the central control mechanisms for monitoring the behaviour of managers and are good proxies for overall good governance, therefore, instead of considering a single measures, this study considers four different measures of corporate governance, and constructs the corporate governance index (CG index) to assess whether the overall corporate governance impacts the firm performance from the board structure and ownership structure. That is, this study will take a different approach from previous research and construct a Chinese Corporate Governance Index based primarily on the listed firms of the SSE index 180 during 2004 to 2008 in order to investigate the relationship between the financial performance and corporate governance index.
Specifically, according to the OECD governance principles, the main purpose of corporate governance is to monitor the senior managers and to protect the minority shareholders. In this research, I use the independent directors and block shareholders’ holdings as measures to protect the minority shareholders. In addition, I also apply board size and CEO duality as measures to control the managers. Thus the study considers four characteristics of corporate governance including board size, independent director ratio, CEO duality and block shareholders’ holding, and construct a corporate governance index from the perspectives of board of directors and ownership structure. Finally, I make the indicator variable equal to one if an individual governance characteristic is presumed to strengthen the firm performance, zero otherwise. As a consequence, the governance index is the sum of the four indicators in the range of zero to four, and can be used as proxy to assess the quality of corporate governance of the firm. That is, firms with governance index of zero are presumed to have a weaker governance system, leading to decreased firm value, conversely, firms with an index of four are presumed to have a stronger governance system, leading to increased firm value.

4.1.2 **Board Size Indicator (Sub_Index A)**

The board size indicator refers to the number of directors on the board. As discussed above, there are arguments for an impact of board size on firm performance. For example, some scholars (S. Cheng, 2008; T. Eisenberg, Sundgren, & Wells, 1998b; Yermack, 1995) indicated that a small board will positively affect the firm value because small boards are more effective than large board. Conversely, others scholars (Agrawal & Knoeber, 2009; Dalton et al., 1999) argued that large boards can increase the firm value because they can provide high quality of advice for strategic decisions. Thus it is difficult to determine the optimum size of the board of directors. In China, Qu (2007b) and Yu (2004a) found a reverse U-shaped relationship between board size and financial performance and suggested that neither very small boards nor very larger boards are optimal for Chinese listed firms. That is, their results indicated a positive impact of board size in the range nine to eleven members on firm performance. Therefore, indicator equals 1 for firms with a board size ranging from nine to eleven, zero otherwise (see Table 4.1).

4.1.3 **Independent Director Ratio Indicator (Sub_Index B)**

The independent director ratio refers to the proportion of independent directors on the board. Scholars recommend that a firm should increase its proportion of independent directors on the board because independent directors can strengthen the independence of boards to protect the interests of minority shareholders (B. D. Baysinger & Butler, 1985a; Bozec & Dia, 2007). In
China, the government also emphasized the growing importance of independent directors during recent decade. For example, the CSRC released the guidelines for the establishment of the independent director system in listed firms. In addition, scholars (Choa & Ruib, 2009; Peng, 2004) also argued that there is a relationship between independent director ratio and financial performance in Chinese listed firms. Thus, I define the independent director ratio indicator equal to one if the proportion of independent directors on the board is higher than the legal requirement (33%), zero otherwise (see Table 4.1), because the proportion of independent directors must be over 33% in listed firms in terms of the regulation issued by the China Securities Regulatory Commission.

4.1.4 Block Shareholders’ holding Indicator (Sub_Index C)

A block shareholder is defined as shareholders who hold 5% or more of the outstanding shares. The research will investigate how the total fraction of shares owned by the block shareholders affects financial performance in China. As discussed above, there is a positive relationship between the ownership concentration and financial performance because China is an emerging and transitional economy with a low level of investor protection (La Porta et al., 1998; Shleifer & Vishny, 1997a). Furthermore, according the securities law of the P.R.C., where an investor has attained a 30% shareholding in a listed company, the investor shall make an offer to all shareholders of the listed company in accordance with the provisions of the law for a complete or partial acquisition of shares of the listed company. Therefore, I define the block shareholders’ holding indicator equal to one if the total ownership of all block shareholders is larger than 30%, zero otherwise (see Table 4.1).

4.1.5 CEO Duality Indicator (Sub_Index D)

CEO duality refers to the CEO also serving as the chairman of the board. Some scholars indicated that firms should split the jobs of CEO and the chairman because the separation of CEO and chairman can facilitate monitoring and control of the behaviour of the CEO (Perrow, 1993). However, other scholars argue that companies without CEO duality can make better and faster decisions and do better than those which split the two positions because the CEO duality cannot establish strong leadership, leads to inefficiencies through unity of command and increases the conflict between CEO and chairman (J. R. Galbraith, 1973; Perrow, 1993). Furthermore, Palmon and Wald (2002) developed an integrated view on the impact of the CEO duality and found that small firms can benefit from the clarity and decisiveness of decision making under a single executive and large firms can take advantage of the checks and balances of having two executives in the CEO and chairman positions. In
the research, the firm will be defined as a large firm when the firm size is larger than the mean size of the sample; otherwise I will define a firm as a small firm when its size is smaller than the mean size of the sample. The firm size is measured by the natural log of the total assets of each fiscal year-end; a firm is defined to be large if its log of assets is greater than the mean of log of total assets of the sample. Therefore, CEO duality indicator equals one for small firms with CEO duality, zero otherwise. In contrast, the indicator equals zero for large firm with CEO duality, one otherwise (see Table 4.1).

Therefore, the corporate governance index is the sum of the four governance indicators with a range from 0 to 4; the study refers to the corporate governance index as “CGI”.

*Corporate Governance Index “CGI” = Board size indicator + Independent director ratio indicator + Block shareholders’ holding indicator+ CEO duality indicator.*

**Table 4.1 Definition of Corporate Governance Indicators**

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board size indicator</td>
<td>Number of directors on the board Indicator equals one for firms with board size ranging from nine to eleven; zero otherwise.</td>
</tr>
<tr>
<td>Independent director ratio indicator</td>
<td>Proportion of independent directors on the board Indicator equals one if proportion of independent director on the board is higher than the legal requirement (33%); zero otherwise.</td>
</tr>
<tr>
<td>Block shareholders’ holding indicator</td>
<td>A block shareholder is defined as a shareholder who holds 5% or more of the outstanding shares Indicator equals one if total ownership of all block shareholders is larger than 30%, zero otherwise.</td>
</tr>
<tr>
<td>CEO duality indicator</td>
<td>CEO duality refer to CEO also serving as the chairman/chairwoman of the board Indicator equals one for small firms with CEO duality, zero otherwise. Indicator equals zero for large firms with CEO duality, one otherwise.</td>
</tr>
</tbody>
</table>

**4.2 Moderating Variables**

The moderating variables are age heterogeneity of directors, functional heterogeneity of directors, average tenure of directors and tenure heterogeneity of directors.
4.2.1 **Average Age:**

The demographic trait of age will moderate the relationship between corporate governance and firm performance. In the research, Average age is measured by the mean of the age of the directors on the board.

4.2.2 **Age Heterogeneity:**

Age heterogeneity is measured by using the coefficient of variation in the age of the members on the board (standard deviation divided by the mean), because the coefficient of variation is the best way to measure interval–level data such as age and tenure (Allison, 1978).

4.2.3 **Functional Heterogeneity:**

Functional experience of the members in the boards is defined as the area in which directors have most experience and is measured by the number of years spent by the director in this area. In this research, functional experience is categorized into six tracks: 1) general management; 2) law; 3) finance and accountant; 4) civil service; 5) public service; and 6) academic consulting. Because functional experience is a categorical variable, functional diversity is measured using Blau’s heterogeneity index (Blau, 1977) in the following way:

\[ H = 1 - \sum P_i^2 \]

\( P_i \): is the proportion of the directors in each category i.

\( i \): takes the value one to six representing the diverse functional experience.

Therefore, the H index will vary from zero to one, where values close to one show that functional heterogeneity is higher among board members; in contrast, values close to zero shows that directors on the board are dominated by one function.

4.2.4 **Average Tenure:**

Director tenure refers to the number of years the directors have held the director position on the board. The average director’s tenure is the mean of the tenure of the directors on the board.

4.2.5 **Tenure Heterogeneity:**

Because tenure is also interval–level data, I applied the coefficient of variation (standard deviation divided by the mean) to measure the tenure heterogeneity.
4.3 Dependent Variables

The research uses two widely used finance measures, ROE (net income divided by owners’ equity) and profit margin (net income divided by revenue) for two reasons. First, ROE is adopted as an important factor to assess the financial performance in China. For instance, CSRC announced the regulation to require listed firms’ ROE to be less than 10% in each of the three most recent years if the listed firm wants to receive the proceeds through the secondary offering. In addition, SASAC also applies the ROE as an important measure to evaluate the top management team’s performance. Operationally, the ROE is measured by using net income divided by the owners’ equity during a given year. The research also uses a second measure, profit margin (profits divided by revenue), to strengthen the construct of firm performance.

Secondly, the capital market in China was established at the end of last century and is not yet well developed, thus a volatile market-measure such as share price can not reflect the firm’s true value. For example, according to the statistics report issued by National Bureau of Statistics of China, the real GDP growth rose 9% in 2008 and 8.7% in 2009, that is, China’s economy has grown significantly during the period 2008 to 2009 as a result of the economic stimulation policy. However, at the same time, the Shanghai stock composite index started to go down gradually and fell below 1900 points in September 2008, which was about 70% below the high of 6124 points recorded on October 16, 2007 (Lai & Yang, 2009). In addition, Xu (2010) indicated that the China stock market index displayed the characteristics of excess fluctuation on the base of the stock index during the period 1993 to 2008. Some other scholars suggested that the turnover ratios of the Chinese capital market are 700-1000%, which indicated that the capital market is a highly speculative market (Pistor & Xu, 2005). Therefore market-based measures will be less informationally efficient and will not be adopted in this study (Tenev, Zhang, & Brefort, 2002). Finally, these two performance measures have been adopted to evaluate the effectiveness of corporate governance in the previous studies in China (Li, 2008; Peng, 2004); therefore I can use them to compare my empirical result with previous research.

4.4 Control Variables

There are some other variables that can affect the relationship between corporate governance and firm performance, thus these variables should be controlled in the research.
Firm size

The size of a firm is an important factor affecting firm performance. For instance, Jung (1991) indicated that there is a positive relationship between firm size and firm performance. In addition, other scholars also suggested that firm size has a significant impact on financial performance and should be included as a control variable (Cheung, Jiang, Limpaphayom, & Lu, 2010; Johnson et al., 1993; Peng, 2004). The research will use the natural log of firm assets to measure firm size.

Leverage ratio (Debt/Assets)

Leverage is regarded as an important factor influencing firm performance. For example, Lang et al. (1996) found that leverage can affect firm growth. Moreover, some scholars indicated that leverage should be included as a control variable because leverage can influence firm value (Tallman & Li, 1996; Zahra, 1995). Leverage will be measured using the debt/asset ratio in this research.

4.5 Methods

To investigate the relationship between the corporate governance index and firm performance, the research will use a standardized regression model to examine autocorrelation in data pooled during the period 2004 to 2008.

