Board Composition and Financial Performance of Hong Kong Listed Property Companies

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Statement of Originality

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to this copy of my thesis, when deposited in the University Library, being made available for loan and photocopying subject to the provisions of the Copyright Act 1968.

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Abstract

In the last decade, the global financial crisis, triggered by bankruptcy of poorly governed companies such as Enron, AIG, Lehman Brothers and Merrill Lynch led the U.S. and other nations including Hong Kong to introduce stricter corporate governance rules and regulations in order to protect the interests of stakeholders. Hong Kong Exchanges and Clearing (HKEX) Main Board Listing Rules Appendix 14, issues a number of changes to Code of corporate governance in January 2005, covering five major areas. The main area that attracts the most attention from people is the number of Independent Non-Executive Directors (INEDs) in the new Code of corporate governance practices (HKEX, 2005). This Code takes into consideration the latest development in corporate governance, and is benchmarked against the revised UK Combined Code.

In Hong Kong, prior to 1st January 2005, the Code of corporate governance on board composition only requires a listed company to have at least two Independent Non-Executive Directors (INEDs). However, with effect from 1st January 2005, the new Code of corporate governance requires a balanced composition of INEDs and Non-INEDs so that there is a strong and effective leadership. As a result, the new Code requires listed companies to include at least three INEDs or one-third INEDs on the board. Furthermore, the roles of Chairman and CEO should be separate and should not be performed by the same individual (HKEX, 2005).
One of the driving factors, which forces Hong Kong to adopt a new Code is that poor corporate governance weakens a company’s financial performance and causes financial difficulties and even fraud (OECD, 2004b).

It is widely believed that good corporate governance adds value to a company. A good corporate governance practice is a necessary condition but not a pre-condition to better financial performance. Since board composition plays a vital role in corporate governance (Brennan, 2006), the aim of this study is to answer two major questions: Does board composition affect financial performance in Hong Kong listed companies? The general view is that corporate governance in Hong Kong is easy to comply with, just like another “box ticking” exercise to check compliance simply to meet the regulators’ requirement. This leads to the second question of the study: Does compliance with the Code of corporate governance on board composition improve financial performance of Hong Kong listed companies? These two questions are addressed by using a sample of Hong Kong listed property companies on the Main Board of the Hong Kong Stock Exchange.

The study examines: (a) the correlation between board composition and financial performance in Hong Kong listed property companies; and (b) the correlation between compliance with the Code of corporate governance on board composition and financial performance in Hong Kong listed property companies.

The board composition in this study includes four key elements: board size, percentage of INEDs on the board, CEO-duality and percentage of women on the board. The sample consists of 66 out of a total of 108 Hong Kong listed companies under the “Properties” industry classification on the Main Board of the Hong Kong Stock Exchange (SEHK) over the period 1999-2010 (approximately 792 firm years). The results of the study confirm that there is a positive association between board size and financial performance. There is a
Positive association between the percentage of INEDs on the board and financial performance. There is no association between CEO-duality and financial performance. There is no association between the percentage of women on the board and financial performance. And finally, there is no association between compliance with the Code of corporate governance on board composition and financial performance in Hong Kong listed property companies.

In the Hong Kong context, there are a few studies on corporate board practices and corporate governance. However, there is a lack of empirical evidence on the relationship between corporate governance and performance of family-controlled companies in Hong Kong (Ho, 2003). A recent study finds more than 90 percent of the property companies listed on the Main Board of Hong Kong Stock Exchange is under family control (Jordan, 2008). This study extends the literature on board composition and financial performance by providing empirical evidence from Hong Kong listed property companies over the period 1999-2010.

Keywords: corporate governance, board composition, financial performance, board of directors, women on the board, board diversity, independent non-executive directors (INEDs), board size, CEO-duality, Hong Kong listed property companies.
Chapter 1

INTRODUCTION

1.1 Background

1.1.1 Development and Status of Corporate Governance

Businesses around the world acknowledge the important role that corporate governance practices play in protecting the investors from being expropriated by dominant shareholders in publicly listed companies. Global financial crisis leading to bankruptcy of once giant companies such as Enron, AIG, Merrill Lynch, and Lehman Brothers illustrates the risks posed by corporate governance breakdowns. In the United States, the Sarbanes-Oxley Act 2002 (SOX), also known as the Public Company Accounting Reform and Investor Protection Act 2002, regulates boardroom accountability and provides the Securities and Exchange Commission with more authorised and statutory power to police violation of serious corporate governance matters (De Nicolo et al., 2008). While SOX introduces stricter rules and regulations, many other Asian countries including Hong Kong, choose to adopt more flexible guidelines or recommendations based on the “comply or explain” principle.

In Asian countries, poor corporate governance, i.e., the lack of corporate transparency and effective regulation, are viewed as one of main causes of the Asian financial crisis in 1997 (Choi, 1998). It is believed that after the Asian financial crisis in 1997, there is an acknowledgment of the importance of both internal and external corporate governance (Gillan, 2006). Unlike other developed countries such as the U.S., Canada and U.K.,
most of Asian listed companies are owned and controlled by families, with family members holding key managerial positions and directorships (Jordan, 2008). As a result, major agency problems do exist between the management (the controlling family) and the minority shareholders (Agrawal & Knoeber, 1996b; Jensen & Meckling, 1976).

Many Asian companies are controlled by families with concentrated ownership, which pose agency issues (La Porta et al., 1999; Ho, 2003; Filatotchev et al., 2005). It is stated that family-controlled companies are exposed to agency problems because there is a lack of separation of ownership and control. Corporate governance mechanisms evolve over the years with the objective to minimise, though not eliminate, the costs associated with the separation of ownership and control (Denis, 2001). The importance of corporate governance is to ensure the accountability of board members, with the objective to minimise or if possible eliminate the principal-agent problem (Sheng, 2000). It is argued that the board is responsible for ensuring that the management balances its interests with the interests of the majority, as well as other minority shareholders (Rose, 2005). The board of directors acts as the critical first line of defence against managers who are working in line with shareholders’ interests. It is suggested that the board of directors is the most central internal governance mechanism (Daily et al., 2003).

Without the check and balance mechanisms in place in the boardroom, there are many ways that the controlling shareholders can take advantage of the minority shareholders. One way for controlling shareholders to extract private benefits from a company, sometimes it is referred to “tunnelling”. As defined in Johnson et al. (2000), tunnelling refers to a phenomenon that controlling shareholders transfer assets and values out of companies to benefit themselves. For example, a listed property company buys raw
material from another 3rd party private company owned by the controlling shareholder of the listed property company, at a higher than market price in order to make economic gain for themselves at the expense of the listed company’s shareholders. The controlling shareholders may take up assets of the company, which are transferred through some “underground” tunnel