I examine hypotheses two to six to determine whether or not there are interactions between the corporate governance index and the characteristics of directors on boards in China; they will be tested by the hierarchical regression analysis. That is, the analysis first enters the control variables, then the independent variables, and then the interaction terms (Zahra, 1996). Specifically, the control variable was entered as one block in the first step, the independent variables (corporate governance index) and the moderating variables (average age, age heterogeneity, function heterogeneity, tenure heterogeneity and average tenure) were entered as one block in the second step. Finally, after centering the independent variables and moderating variables separately, the interaction effect of the independent variables and moderating variables (corporate governance * the director’s demographic characteristic) were entered in one block in the third step. For instance, in order to examine the moderating role of average age on the relationship between corporate governance and financial performance, in the first step, the control variable (log asset) was entered in block one, then the control variable (log asset), the independent variables (corporate governance index) and moderating
variables (average age) were entered in block two in the second step and, finally, the control variable (log asset), independent variables, moderating variables and interaction effect of independent variables & moderating variable (corporate governance * average age) in block three in the third step.

Table 4.2  Summary of Regression Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Definition and Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent variables</strong></td>
<td></td>
</tr>
<tr>
<td>ROE</td>
<td>Net income divided by owners’equity</td>
</tr>
<tr>
<td>Profit Margin</td>
<td>Net income divided by revenue</td>
</tr>
<tr>
<td><strong>Independent variables</strong></td>
<td></td>
</tr>
<tr>
<td>Corporate Governance Index</td>
<td>Corporate Governance Index “CGI” = Board size indicator + Independent director ratio indicator + Block shareholders’ holding indicator+ CEO duality indicator.</td>
</tr>
<tr>
<td><strong>Moderating variables</strong></td>
<td></td>
</tr>
<tr>
<td>Average Age</td>
<td>Mean of the age of the directors on the board</td>
</tr>
<tr>
<td>Age Heterogeneity</td>
<td>Coefficient of variation(standard deviation divided by the mean)</td>
</tr>
<tr>
<td>Functional Heterogeneity</td>
<td>Blau’s heterogeneity index $H=1-\sum P_i^2$</td>
</tr>
<tr>
<td>Average Tenure</td>
<td>Mean of the tenure of the director on the board</td>
</tr>
<tr>
<td>Tenure heterogeneity</td>
<td>Coefficient of variation(standard deviation divided by the mean)</td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
</tr>
<tr>
<td>Leverage</td>
<td>Debt divided by asset</td>
</tr>
<tr>
<td>Firm size</td>
<td>Natural log of firm assets</td>
</tr>
</tbody>
</table>
Chapter 5

Results and Findings

This chapter describes the empirical results of the hypotheses testing proposed in above chapter. That is, after presenting the descriptive statistics of the sample of the 684 company-years in this study, the results of the various hypotheses will be presented.

Table 5.1 shows the minimum, maximum, means and standard deviations among all variables including dependent variables, independent variables and control variables included in this study.

<table>
<thead>
<tr>
<th>Feature</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROE</td>
<td>684</td>
<td>-0.39</td>
<td>0.95</td>
<td>0.13</td>
<td>0.12</td>
</tr>
<tr>
<td>Profit margin</td>
<td>684</td>
<td>-0.38</td>
<td>1.52</td>
<td>0.12</td>
<td>0.13</td>
</tr>
<tr>
<td>Board Size Indicator</td>
<td>684</td>
<td>0.00</td>
<td>1.00</td>
<td>0.63</td>
<td>0.48</td>
</tr>
<tr>
<td>Independent Director Ratio Indicator</td>
<td>684</td>
<td>0.00</td>
<td>1.00</td>
<td>0.88</td>
<td>0.32</td>
</tr>
<tr>
<td>Block Shareholders’ holding Indicator</td>
<td>684</td>
<td>0.00</td>
<td>1.00</td>
<td>0.90</td>
<td>0.31</td>
</tr>
<tr>
<td>CEO Duality Indicator</td>
<td>684</td>
<td>0.00</td>
<td>1.00</td>
<td>0.49</td>
<td>0.50</td>
</tr>
<tr>
<td>Corporate Governance Index (CGI)</td>
<td>684</td>
<td>1.00</td>
<td>4.00</td>
<td>2.89</td>
<td>0.85</td>
</tr>
<tr>
<td>Average Age</td>
<td>684</td>
<td>40.71</td>
<td>61.67</td>
<td>50.58</td>
<td>3.91</td>
</tr>
<tr>
<td>Age Heterogeneity</td>
<td>684</td>
<td>0.06</td>
<td>0.34</td>
<td>0.16</td>
<td>0.04</td>
</tr>
<tr>
<td>Functional Heterogeneity</td>
<td>684</td>
<td>0.20</td>
<td>0.73</td>
<td>0.51</td>
<td>0.10</td>
</tr>
<tr>
<td>Tenure Heterogeneity</td>
<td>684</td>
<td>0.00</td>
<td>1.41</td>
<td>0.46</td>
<td>0.24</td>
</tr>
<tr>
<td>Average Tenure</td>
<td>684</td>
<td>1.00</td>
<td>9.36</td>
<td>4.01</td>
<td>1.42</td>
</tr>
<tr>
<td>Log Assets</td>
<td>684</td>
<td>8.71</td>
<td>12.08</td>
<td>9.91</td>
<td>0.54</td>
</tr>
<tr>
<td>Debt/assets</td>
<td>684</td>
<td>0.03</td>
<td>0.96</td>
<td>0.51</td>
<td>0.17</td>
</tr>
<tr>
<td>Valid N (list wise)</td>
<td>684</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The appendix table 1 presents the correlations for all the variables used in this study. The results of the correlation among the demographic variables suggested that they can be included in one regression model. Therefore, multicollinearity was not a problem in this study.

As discussed above, I used the OLS regression and the hierarchical regression analysis to test these hypotheses. Tables 5.3-5.14 present all regression results for the effect of corporate governance on financial performance and the moderating impact of directors’ demographic
The tables not only show the effect of corporate governance on the performance measured by ROE and profit margin separately, but also indicate the moderating effects of directors’ demographic heterogeneity on the relationship between corporate governance and performance.

5.1 The Effect of Corporate Governance on Firm Performance in Chinese listed companies

H1: There will be positive relationship between firm performance and corporate governance in Chinese listed companies.

From the perspective of ownership and leadership, this study empirically tests the effects of the corporate governance mechanisms on the financial performance in Chinese listed companies. I used two different measures of firm performance, namely return on equity (ROE) and profit margin (net income/revenue), as dependent variables; at the same time, the independent variables include the five corporate governance variables, board size indicator, independent director ratio indicator, block holders’ holding indicator, CEO duality indicator and corporate governance index, together with firm size and leverage ratio as control variables.

Table 5.2 presents the summary statistics of the corporate governance index and the four sub-indices. I found that there are significant improvements in the corporate governance index of Chinese listed firms during the period 2004-2008, the potential reason is that Chinese listed companies have established the corporate governance framework with Chinese characteristics to adapt to the development environment and economic situation, based on the OECD principles of corporate governance and the requirements set out by Chinese government. That is, since 2004, a series of policies and regulations which aim to strength the effectiveness of corporate governance has been introduced by government or government authorized organizations and have been acknowledged by the listed companies. For instances, according to the requirement for the independent directors, the Chinese listed companies have gradually restructure their board composition to strength the independence of board of directors. As a result, it appears that these Chinese listed firms have made significant progress with respect to quality of corporate governance.
Table 5.2 **Summary of Corporate Governance Index**

<table>
<thead>
<tr>
<th>Year</th>
<th>Variable</th>
<th>No. of obs.</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>Board Size Indicator</td>
<td>121</td>
<td>0</td>
<td>1</td>
<td>0.6</td>
<td>0.491</td>
</tr>
<tr>
<td></td>
<td>Independent Director Ratio Indicator</td>
<td>121</td>
<td>0</td>
<td>1</td>
<td>0.85</td>
<td>0.357</td>
</tr>
<tr>
<td></td>
<td>Block Shareholders’ holding Indicator</td>
<td>121</td>
<td>0</td>
<td>1</td>
<td>0.96</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>CEO Duality Indicator</td>
<td>121</td>
<td>0</td>
<td>1</td>
<td>0.55</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>CGI</td>
<td>121</td>
<td>1</td>
<td>4</td>
<td>2.96</td>
<td>0.8</td>
</tr>
<tr>
<td>2005</td>
<td>Board Size Indicator</td>
<td>121</td>
<td>0</td>
<td>1</td>
<td>0.64</td>
<td>0.481</td>
</tr>
<tr>
<td></td>
<td>Independent Director Ratio Indicator</td>
<td>121</td>
<td>0</td>
<td>1</td>
<td>0.88</td>
<td>0.331</td>
</tr>
<tr>
<td></td>
<td>Block Shareholders’ holding Indicator</td>
<td>121</td>
<td>0</td>
<td>1</td>
<td>0.95</td>
<td>0.218</td>
</tr>
<tr>
<td></td>
<td>CEO Duality Indicator</td>
<td>121</td>
<td>0</td>
<td>1</td>
<td>0.54</td>
<td>0.501</td>
</tr>
<tr>
<td></td>
<td>CGI</td>
<td>121</td>
<td>1</td>
<td>4</td>
<td>3.01</td>
<td>0.851</td>
</tr>
<tr>
<td>2006</td>
<td>Board Size Indicator</td>
<td>137</td>
<td>0</td>
<td>1</td>
<td>0.64</td>
<td>0.481</td>
</tr>
<tr>
<td></td>
<td>Independent Director Ratio Indicator</td>
<td>137</td>
<td>0</td>
<td>1</td>
<td>0.9</td>
<td>0.304</td>
</tr>
<tr>
<td></td>
<td>Block Shareholders’ holding Indicator</td>
<td>137</td>
<td>0</td>
<td>1</td>
<td>0.85</td>
<td>0.354</td>
</tr>
<tr>
<td></td>
<td>CEO Duality Indicator</td>
<td>137</td>
<td>0</td>
<td>1</td>
<td>0.45</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>CGI</td>
<td>137</td>
<td>1</td>
<td>4</td>
<td>2.85</td>
<td>0.907</td>
</tr>
<tr>
<td>2007</td>
<td>Board Size Indicator</td>
<td>151</td>
<td>0</td>
<td>1</td>
<td>0.63</td>
<td>0.485</td>
</tr>
<tr>
<td></td>
<td>Independent Director Ratio Indicator</td>
<td>151</td>
<td>0</td>
<td>1</td>
<td>0.9</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>Block Shareholders’ holding Indicator</td>
<td>151</td>
<td>0</td>
<td>1</td>
<td>0.87</td>
<td>0.34</td>
</tr>
<tr>
<td></td>
<td>CEO Duality Indicator</td>
<td>151</td>
<td>0</td>
<td>1</td>
<td>0.45</td>
<td>0.499</td>
</tr>
<tr>
<td></td>
<td>CGI</td>
<td>151</td>
<td>1</td>
<td>4</td>
<td>2.85</td>
<td>0.839</td>
</tr>
<tr>
<td>2008</td>
<td>Board Size Indicator</td>
<td>154</td>
<td>0</td>
<td>1</td>
<td>0.61</td>
<td>0.489</td>
</tr>
<tr>
<td></td>
<td>Independent Director Ratio Indicator</td>
<td>154</td>
<td>0</td>
<td>1</td>
<td>0.88</td>
<td>0.322</td>
</tr>
<tr>
<td></td>
<td>Block Shareholders’ holding Indicator</td>
<td>154</td>
<td>0</td>
<td>1</td>
<td>0.87</td>
<td>0.337</td>
</tr>
<tr>
<td></td>
<td>CEO Duality Indicator</td>
<td>154</td>
<td>0</td>
<td>1</td>
<td>0.47</td>
<td>0.501</td>
</tr>
<tr>
<td></td>
<td>CGI</td>
<td>154</td>
<td>1</td>
<td>4</td>
<td>2.84</td>
<td>0.836</td>
</tr>
</tbody>
</table>

Table 5.3 and 5.4 report the regressions result of corporate governance on firm performance. Model 2 in the table shows a mixed relationship between the sub-indexes of corporate
governance and financial performance measured by return on equity (ROE). Specifically, the ROE is significantly positively related to the board size indicator (coefficient = 0.026, t-value=-2.684), and the block shareholders’ holding indicator (coefficient=0.035, t-value=2.29). However, the independent director ratio indicator (coefficient=-0.001, t-value=0.086) is non-significantly negatively related to the ROE, CEO duality (coefficient=0.002, t-value=-0.139) is non-significantly positively related to the ROE.

Model 2 in Table 5.4 also indicated mixed effects of the sub-indexes of corporate governance on the performance measured by profit margin. Specifically, the profit margin is significantly positively associated with the block shareholders’ holding indicator (coefficient=0.028, t-value=1.831). However, the board size indicator (coefficient=0.001, t-value =0.124), the independent director (coefficient=0.013, t-value=0.88) and the CEO duality indicator (coefficient=0.006, t-value=0.565) are positively but non-significantly related to performance.

Table 5.3  The results of regression analysis of the sub-indexes and the corporate governance index

<table>
<thead>
<tr>
<th>Variables</th>
<th>Dependent Variable: ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.026***</td>
</tr>
<tr>
<td>Board Size Indicator</td>
<td>(-0.185)</td>
</tr>
<tr>
<td>Independent Director Ratio Indicator</td>
<td>-0.001</td>
</tr>
<tr>
<td>Block Shareholders’ holding Indicator</td>
<td>0.035**</td>
</tr>
<tr>
<td>CEO Duality Indicator</td>
<td>0.002</td>
</tr>
<tr>
<td>Corporate governance index(CGI)</td>
<td>0.016***</td>
</tr>
<tr>
<td>Log Assets</td>
<td>0.019**</td>
</tr>
<tr>
<td></td>
<td>(2.311)</td>
</tr>
<tr>
<td>Debt/assets</td>
<td>-0.103***</td>
</tr>
<tr>
<td></td>
<td>(-3.734)</td>
</tr>
<tr>
<td>R Square</td>
<td>0.024</td>
</tr>
</tbody>
</table>
Table 5.4  The result of regression analysis of sub-indexes and the corporate governance index

<table>
<thead>
<tr>
<th>Variables</th>
<th>Dependent Variable: Profit Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.048</td>
</tr>
<tr>
<td></td>
<td>(0.569)</td>
</tr>
<tr>
<td>Board Size Indicator</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>(0.124)</td>
</tr>
<tr>
<td>Independent Director Ratio Indicator</td>
<td>0.013</td>
</tr>
<tr>
<td></td>
<td>(0.88)</td>
</tr>
<tr>
<td>Block Shareholders’ holding Indicator</td>
<td>0.028*</td>
</tr>
<tr>
<td></td>
<td>(1.831)</td>
</tr>
<tr>
<td>CEO Duality Indicator</td>
<td>0.006</td>
</tr>
<tr>
<td></td>
<td>(0.565)</td>
</tr>
<tr>
<td>Corporate governance index(CGI)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Log Assets</td>
<td>0.024</td>
</tr>
<tr>
<td></td>
<td>(2.859)</td>
</tr>
<tr>
<td>Debt/assets</td>
<td>-0.332</td>
</tr>
<tr>
<td></td>
<td>(-11.967)</td>
</tr>
<tr>
<td>R Square</td>
<td>0.175</td>
</tr>
</tbody>
</table>

Note: ***, ** and * represent the significance level at 1%, 5% and 10% respectively

As discussed above, the corporate governance index is a composite measure and can reflect the overall quality of a company’s governance from the perspective of ownership structure and board structure. Model 3 in Tables 5.3 and 5.4 analyses the effect of corporate governance index on firm performance. The results show that the corporate governance index significantly positively affects the financial performance as measured by return on equity (coefficient=0.016, t-value=2.871) and profit margin (coefficient=0.009, t-value=1.675). Thus Hypothesis H₁ received strong support, that is, the result found that there is an effective impact of corporate governance on the performance of Chinese listed companies.

In addition, Model 1 in table 5.3 and 5.4 also shows the effectiveness of the two control variables, firm size is positively and significantly correlated with financial performance as measured by ROE and profit margin. Similarly, the results show that the leverage ratio is positively and significantly related to financial performance as measured by ROE and profit margin.
5.2 The Moderating Effects of Directors’ Demographic Characteristics

The research uses demographic characteristics of directors as moderator to test whether directors’ demographic characteristics can moderate the relationship between corporate governance and firm performance. More specifically, directors’ demographic characteristics that serve as the moderator between corporate governance and financial performance and include average age, age heterogeneity, functional heterogeneity, average tenure and tenure heterogeneity, together with firm size and leverage ratio as control variables. As mentioned above, this study also adopted ROE and profit margin as measures of firm financial performance.

In order to test the hypotheses examining whether director diversity is a moderator of the relationship between corporate governance and firm performance, I used hierarchical regression analysis. Meanwhile, I examined the change in variance which is explained by R square change to validate the interactions. The following tables report the results from a series of hierarchical regressions.

5.2.1 Interaction Effect between Average Age and Corporate Governance on Firm Performance

H2: The relationship between corporate governance and firm performance is not stronger when the average age of directors is higher as opposed to when it is lower in Chinese listed companies.

This hypothesis investigated whether the average age of directors moderated the relationship between corporate governance and firm performance. Average age was measured using the mean age for directors in Chinese listed companies, the performance was measured using return on assets, and then the study used the average age as moderator between corporate governance and firm performance. The results as summarized in Table 5.5 suggests that there is a statistically significant (t-value=-1.812) and negative (coefficient=-0.002) interaction between average age and corporate governance index. Thus, hypothesis H2 is supported.

Similarly, using profit margin as a proxy for financial performance for the period 2004 to 2008, the research examined the moderating effect of average age. Table 5.6 shows that average age reduces the strength of the positive relationship between the corporate governance index and financial performance (coefficient=-0.002, t-value=-1.735), thus, hypothesis H2 was again supported.
Table 5.5  Moderated Regression Analysis Results: Average Age as a Moderator.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model1</th>
<th>Model2</th>
<th>Model3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.015 (-0.185)</td>
<td>0.002 (-0.027)</td>
<td>-0.005 (-0.06)</td>
</tr>
<tr>
<td>Corporate governance index(CGI)</td>
<td>0.016*** (-2.875)</td>
<td>0.015*** (-2.839)</td>
<td></td>
</tr>
<tr>
<td>Average age</td>
<td>0.0002 (-0.186)</td>
<td>0.0004 (-0.274)</td>
<td></td>
</tr>
<tr>
<td>Average age * CGI</td>
<td>-0.002* (-1.812)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log Assets</td>
<td>0.019** (2.311)</td>
<td>-0.015 (-1.489)</td>
<td>0.016 (-1.646)</td>
</tr>
<tr>
<td>Debt/assets</td>
<td>-0.103*** (-3.734)</td>
<td>-0.105*** (-3.751)</td>
<td>-0.105*** (-3.774)</td>
</tr>
<tr>
<td>R Square</td>
<td>0.024</td>
<td>0.036</td>
<td>0.041</td>
</tr>
<tr>
<td>R Square change</td>
<td></td>
<td></td>
<td>0.005</td>
</tr>
</tbody>
</table>

*Note:***, ** and * represent the significance level at 1%, 5% and 10% respectively*

Table 5.6  Moderated Regression Analysis Result: Average Age as a Moderator

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model1</th>
<th>Model2</th>
<th>Model3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.048 (0.569)</td>
<td>-0.001 (-0.008)</td>
<td>-0.008 (-0.009)</td>
</tr>
<tr>
<td>Corporate governance index(CGI)</td>
<td>0.008 (-1.521)</td>
<td>0.008 (-1.485)</td>
<td></td>
</tr>
<tr>
<td>Average age</td>
<td>0.003** (-2.313)</td>
<td>0.003** (-2.292)</td>
<td></td>
</tr>
<tr>
<td>Average age * CGI</td>
<td>-0.002* (-1.735)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log Assets</td>
<td>0.024*** (2.859)</td>
<td>0.01 (-1.061)</td>
<td>0.012 (-1.211)</td>
</tr>
<tr>
<td>Debt/assets</td>
<td>-0.332*** (-11.967)</td>
<td>-0.32*** (-11.324)</td>
<td>-0.32*** (-11.357)</td>
</tr>
<tr>
<td>R Square</td>
<td>0.175</td>
<td>0.185</td>
<td>0.188</td>
</tr>
<tr>
<td>R Square change</td>
<td></td>
<td></td>
<td>0.003</td>
</tr>
</tbody>
</table>
5.2.2 Interaction Effect between Age Heterogeneity and Corporate Governance on Firm Performance

**H3: The relationship between corporate governance and firm performance is not stronger when the age heterogeneity of directors is higher as opposed to when it is lower in Chinese listed companies.**

Table 5.7 and 5.8 presented that age heterogeneity moderates the relationship between corporate governance and firm performance. This study used the coefficient of variation as a proxy to assess the degree of age heterogeneity and ROE as proxy to evaluate the firm performance, Model 3 in Table 5.7 shows that there is a statistically insignificant (t-value=0.449) positive (coefficient=0.054) interaction between age heterogeneity and corporate governance. The result does not support hypothesis.

Similarly, using profit margin as a proxy to assess the financial performance in Chinese listed companies, the research investigated the moderating effect of age heterogeneity. Model 3 in Table 5.8 shows that age heterogeneity increased the strength of the positive relationship between the corporate governance index and performance (coefficient=0.207, t-value=1.719), the hypothesis H3 was not accepted.

**Table 5.7  Moderated Regression Analysis Results: Age Heterogeneity as a Moderator.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model1</th>
<th>Model2</th>
<th>Model3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.015 (0.185)</td>
<td>0.027 (0.316)</td>
<td>0.026 (0.305)</td>
</tr>
<tr>
<td>Corporate governance index(CGI)</td>
<td>0.016*** (2.899)</td>
<td>0.016*** (2.857)</td>
<td>0.016*** (2.875)</td>
</tr>
<tr>
<td>Age Heterogeneity</td>
<td>-0.132 (-1.285)</td>
<td>-0.136 (-1.314)</td>
<td>-0.136 (-1.314)</td>
</tr>
<tr>
<td>Age Heterogeneity * CGI</td>
<td>0.054 (0.449)</td>
<td>0.054 (0.449)</td>
<td>0.054 (0.449)</td>
</tr>
<tr>
<td>Log Assets</td>
<td>0.019** (2.311)</td>
<td>0.013 (1.493)</td>
<td>0.013 (1.516)</td>
</tr>
<tr>
<td>Debt/assets</td>
<td>-0.103*** (-3.734)</td>
<td>-0.106*** (-3.864)</td>
<td>-0.107*** (-3.878)</td>
</tr>
<tr>
<td>R Square</td>
<td>0.024</td>
<td>0.038</td>
<td>0.039</td>
</tr>
<tr>
<td>R Square change</td>
<td></td>
<td></td>
<td>0.001</td>
</tr>
</tbody>
</table>
Table 5.8  Moderated Regression Analysis Result: Age Heterogeneity as a Moderator.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.048</td>
<td>0.083</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>(0.569)</td>
<td>(0.961)</td>
<td>(0.923)</td>
</tr>
<tr>
<td>Corporate governance index(CGI)</td>
<td>0.009*</td>
<td>0.009</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.7)</td>
<td>(1.576)</td>
<td></td>
</tr>
<tr>
<td>Age Heterogeneity</td>
<td>-0.127</td>
<td>-0.14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-1.216)</td>
<td>(-1.343)</td>
<td></td>
</tr>
<tr>
<td>Age Heterogeneity * CGI</td>
<td></td>
<td></td>
<td>0.207*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(1.719)</td>
</tr>
<tr>
<td>Log Assets</td>
<td>0.024***</td>
<td>0.02**</td>
<td>0.021**</td>
</tr>
<tr>
<td></td>
<td>(2.859)</td>
<td>(2.302)</td>
<td>(2.401)</td>
</tr>
<tr>
<td>Debt/assets</td>
<td>-0.332***</td>
<td>-0.335***</td>
<td>-0.337***</td>
</tr>
<tr>
<td></td>
<td>(-11.967)</td>
<td>(-12.059)</td>
<td>(-12.145)</td>
</tr>
<tr>
<td>R Square</td>
<td>0.175</td>
<td>0.18</td>
<td>0.184</td>
</tr>
<tr>
<td>R Square change</td>
<td>0.004</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: ***, ** and * represent the significance level at 1%, 5% and 10% respectively

5.2.3 Interaction Effect between Functional Heterogeneity and Corporate Governance on Firm Performance

H₄: The relationship between corporate governance and firm performance is not stronger when the functional heterogeneity is higher as opposed to when it is lower in Chinese listed companies.

Table 5.9 and 5.10 presented the regression results for the moderating effect of functional heterogeneity on the relationship between corporate governance and performance; Blau’s index was used to measure the degree of function heterogeneity. Using ROE as a proxy to measure the financial performance in Chinese listed companies, Model 3 in Table 5.9 showed that function heterogeneity negatively (coefficient=-0.128) and significantly (t-value=-2.141) moderated the effectiveness of corporate governance to improve financial performance in China. Thus, Hypothesis H₄ was supported. Similarly, the research used the profit margin as a proxy to measure the financial performance and tested the interaction effect between corporate governance and function heterogeneity on firm performance. Model 3 in Table 5.10 indicated that the interaction between function heterogeneity and corporate governance is negative (coefficient=-0.005, t-value=-0.818), but not significant.
Table 5.9  **Moderated Regression Analysis Results: Functional Heterogeneity as a Moderator.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dependent Variable: ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model1</td>
</tr>
<tr>
<td>Intercept</td>
<td>-0.015</td>
</tr>
<tr>
<td></td>
<td>(-0.185)</td>
</tr>
<tr>
<td>Corporate governance index(CGI)</td>
<td>0.015***</td>
</tr>
<tr>
<td></td>
<td>(2.713)</td>
</tr>
<tr>
<td>Functional heterogeneity</td>
<td>-0.147***</td>
</tr>
<tr>
<td></td>
<td>(-3.291)</td>
</tr>
<tr>
<td>Functional heterogeneity*CGI</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Log Assets</td>
<td>0.019**</td>
</tr>
<tr>
<td></td>
<td>(2.311)</td>
</tr>
<tr>
<td>Debt/assets</td>
<td>-0.103***</td>
</tr>
<tr>
<td></td>
<td>(-3.734)</td>
</tr>
<tr>
<td>R Square</td>
<td>0.024</td>
</tr>
<tr>
<td>R Square change</td>
<td></td>
</tr>
</tbody>
</table>

Table 5.10  **Moderated Regression Analysis Results: Function Heterogeneity as a Moderator.**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Dependent Variable: Profit Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.048</td>
</tr>
<tr>
<td></td>
<td>(0.569)</td>
</tr>
<tr>
<td>Corporate governance index(CGI)</td>
<td>0.009</td>
</tr>
<tr>
<td></td>
<td>(1.611)</td>
</tr>
<tr>
<td>Functional heterogeneity</td>
<td>-0.053</td>
</tr>
<tr>
<td></td>
<td>(-1.171)</td>
</tr>
<tr>
<td>Functional heterogeneity*CGI</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Log Assets</td>
<td>0.024***</td>
</tr>
<tr>
<td></td>
<td>(2.859)</td>
</tr>
<tr>
<td>Debt/assets</td>
<td>-0.332***</td>
</tr>
<tr>
<td></td>
<td>(-11.967)</td>
</tr>
<tr>
<td>R Square</td>
<td>0.175</td>
</tr>
<tr>
<td>R Square change</td>
<td></td>
</tr>
</tbody>
</table>

*Note:***,** and * represent the significance level at 1%, 5% and 10% respectively*
5.2.4 Interaction Effect between Average Tenure and Corporate Governance on Firm Performance

\(H_5\): The relationship between corporate governance and firm performance is not stronger when the average tenure is higher as opposed to when it is lower in Chinese listed companies.

Using return on equity as a proxy to measure the performance, this study examined the moderating effect of average tenure on the relationship between corporate governance and firm performance. Model 3 in Table 5.11 presented the regression result for this hypothesis and indicated that the interaction between corporate governance and average tenure has a non-significantly positive impact on financial performance in Chinese listed companies. Thus, this hypothesis was not supported.

Similarly, using profit margin as a proxy to measure the performance, this hypothesis predicted that average tenure will moderate the relationship between corporate governance and performance. However, the results (see Table 5.12) showed a negative (coefficient=-0.011) and significant (t-value=-2.92) moderating effect of average tenure on the relationship between corporate governance and firm performance. That is, the result indicated that average tenure reduces the strength of the positive relationship between corporate governance and firm performance. Thus the hypothesis \(H_5\) is acceptable.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dependent Variable: ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model1</td>
</tr>
<tr>
<td>Intercept</td>
<td>-0.015</td>
</tr>
<tr>
<td></td>
<td>(-0.185)</td>
</tr>
<tr>
<td>Corporate governance index(CGI)</td>
<td>0.015***</td>
</tr>
<tr>
<td></td>
<td>(2.828)</td>
</tr>
<tr>
<td>Average tenure</td>
<td>-0.002</td>
</tr>
<tr>
<td></td>
<td>(-0.538)</td>
</tr>
<tr>
<td>Average tenure* CGI</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Log Assets</td>
<td>0.019**</td>
</tr>
<tr>
<td></td>
<td>(2.311)</td>
</tr>
<tr>
<td>Debt/assets</td>
<td>-0.103***</td>
</tr>
<tr>
<td></td>
<td>(-3.734)</td>
</tr>
<tr>
<td>R Square</td>
<td>0.024</td>
</tr>
<tr>
<td>R Square change</td>
<td></td>
</tr>
</tbody>
</table>
Table 5.12  Moderated Regression Analysis Results: Average Tenure as a Moderator.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Dependent Variables: Profit Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.048</td>
</tr>
<tr>
<td></td>
<td>(0.569)</td>
</tr>
<tr>
<td>Corporate governance index(CGI)</td>
<td>0.009</td>
</tr>
<tr>
<td></td>
<td>(1.57)</td>
</tr>
<tr>
<td>Average tenure</td>
<td>-0.005</td>
</tr>
<tr>
<td></td>
<td>(-1.56)</td>
</tr>
<tr>
<td>Average tenure* CGI</td>
<td>-0.011***</td>
</tr>
<tr>
<td></td>
<td>(-2.92)</td>
</tr>
<tr>
<td>Log Assets</td>
<td>0.024***</td>
</tr>
<tr>
<td></td>
<td>(2.859)</td>
</tr>
<tr>
<td>Debt/assets</td>
<td>-0.332***</td>
</tr>
<tr>
<td></td>
<td>(-11.967)</td>
</tr>
<tr>
<td>R Square</td>
<td>0.175</td>
</tr>
<tr>
<td>R Square change</td>
<td></td>
</tr>
</tbody>
</table>

Note: ***, ** and * represent the significance level at 1%, 5% and 10% respectively

5.2.5 Interaction Effect between Tenure Heterogeneity and Corporate Governance on Firm Performance

\( H_6: \) The relationship between corporate governance and firm performance is not stronger when the tenure heterogeneity is higher as opposed to when it is lower in Chinese listed companies.

Using the coefficient of variation as a proxy to measure the tenure heterogeneity, this study examined whether tenure heterogeneity moderated the relationship between corporate governance and performance measured by the return on equity. The results as summarized in Table 5.13 indicated that there is statistically significant (t-value=-1.71) and negative (coefficient=-0.038) interaction between corporate governance and tenure heterogeneity. Similarly, in order to determine the direction of the hypothesis relationships, this study also conducted the regression analyses with an interaction between corporate governance and tenure heterogeneity using profit margin as a measure of performance. Model 3 in the Table 5.14 indicated that the tenure heterogeneity negatively (coefficient=-0.043) and significantly (t-value=-1.916) moderates the effectiveness of corporate governance on performance; thus, hypothesis \( H_6 \) was supported.
Table 5.13  **Moderated Regression Analysis Results: Tenure Heterogeneity as a Moderator.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dependent Variable: ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model1</td>
</tr>
<tr>
<td>Intercept</td>
<td>-0.015 (0.185)</td>
</tr>
<tr>
<td>Corporate governance index(CGI)</td>
<td>0.015*** (2.841)</td>
</tr>
<tr>
<td>Tenure heterogeneity</td>
<td>-0.014 (-0.775)</td>
</tr>
<tr>
<td>Tenure heterogeneity* CGI</td>
<td>-0.038* (-1.71)</td>
</tr>
<tr>
<td>Log Assets</td>
<td>0.019** (2.311)</td>
</tr>
<tr>
<td>Debt/assets</td>
<td>-0.103*** (-3.734)</td>
</tr>
<tr>
<td>R Square</td>
<td>0.024</td>
</tr>
<tr>
<td>R Square change</td>
<td></td>
</tr>
</tbody>
</table>

*Note:***, ** and * represent the significance level at 1%, 5% and 10% respectively*  

Table 5.14  **Moderated Regression Analysis Results: Tenure Heterogeneity as a Moderator.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dependent Variable: Profit Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.048 (0.569)</td>
</tr>
<tr>
<td>Corporate governance index(CGI)</td>
<td>0.009 (1.639)</td>
</tr>
<tr>
<td>Tenure heterogeneity</td>
<td>-0.018 (-0.959)</td>
</tr>
<tr>
<td>Tenure heterogeneity* CGI</td>
<td>-0.043* (-1.916)</td>
</tr>
<tr>
<td>Log Assets</td>
<td>0.024*** (2.859)</td>
</tr>
<tr>
<td>Debt/assets</td>
<td>-0.332*** (-11.967)</td>
</tr>
<tr>
<td>R Square</td>
<td>0.175</td>
</tr>
<tr>
<td>R Square change</td>
<td></td>
</tr>
</tbody>
</table>

*Note:***, ** and * represent the significance level at 1%, 5% and 10% respectively*
Chapter 6

Discussion and Conclusions

The current turmoil in financial markets is regarded as the most serious crisis since the Great Depression and leads some scholars and policy makers to re-examine the weakness or failure of corporate governance from a comprehensive perspective. However, as Cha (2001) indicated, we must recognize that the promulgation of more rules and regulations alone would not be sufficient to improve the quality of corporate governance. Therefore, the financial crisis encourages us to think about the improvement of the relationship between corporate governance and financial performance in a new way and reminds us to take new steps to allow corporate governance to return to effectiveness and efficiency.

Hence, based on a sample of 155 listed firms on the Shanghai Stock Exchange, this study has constructed a corporate governance index from the perspectives of ownership structure and board characteristics to empirically examine the relationship between corporate governance and financial performance. Furthermore, the research investigated an integrated model that takes into account the moderating role of directors’ demographic characteristics in corporate governance practices and assessed the interactive effects of corporate governance and directors’ demographic characteristics on financial performance in Chinese listed companies. First, the results are consistent with those of western research and indicated that the association between corporate governance and financial performance is significantly positive in China. Second, the findings suggest that heterogeneity of directors’ demographic characteristics can play an important moderating role in the link between corporate governance and financial performance.

To sum up, the empirical evidences show some interesting results regarding the effectiveness of corporate governance and the moderating role of the directors’ demographic characteristics. This section will discuss the findings in detail as well as their implications for academic research and for practitioners.

6.1 Corporate Governance

First, this study explored the relationship between corporate governance and financial performance in Chinese listed firms, and hypothesized a significant positive relationship between corporate governance and financial performance. Thus, the research combined ownership structure and board structure into a corporate governance index to evaluate the
quality of corporate governance and found that the hypothesis is supported in Chinese listed companies. That is, my findings indicate that there is a positive and significant association between good corporate governance and financial performance in Chinese listed firms.

Secondly, the governance index in this research is consisted of four indicators: board size, independent director ratio, block shareholders’ holding and CEO duality, however, the study found that these governance indicators have different effects on financial performance in China compared with those in developed countries. Therefore, the findings shed the light on the competing interpretations of the academic community and suggested that differences in corporate governance structure should reflect the trade-off between the benefits of increasing monitoring and the costs of such monitoring. In addition, the results should also be consistent with the view that the corporate governance can reflect endogenous and efficient adjustments to the firm’s environment (Boone & Field, 2007).

6.1.1 Corporate Governance and Firm Performance

Based on the corporate governance index, this study finds that there is a positive and significant relationship between corporate governance and firm performance in Chinese listed companies which is consistent with western scholars’ views on the function of corporate governance in the organization. That is, the constituents of firms stand to gain or lose greatly depending on the quality and nature of corporate governance because corporate governance acts as the structure and process by which an organization’s assets and activities are overseen (Fama, 1980; Fama & Jensen, 1983b, 1983c; D. C. Hambrick et al., 2008). Meanwhile, the results also showed that the corporate governance index is successful in assessing the quality of corporate governance in China’s listed companies.

Furthermore, the findings in this study have emphasised that there has been the significant progress in China’s corporate governance system over the past 30 years. First, the findings show that corporate governance in China has gradually acquired most of the necessary and successful components of corporate governance in developed countries, because the basic structure of the corporate governance index is consistent with the theoretical framework and practice experienced in developed countries and showed that good corporate governance can result in better decision making and then better financial performance in Chinese listed companies. Therefore, according to the Deloitte survey in 2009, most surveyed Chinese companies pursued reforms of governance practices not only to meet regulatory requirements but also to meet their company’s long-term development needs. More specifically, the survey showed that 95% of companies see enhancing their company’s quality of management as a
motive for improving corporate governance; 71% of companies wish to improve decision-making as a motive for the pursuit of improved corporate governance; another 59% and 43% of surveyed companies see corporate governance as a way to increase firm value and to gain competitive edge, respectively (Deloitte, 2009).

Second, the goal of China’s economic reform is to replace the centrally planned system with a socialist market economy with China’s characteristics in terms of the decision issued by CPC Central Committee in November 1993. Toward achieving the goal, Chinese listed companies have considered an array of policies to perfect the framework of Chinese corporate governance because these finding indicated that each policy cannot take account into all crises of corporate governance, and has its own limits and its potential adverse effects under the changing conditions in China. As Zhang, General Manager of the Shanghai Stock Exchange, emphasised (Zhang, 2008), the quality of corporate governance should be improved from a variety of perspectives including the behaviour of controlling shareholders, related party transactions and transparency in China’s listed companies. Specifically, listed companies should establish a strong policy framework that not only regulate the controlling shareholders’ behaviour such as ownership management, M&A and related party transactions, but also strengthen the directors’ responsibility for the information disclosure and strategic decision making.

6.1.2 Board Size

As mentioned above, board size is viewed as an important variable that affects decision making in the boardroom and then effectiveness of corporate governance. However, there is still a debate on the ideal size of the board in the western countries. At the same time, the empirical results relating to the effect of board size on financial performance are also mixed. Thus, this study provides some dispute resolutions for the effect of board size on financial performance in China. That is, this finding showed that there is a reverse U-shape relationship between board size and financial performance in Chinese listed companies; specifically, the board range from nine and eleven members is positively related to financial performance, in the meantime, there is no relationship between board range below nine and above eleven and financial performance. the potential explanation suggests that the optimal board size is the balance between incremental cost of communication of decision making and the benefits of more experience, knowledge and better advice for the quality of decisions; on the other hand, the board size also reflects a trade-off between the firm-specific benefits of increased monitoring and the cost of such monitoring (T. Eisenberg et al., 1998b; Yermack, 1995).
6.1.3  **Independent Directors**

The results indicate that the independent director ratio is not significantly related to firm performance, which is inconsistent with the previous findings of western scholars. Specifically, based on agency theory, the western scholars suggest that appointing more independent directors can protect the interests of shareholders. In China, the reform of corporate governance of Chinese listed companies has learned from the experience of developed countries for reference and also established the independent director mechanism according to the Guidelines for introducing independent directors to the board of directors of listed companies issued by CSRC in 2001.

However, this study found that the relationship between the proportion of independent directors and financial performance is not significant and negative in Chinese listed companies; the potential reasons are that the appointment process and role of independent directors in China is different from those in U.S. and other western countries. That is, as Peng (2000) indicated, many independent directors in the listed companies built their careers at Chinese traditional state-owned companies and have not internalized the need for effective board control. As a result, they are only certain cosmetic changes in the composition of boards, and cannot influence the effectiveness of the board. That is, as Laura Cha (Cha, 2001), the former vice chairwoman of CSRC, said, the transformation of corporate governance is more in form than in substance.

Therefore, this study proposes that the process of selecting independent directors should not be influenced by the controlling shareholders or the government; that is, the board should select independent directors without reference to the controlling shareholders and government or those who will side with them in order to enhance the independence of the board and underpin its effectiveness in Chinese listed companies.

6.1.4  **Block Shareholders’ holdings**

Some Chinese scholars insist that, if a firm’s ownership is dispersed, shareholders will have adequate incentive to monitor the management and then influence firm performance. However, the results showed that block shareholders’ holding had a significant positive effect on firm performance in Chinese listed firms, which is consistent with the western view that large shareholders have a greater incentives and more resources to monitor the behaviour of the managers in order to gain the long-term profit from their investments (Zeckhauser & Pound, 1990).
Furthermore, the results indicated that corporate governance practice within any single country should meet the needs of the country development and be suitable in local conditions, because the differences in culture, economic system and legal framework lead to differences in the corporate governance structure across countries (Fan, Wong, & Zhang, 2007). Therefore, the concentrated ownership in listed companies can prevent the corporate assets from being used for purpose that are detrimental to the interests of the minority investors in China because the legal protection of shareholders’ interests is weak in emerging and transitional countries (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1999; Shleifer & Vishny, 1997b).

6.1.5 CEO Duality

In developed countries, there is still a debate about the impact of CEO duality on firm performance. however, this study suggests that we should consider a combination of mechanisms of leadership structure based on the firm characteristics, because the leadership structure not only can restore the advantage of the separation of CEO and chairman to strength directors’ ability to monitor CEO’s decision control, but also can reduce information, agency and incentive costs which is caused by the separation of CEO and chairman (Fama & Jensen, 1983a).

Specifically, this study set up the CEO duality indicator in terms of the asset size of the firm, because a single leadership structure can improve the performance in a small firms; conversely, the separation of the CEO and board chair can mitigate the agency cost in large firms. Thus this study found that the relationship between the CEO duality indicator and financial performance is positive, but not significant. The result indicated that CEO duality was related to the financial performance in Chinese listed companies, and cannot effectively influence the financial performance in China’s listed companies. The potential reason may be that both the CEO and the chairman who normally are appointed by the government or the Chinese Communist Party (CCP) may have extensive ties with the directors and government, and must respond to the requirements from the government and the CCP while making decisions and cannot view the interests of shareholders as the most important objectives in firms (Peng et al., 2007). As a result, board of directors cannot monitor the behaviour of CEO effectively.
6.2 Moderating Role of Director’s Demographic Characteristics

In China, the importance of upper echelon theory and directors’ demographic characteristics has been recognized by scholars and policy makers. However, few scholars considered the interactive effect between directors’ demographic characteristics and corporate governance on firm performance in Chinese listed companies. To achieve this, this research has not only focused on how the structure of corporate governance affects financial performance but also broadened the focus of current research to consider the moderating role of the demographic characteristics of board members. Therefore, the research proposed an initial investigation into the important interactive effect between corporate governance and directors’ demographic characteristics on firm performance in Chinese listed companies.

Consequently, the study found that heterogeneity in the demographic characteristics of board members can influence the strength of the relationship between corporate governance structure and firm performance. Specifically, the heterogeneity of function and tenure and average age has a negative effect on the relationship between governance and performance. In addition, the research assessed the moderating effect of age heterogeneity and found that interactive effect of age heterogeneity and corporate governance is positive; finally, the result showed that the interactive effect of average tenure and corporate governance is mixed. In summary, these results support our expectation that the directors’ demographic characteristics are important moderators of the hypothesized relationship between corporate governance and financial performance in Chinese listed companies.

There are reasons to explain why the demographic characteristics of directors have important effects on the relationship between corporate governance and firm performance in China. As discussed above, corporate governance acts as the structures and processes that exist in oversight roles and responsibilities to influence the financial performance in Chinese firms (D. C. Hambrick et al., 2008); this study has found a significantly positive relationship between corporate governance index and corporate performance. However, the level of effectiveness of corporate governance in listed companies will be influenced not only by the improvement of corporate governance structure, but also by the impacts of the cognitive biases, values and perception of directors on the monitoring and advisor role of board of directors in board process process. Furthermore, upper echelon theorists (Dutton & Duncan, 1987; D. C. Hambrick et al., 1996) used demographic heterogeneity as proxies for the biases, values and interests of directors and indicated that heterogeneity in demographic characteristics will create diverse information collection, interpretation and solution generation and then
influence the interaction processes on the board and at last the relationship between corporate governance and firm performance. The following subsections will in detail discussed the findings of the moderating effect of demographic heterogeneity.

### 6.2.1 Average Age as a Moderator

Consistent with the hypothesis regarding the moderating effect of average age on the relationship between corporate governance and firm performance, the research found that corporate governance is more negatively related to the performance measured by return on assets and profit margin when the average age of directors is high. That is, this finding showed that the lower average age of directors can strengthen the relationship between corporate governance and performance in Chinese listed companies.

As some western scholars (T. S. Cho & Hambrick, 2006; K. G. Smith et al., 1994a) demonstrated, directors with different ages may have different cognition and values to generate the differences in behaviour and attitudes toward strategic decisions. In the Chinese case, this study indicated that firms should adopt the low average age of the board, because the board not only tends to increase the use of new information, skills and knowledge in order to act quickly in response to environmental demands, but also avoids becoming conservative in the business strategy that consequently lead to the negative consequences of decision-making when China is transforming from a planned economy toward a market economy (Daboub et al., 1995; Wiersema & Bantel, 1992).

### 6.2.2 Age Heterogeneity as a Moderator

This study found that heterogeneous age has a positive moderating effect on the strength of the relationship between corporate governance and firm performance. However, the mean and standard deviation of heterogeneity in age are only 0.16 and 0.04 respectively, therefore, a potential explanation for this result may be that low age heterogeneity will enhance the effective pattern of communication and the level of social integration and then contribute to the improve the quality of decision-making in the emerging and transitional economy of China.

Additionally, this study also found there are significantly difference between low level of heterogeneous age and high level of heterogeneity of function and tenure, and indicated that the benefits of board diversity in demographic characteristics will taper off as heterogeneity increases, because a high heterogeneous board will generate the differences in behaviour and attitudes toward strategic decisions based on their different cognition and values, which will
make their communications to become increasing strain and conflict laden in the boardroom (Margarethe & Karen, 1992). Therefore, this study also demonstrates that, a moderate heterogeneous board not only can improve the frequency of communication to reduce the cognitive conflict and increase the effort norms within the board, but also may be able to take advantage of innovative suggestion to improve the use of knowledge and skills based on their different experience (T. S. Cho & Hambrick, 2006; K. G. Smith et al., 1994a).

6.2.3 **Functional Heterogeneity and Tenure Heterogeneity as Moderators**

This study found that the positive relationship between corporate governance and financial performance is weaker when the heterogeneity of directors’ characteristic is high as opposed to when it is low. Specifically, the findings demonstrated that a high degree of heterogeneity in the functional track and tenure of board members will reduce the strength of linkage between corporate governance and financial performance in Chinese listed companies, which is consistent with the argument that heterogeneity of demographic characteristics will lead to greater differentiation among board members and reduce the possibility of sharing resources and coordinating in a cohesive manner in the transitional and emerging economy of China. That is, heterogeneity in function and tenure will increase the cognitive conflict and reduce the effort norms which will influence the efficiency of strategic decision in the boardroom. Therefore, this study suggested the board with homogeneous demographic characteristics can work efficiently together, is more flexible, and is more productive than where there is heterogeneous demography within the board of directors (Alexiev, Jansen, Van den Bosch, & Volberda, 2010).

In addition, the negative interaction effect also indicates that it is critical for business in China to understand and properly utilize Guanxi in order to gain an edge over competitors. The Guanxi is a Chinese tradition cultural characteristic and refers to the concept of drawing on a web of connections to secure favours in personal and organizational relations in Chinese listed firms. Therefore, it has strong implications for interpersonal and interorganizational dynamics in Chinese society. (Park & Luo, 2001). This study indicated that high heterogeneity in function and tenure of the directors will negatively affect the extent of their Guanxi networking to reduce cooperation and govern relationships in Chinese listed companies. On the other hand, homogeneous function and tenure may strengthen the Guanxi to not only improve the cognitive conflicts and effort norms in board process, but also bridge gaps in information and resource flows between unlinked firms and between firms and important outside stakeholders (Burt, 1995).
6.2.4 Average Tenure as a Moderator

Similarly, the study also found that average tenure has a negative effect on the association between corporate governance and financial performance measured by profit margin. Conversely, the interaction effect between corporate governance and average tenure is non-significantly positive when the performance is measured by return on equity (ROE) in Chinese listed companies. This mixed result demonstrates that boards with long average tenure in China focus on how much profit the firm can generate with the shareholder equity, because the board members with long tenure expect to keep their private interests through the existing system of corporate governance and have persistence power to impede strategic change (Katz, 1982).

In contrast, boards with short average tenure will pay attention to the competition and then a high level of profit margin because they expect to break the behaviour and precedents and change the strategy to adapt to their external changing environment (Bebchuk & Roe, 1999), that is, the study suggests that decreased average tenure within the board enable the board to confront the challenges and stimulate the firm’s change and renewal in order to cope with uncertainty in the environment and facilitates sustainable competitive advantage.

In addition, the board of directors in Chinese listed companies is set up in a similar way to the boards in the western countries; directors always have tenure contracts for three years that can be renewed after the contracts expires. However, because the ultimate control rights such as appointment and dismissal of directors still remain in the hands of the CCP and the government, the CCP and government can still have strong incentives to maintain their position in order to increase their interference through influencing the selection of directors. Thus, the another potential reason for the findings is that long-tenured boards have good relationship with the CCP and the government and focus on the return on equity in Chinese listed, because return on equity is adopted as an important measure to assess the financial performance in China by the CCP and the government.

6.2.5 Concluding Remarks

To summarize the above discussion, these findings also revealed the effect of environment on the directors’ demographic heterogeneity, and lends some weight to Sharfman and Dean’s (1991) discussion of the effect of environment on the activities and behaviours in the firm. Therefore, a number of studies indicated that heterogeneous demographic characteristics can generate alternatives to facilitate the decision-making, however, the study shows that a
homogenous demography has a positive moderating effect on the association between corporate governance and financial performance in the emerging and transitional economy of China, that is, increasing environmental uncertainty and reform in China requires that the board members should strengthen integration and co-operation to quickly respond to the environmental change and determine their strategy, because an unstable and complex environment will require the firm to remain flexible and adaptive to improve the cognitive conflicts and effort norms in order to reducing the costs of coordination.

In addition, the mixed impacts of these moderating variables have also revealed that political costs play an important role in Chinese corporate governance when the government is still the controlling shareholder in listed companies of China. Specifically, China’s government has launched a programme to decentralize the managerial decision rights of SOEs from the government to the firm level, however, this corporatization process, which is called privatization by western scholars, still prohibited the government from selling its controlling stake to other investors (Fan et al., 2007). Therefore, as Qian (1996) noted, government control leads to not only the high agency cost due to the lack of accountability in executives, but also the high political cost related to the political interference by the government. For instance, this study found that the most directors who are appointed by the government lack the specific experience and appropriate skills of business management in the state-owned firms. In addition, these findings also indicated that many government officers are selected as chairman and independent directors on the board, and are relatively weak in monitoring the behaviour of managers in state-owned listed companies, because they have good relationships with the government and state-owned shareholders, and do not consider maximizing the shareholder’s value as the most importance objective for the board of directors in Chinese listed companies. To summarize, the politically-connected directors have a negative impact on the relationship between corporate governance and firm performance.

6.3 Contributions

To date, the driving force of corporate governance reform is still to simply meet the regulatory requirements in China’s listed companies; however, the study encourages listed companies to take a more comprehensive approach to perfect their governance system. That is, this study conducts an initial probe to integrate the demographic characteristics of directors into the corporate governance system in order to enrich the conceptual framework of corporate governance and perfect the effectiveness of corporate governance. Therefore, these findings have made several contributions to the study of corporate governance. Firstly, the
study constructs a corporate governance index to evaluate the quality of corporate governance from the perspectives of ownership structure and board structure and build a link between corporate governance and financial performance in Chinese listed companies. Secondly, I establish a new conceptual model to enrich our understanding of corporate governance through integrating directors’ demographic characteristics into to the relationship between corporate governance and firm performance. Thirdly, the result shows that there is a positive and significant relationship between corporate governance and firm performance based on the corporate governance index; however, compared with those in western countries, this study also found that corporate governance indicators have different effects on financial performance in Chinese listed companies. Forth, the empirical study validated the moderating impact of directors’ demographic characteristics and contributes to the confirmation of the linkage between corporate governance, demographic characteristics and firm performance. At last, the research provides an initial integration approach to improve the effectiveness of corporate governance and suggests a more comprehensive understanding of the system of corporate governance because prior studies often ignored some important intervening variables that can have significant moderating impacts on the corporate governance system.

Specifically, the first contribution is that this study comprehensively examines the association between corporate governance and firm performance. Although a large number of researchers have taken into account a single specific aspect of corporate governance, this study applies a corporate governance index to assess the quality of corporate governance and focuses on the effect of overall corporate governance on financial performance from the perspective of ownership structure and board structure. More specifically, the CG index is a combination of four proxies of outcome of corporate governance in the dimensions of the ownership structure, board size, independent director ratio and CEO duality. As a result, first, this study establishes a corporate governance index to find the effectiveness of corporate governance in Chinese listed companies, secondly it provides a comprehensive perspective on understanding the significantly positive relationship and showed that mechanisms of corporate governance can be complementary to each other, at last, the evidences of the corporate governance index from China are also expected to be useful to other emerging economies that have a weak legal framework and weak system of property rights protection.

The second contribution is that the mixed results of the governance indicators in Chinese listed companies emphasized that good corporate governance should meet the needs of its institutional conditions and enviroment. That is, an arrangement of corporate governance must be situated in a specific historical, social and organizational context because institutional
differences give rise to governance arrangements that are suitable, not in a universal sense, but rather specifically for the individual firm and the context in which it is situated (Qian, 2000).

More specifically, the results show that board size and block shareholders’ holdings were significantly positive with the financial performance. However, the results do not support the impact of the CEO duality and independent directors on the financial performance, and are not consistent with prior results of some developed countries, these findings demonstrate that the current reform of corporate governance in China should not adopt the “one-size-fits-all” approach to impose developed countries’ models for Chinese corporate governance (Qian, 2000). The potential explanation is that, the China’s government not only acts as regulator to monitor the listed companies, but also as the block holder to exercise shareholder control rights in the process of the transition from a centrally planned economy to a decentralized market economy.

The third contribution of this study is that the research establishes an integrated research model to investigate that there is an important moderating effect of the demographic characteristics of directors on the relationship between corporate governance and financial performance measured by return on assets and profit margin. Specifically, based on the upper echelon theory, the study not only explains that directors’ demographic characteristics can influence the effectiveness of corporate governance through integrating upper echelon theory into conventional corporate governance framework, but also emphasize that the homogeneous demography has a significant impact on the level of relationship between Chinese corporate governance and firm performance.

Meanwhile, these findings also explained that it is necessary for government authorities to issue a series of regulations and policies to strength the importance of the demographic characteristics of directors in corporate governance. For instance, Code of Corporate Governance for listed companies in China emphasised that the board of directors will possess adequate professional background (including: knowledge, skills and qualities) to perform their duties; in addition, the Code also emphasis that independent directors must bear the responsibilities of due diligence toward the listed company and perform their duties in accordance with laws and regulations (CSRC, 2002).

The fourth contribution of this study is that, consistent with hypotheses regarding the moderating effect of directors’ demographic characteristics on the relationship between
corporate governance and performance, the empirical results further validates the moderating impact of directors’ demographic characteristics (including: average age, age heterogeneity, functional heterogeneity, average tenure and tenure heterogeneity) on the relationship between corporate governance and financial performance and indicates that interaction between directors’ demographic heterogeneity and corporate governance can strongly impact financial performance in Chinese listed companies. In sum, the empirical findings contribute to the confirmation of the linkage between corporate governance, demographic characteristics and firm performance.

The fifth contribution is that the integrated model not only enrich the existing academic framework of corporate governance through combining demographic characteristics into corporate governance, but also offer us with a new way for further integration of other important intervening factors into corporate governance. That is, the research provides an initial integration approach to improve the effectiveness of corporate governance and suggests a more comprehensive understanding of the system of corporate governance because previous studies often ignored some important intervening variables that can have significant moderating impacts on the effectiveness of corporate governance.

In conclusion, despite the perception of corporate governance and the theoretical concept of upper echelon theory are introduced from western developed countries, this study suggested that China cannot simply and fully copy the whole framework of corporate governance in developed countries, but should strength the reform and innovation in corporate governance system based on institutional conditions and environment in China. Towards the goal, China’s listed companies still confront a number of challenges ahead. Next, this study provides new insights into the reform of Chinese corporate governance.

6.4 Policy Implications

An integrative and comprehensive view of the moderating effect of demographic characteristics on the relationship between corporate governance and financial performance has emerged from this study; at the same time, several important policy implications can be drawn from this synthesis.

From the micro perspective, firstly, the findings suggested that the government should further clarify directors’ exact rights and responsibilities to increase the effectiveness of the existing laws and regulations framework of corporate governance. More specifically, policymakers and academics should further improve the framework of laws and regulations to provide the
detailed and clear requirements for the key functions, roles and responsibilities of the boards in China, as a result, these policies should not only promote directors to develop their independent thinking and exercise their rights to freedom of judgements, but also remind them to recognize the consequences of their decisions in Chinese listed firms, briefly, these policies for Chinese listed companies should keep the balance between directors’ responsibility and right in order to improve the effectiveness and efficiency of board of directors.

For example, the revised Company law of China only defined the basic legal responsibility and right of the board, such as the appointment of general managers and assessment of important strategies. Similarly, The Code of Corporate Governance for listed companies in China only described the simple duties and responsibilities of the directors, that is, directors should perform their duties for the best interests of the firm and all the shareholders, directors shall abide by relevant laws, regulations, rules and the company’s articles of association. However, compared with the OECD principle of corporate governance (2004), the policy makers should consider adopting clearly articulated rules and regulations to shape the behaviour of board member and achieve the effectiveness of corporate governance as follows,

1. the board should review not only strategic decision but also risk management that should include corporate strategy, the plan of action, risk policy, annual budgets, setting performance objectives and monitoring corporate performance;

2. the board shall align key executives and board remuneration with the longer term interests of the company and its shareholders; the board shall monitor the conflict of interests of management, board members and shareholders including the misuse of corporate assets and abuse in related party transactions;

3. directors shall ensure the integrity of corporation’s accounting and financial reporting system, otherwise, directors will fail to perform their functions and cannot ensure the board’s accountability to the company and the shareholders (OECD, 2004).

Secondly, China should integrate directors’ demographic characteristics into the evaluation system of the board of directors in order to strength the implementation of corporate governance, because demographic characteristics are important moderating variables that influence the quality of information processing and strategic decisions within board of directors and then the effectiveness of corporate governance.
Until recently, the primary focus of Chinese scholars and policymakers is still about how to improve the effectiveness of corporate governance through optimizing the corporate governance structure, however, this study indicated that the effectiveness of corporate governance is driven not only by the improvement of governance structure, but also by the heterogeneity in demographic characteristics of directors. Therefore, China should develop an integrated policy framework of corporate governance that combines the corporate governance structure with the specific requirement for the directors’ demographic characteristics (including: age, functional track, knowledge and tenure) in order to strengthen the relationship between corporate governance and firm performance. Especially, the State-Owned listed companies should focus on the evaluation of the management capability and skills of directors (such as strategic decision-making, finance and law), because these listed companies often cannot consider importance role of the board which is responsible to determines the strategic direction and monitor the behaviour of managers, and always appointed some government officer to be members of the board, although these officers lack sufficient management knowledge and skills, or confidence to serve as directors in the listed companies (J. Wu, 1994).

Thirdly, China’s listed companies should strengthen the training and education of the directors to enhance the board’s functions and directors’ skill and knowledge. In the developed countries, it is necessary to professionalize the director in listed companies in order to improve the efficiency and effectiveness of corporate governance. For instance, as the Singapore Institute of Directors (2002) indicated, an effective board is central to good corporate governance and skill, moreover, the knowledge of directors is central to the board effectiveness, therefore, the institute introduced a company directors’ course that included four modules: the company and corporate directorship, getting the best from your board, strategic management and finance, and consequently hopes to promote the professional development of directors and corporate leaders and encourage the highest standards of corporate governance and ethical conduct. However, although the Code of Corporate Governance of Chinese listed companies (CSRC, 2001) has suggested that directors should attend relevant training to learn about the rights, obligations and duties of a director, this study suggests that China should draw on the successful experience in developed countries to build an independent institute of company directors to provide the specific training for directors, as a result, the regulators and listed companies can comprehensively assess the quality of the candidates of directors and can systematically identify the directors based on the market principles.
Fourth, Chinese enterprises should adopt a Code of Ethics and Conduct for Directors to regulate the behaviour of directors. So far, China’s listed companies specify the director’s responsibilities and duties only in terms of the company law and relevant regulations. However, these current law and regulations cannot systematically set out the responsibilities and duties of directors on basis of business ethics and conduct, and then not only lead to a series of moral problems including moral hazard and adverse selection, but also influence the level of cognitive conflict and effort norms within interaction process of board members.

However, in developed countries, listed companies always issued ethics guidelines to define the conduct of members of board in the business (including: personal conduct, the protection of firm’s asset, obligations in conducting firm’s business with other people and organization, conflicts of interest and other considerations affecting the firm) and can effectively regulate the behaviour of board members (IBM, 2009). Therefore, the thesis suggests that the listed companies should learn from the successful experience of developed countries and issue a code of ethics and conduct to control the type of board behaviour in order to improve financial performance and the long-term sustainability.

From a macro perspective, first, China needs an optimal relationship among government, state-owned supervision commission, listed companies, board of directors and managers in order to improve the effectiveness and efficiency of corporate governance system. So far, China still has a multiple-tier governance monitoring system that cannot keep direct and clear linkages between principal and agents as follows,

![Figure 6.1 The Governance Control Line of Chinese SOE](image)

As a result, the system will negatively influence the corporate governance in Chinese listed companies, because the board in the listed companies often miss their target and cannot adopt the effective policies and principles to serve the interests of shareholders. Therefore, the research imply that China should further shorten the control line of the Chinese SOE to clarify the relationship between government, state-owned supervision, SOE and listed companies, and to specify responsibilities and rights of shareholders, the board of directors and managers.
Second, this study suggests that corporate governance in China should make a transition toward more formal methods of the reform of corporate governance. That is, the reform of corporate governance should be a process to drive from relationship-based governance to evolve eventually into rule-based governance. More specifically, Li (2003) provide a detailed explanation for this suggestion from a cost perspective. Before rule-based governance is established, organizations mainly use the relation-based governance whereby personal agreements between two parties are based on their mutual relationship and relies on local information and involves few fixed costs, but significant marginal costs, as a result, the relation-based governance is non-transparent and incompatible.

However, with the expansion of business, the average costs of relation-based governance will increase due to the rising marginal costs of private monitoring, therefore, scholars suggested that organizations should adopt the rule-based governance because it largely depends on public information and involve large total fixed transaction costs including the costs of drafting, interpreting and implementing contracts, but few marginal costs. The average cost of rule-based governance will decrease owing to the large fixed costs and negligible marginal costs. In China, listed companies still largely depend on relationship-based governance because of the impact of the Chinese tradition culture and institutions’ enviroment on corporate governance. However, China is a transition and emerging economy with rapid business expansion; thus, successful corporate governance requires a important shift from relation-based to rule-based governance in order to meet the demand of investors and regulators (J. S. Li, 2003).

To summarize the discussion above, as scholars (Bergh & Lawless, 1998; Rowley, Behrens, & Krackhardt, 2000) indicated, the effectiveness of corporate governance practices will depend on the threats and opportunities within a particular firm environment. Thus the findings show that some policies and regulations designed for western economies may be ineffective in emerging and transitional economy of China. For example, some board characteristics that prove the beneficial for listed firms in developed countries have not significantly positive effect on the financial performance in the transitional economy of China, because the ultimate control rights, such as selection and dismissal of directors and approval of important investment project, still remain in the hands of the CCP and the government. In addition, this study also find that the dispersed ownership structure as a solution to the principal-agent problem in U.S. and U.K. can not improve the effectiveness of corporate governance in Chinese listed companies, the reasons are that these governance mechanisms are characterized by strong securities markets, rigorous disclosure standards,
high share turnover, and high market transparency in those developed countries (Coffee, 2005). Therefore, in order to improve corporate governance in China, scholars and policymakers must pay close attention to China-specific level of economic and institutional development in comparison with developed countries and takes different measures to improve the corporate governance framework (Qian, 1996).

Furthermore, China should focus on the role of the macro-level institutional in improving the framework of corporate governance, and change their corporate governance from a governance model of political control to a market-determined governance model in order to minimize the influence of the administrative function of government and the traditional planned economic system, because some unique institutional features which are specific to the transitional and emerging economy of China have shaped the development of Chinese corporate governance. Specifically, as discussed above, the CCP and the Chinese government not only affect the decision making through appointment and dismissal of directors and CEO, but also determine the ownership transformation through concentrated ownership structure, as a result, the close relationship between the CCP, the government and listed companies extremely influence the independence of assets, business, human resources, and finance and organization structure and then affected the effectiveness of corporate governance in Chinese listed companies. Therefore, Chinese listed companies should reduce the interest conflict with both the CCP and the government through the separation of government and enterprise and improve the effectiveness of corporate governance by developing a market-determined model of corporate governance.

6.5 Limitations and Future Research

This study has examined the effect of corporate governance on the financial performance and interaction effects between corporate governance and demographic diversity. However, there are some limitations in this research. First, data are drawn from the SSE Index, which not only limits alternative explanations for performance and directors’ demographic characteristics, but also influence the general explanation of the findings of this research. In addition, the research gathers from secondary data to identify several critical demographics characteristics of directors in the Chinese listed companies, therefore this study can only make inferences regarding the effects of directors’ demographic heterogeneity on the relationship between corporate governance and financial performance. That is, future research needs to focus on data drawn from a comprehensive perspective to improve the explanation.
Secondly, the study integrated only four important variables of corporate governance structure: ownership structure, board size, board composition and board leadership structure, into the research framework. However, there is a variety of other important governance variables that have important effects on financial performance and are not included in this framework, such as ownership of directors and managers (Morck, 1988; Zahra, 1996), state-owned shares (Broadman, 1999), in Chinese listed firms. Briefly, these variables also offer another avenue for future study from other angles of corporate governance structure.

In addition, this study only investigated some directors’ demographic characteristics including age, functional track and tenure; however, other characteristics (such as education, gender and so on) might also strongly influence the relationship between corporate governance and firm performance. Furthermore, as Zahra and Pearce (1989) indicated, there are some common reasons for the inconsistent findings about the effect of the corporate governance structure on the firm performance:

1. Researchers often ignore the impact of the contextual factor, such as industry, organizational life cycle, and corporate strategy;
2. Researchers do not effectively consider the effect of interaction among board members on decision making; and
3. Scholars often emphasized univariate analytical approaches and consider board attributes in isolation and ultimately make comparisons and integration across studies difficult.

Therefore, there exists not only too many intervening individuals and processes between boards of directors and firm performance, but also too many potential contingency factors that might affect how boards can influence performance outcomes (Finkelstein, Cannella, et al., 2008). The future research should take account of other important intervening factors in order to develop this research model.

Thirdly, the study has assessed the interactive relationship between the demographic characteristics and corporate governance; however, I also acknowledge the possibility that demographic characteristics can influence the individual governance variables. For instance, the heterogeneity of age and functional track in the firm may affect the board size and independent direction ratio in the boardroom. Conversely, the ownership structure may not only have a strong effect on the board structure but also influences the level of board diversity including average age, heterogeneity of age, tenure and functional track. Therefore, future
research should take the interaction relationship of these variables into account in exploring the new measures to improve the effectiveness of corporate governance.

Fourthly, the interaction effect of the corporate governance structure and demographic characteristics on financial performance motivates us to further consider the impact of human behaviour in the future research. That is, previous researchers studied corporate governance based on the traditional paradigm that assumes rational behaviour and maximization of expected utility (Simon, 2000). However, the moderating role of the demographic characteristics in this study indicated that scholars and policy makers did not know what they did not know (Logan, 2009) and cannot think of all the possible outcomes (Dréze, 1978) in the field of corporate governance. Thus this study implies that they should further focus on the effect of psychological and organization factors in the future corporate governance research.

Finally, the research takes advantage of a special window of opportunity for corporate governance reform in China, because China is in the process of transition and gradually issued a large number of regulations and laws of corporate governance during the period 2004-2008. For example, the revised corporate law and Securities law came into force, the SASAC issued the Guidelines for central enterprise comprehensive risk management, the Shanghai Stock Exchange and Shenzhen Stock Exchange also released the Guidelines for the internal control of listed companies. Furthermore, in 2007, CSRC announced the information disclosure management measures. As a result, the government is gradually establishing the complete standards and framework of corporate governance in China. However, this study also shows that, although the governance mechanisms for Chinese listed companies are sufficiently developed, policymakers and scholars should further perfect the framework of corporate governance because mixed results indicated that the present policies and regulations of corporate governance still too principle and disorder to meet the needs of development of the firms, therefore, future research should comprehensively investigate the development of corporate governance and pay attentions to intervening factors that influence the association between corporate governance and financial performance in order to improve the framework of corporate governance.

6.6 Conclusions

2011 marked the thirty-third year of enterprise reform in China in the transition from a planned to a market economy; meanwhile, the lessons from the current financial crisis also show that reform of corporate governance should enter a new stage in China. Therefore, this
study suggest that academics and policy makers should not only comprehensively focus on the main problems in the patterns of corporate governance and relationships among the concepts of corporate governance, but also take new measures to perfect the governance system and develop an integrated framework of corporate governance to meet the demands of unique and country-specific governance environment in China.

From a theoretical perspective, previous research on corporate governance traditionally concerned the direct relationship between governance structure and firm performance, while ignoring intervening variables that significantly influence the level of this relationship. This study presents an integrated theoretical framework to investigate the moderating effect of demographic characteristics of directors on this relationship between corporate governance and firm performance. Specifically, as SEC Chair Mary Schapiro (2009) indicated, the current economic crisis has led many investors to raise serious concerns about the accountability and responsiveness of boards of directors to the interests of shareholders. Therefore, this thesis has extracted the important variables from the previous literature and enriched a theoretical framework to discuss the linkage among corporate governance, directors’ demographic characteristics and firm performance. In summary, when adding demographic characteristics, this study provide an important signal that a number of intervening variables seriously influence the strength of the relationship between corporate governance and firm performance.

From practice perspectives, this study not only found that corporate governance has a significantly positive impact on financial performance in Chinese listed firms, but also indicated that directors’ demographic characteristics can moderate the strength of the effect of corporate governance on firm performance. That is, the empirical research further suggested that the listed companies should pay more attention to the interaction between corporate governance and demographic characteristics in order to strengthen the relationship between corporate governance and firm performance. In summary, this study provides academics and practitioners a richer and more comprehensive understanding of the relationship between corporate governance and firm performance.

To conclude, although we still face a lot of challenges to improve the effectiveness of corporate governance system in China, I expect that this study may be viewed as an initial investigation of the interactive effect of corporate governance and demographic characteristics on firm performance; and represents an important step toward improving the effectiveness of corporate governance in Chinese listed firms. That is, it gives the
shareholders another important approach to protect their interests, creates a measure to detect behaviour of the board members and provide us with a new perspective for enhancing the knowledge and practice of corporate governance.
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## Appendix A

### A.1 Correlation Relationship

<table>
<thead>
<tr>
<th></th>
<th>ROE</th>
<th>profit margin</th>
<th>Board Size Indicator</th>
<th>Independent Director Ratio Indicator</th>
<th>Block Shareholders ‘holding Indicator</th>
<th>CEO Duality Indicator</th>
<th>CG Index(CGI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROE</td>
<td>1</td>
<td>0.333(**)</td>
<td>0.092(*)</td>
<td>-0.01</td>
<td>0.115(**)</td>
<td>0.049</td>
<td>0.119(**)</td>
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<td>Profit margin</td>
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<td>0.226(**)</td>
<td>0.116(**)</td>
<td>0.004</td>
<td>-0.121(**)</td>
<td>0.587(**)</td>
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<td>0.004</td>
<td>-0.109(**)</td>
<td>-0.081(*)</td>
<td>-0.421(**)</td>
<td></td>
</tr>
<tr>
<td>Independent Director Ratio Indicator</td>
<td>1</td>
<td>-0.109(**)</td>
<td>-0.081(*)</td>
<td>0.237(**)</td>
<td>0.461(**)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block Shareholders ‘holding Indicator</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>0.575(**)</td>
<td></td>
</tr>
<tr>
<td>CEO Duality Indicator</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CG Index(CGI)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</table>

**Note:**
- **:** Significant at the 0.01 level.
- *:** Significant at the 0.05 level.
<table>
<thead>
<tr>
<th></th>
<th>Average Age</th>
<th>Age Heterogeneity</th>
<th>Function Heterogeneity</th>
<th>Tenure Heterogeneity</th>
<th>Average Tenure</th>
<th>LOG Asset</th>
<th>Debt/assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROE</td>
<td>0.056</td>
<td>-0.043</td>
<td>-0.121(**</td>
<td>-0.027</td>
<td>-0.026</td>
<td>0.067</td>
<td>-0.130(**)</td>
</tr>
<tr>
<td>profit margin</td>
<td>0.165(**)</td>
<td>-0.02</td>
<td>-0.026</td>
<td>-0.015</td>
<td>-0.06</td>
<td>0.037</td>
<td>-0.406(**)</td>
</tr>
<tr>
<td>Board Size Indicator</td>
<td>-0.044</td>
<td>0.044</td>
<td>-0.002</td>
<td>0.096(*)</td>
<td>-0.067</td>
<td>-0.142(**)</td>
<td>-0.006</td>
</tr>
<tr>
<td>Independent Director Ratio Indicator</td>
<td>-0.02</td>
<td>-0.059</td>
<td>-0.072</td>
<td>-0.007</td>
<td>0.001</td>
<td>-0.136(**)</td>
<td>0.058</td>
</tr>
<tr>
<td>Block Shareholders’ holding Indicator</td>
<td>0.125(**)</td>
<td>-0.036</td>
<td>-0.017</td>
<td>-0.108(**)</td>
<td>-0.113(**)</td>
<td>0.127(**)</td>
<td>-0.088(*)</td>
</tr>
<tr>
<td>CEO Duality Indicator</td>
<td>0.257(**)</td>
<td>0.02</td>
<td>-0.018</td>
<td>-0.091(*)</td>
<td>0.043</td>
<td>0.553(**)</td>
<td>0.107(**)</td>
</tr>
<tr>
<td>CG Index(CGI)</td>
<td>0.164</td>
<td>0.002</td>
<td>-0.045</td>
<td>-0.041</td>
<td>-0.053</td>
<td>0.240(**)</td>
<td>0.05</td>
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<tr>
<td>Average Age</td>
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<td>0.011</td>
<td>0.093(*)</td>
<td>-0.059</td>
<td>0.07</td>
<td>0.457(**)</td>
<td>-0.109(**)</td>
</tr>
<tr>
<td>Age Heterogeneity</td>
<td>1</td>
<td>-0.167(**)</td>
<td>-0.002</td>
<td>0.097(*)</td>
<td>-0.074</td>
<td>-0.067</td>
<td></td>
</tr>
<tr>
<td>Function Heterogeneity</td>
<td>1</td>
<td>0.107(**)</td>
<td>-0.043</td>
<td>0.028</td>
<td>-0.035</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenure Heterogeneity</td>
<td>1</td>
<td>0.078(*)</td>
<td>-0.023</td>
<td>-0.054</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Tenure</td>
<td>1</td>
<td>0.043</td>
<td>0.017</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log Assets</td>
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<td></td>
<td>0.150(**)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt/assets</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note:* ***, ** and * represent the significance level at 1%, 5% and 10% respectively
A.2 Summary of Empirical Results

Board size indicator

Independent director ratio indicator

Block shareholders’ holding indicator

CEO duality indicator

Corporate Governance Index

Return on Equity

0.026**
-0.001

0.035**
0.002

-0.002*
0.054
-0.128**
0.0004
-0.038*

Average Age
Age heterogeneity
Function heterogeneity
Average Tenure
Tenure Heterogeneity
Note: ***, ** and * represent the significance level at 1%, 5% and 10% respectively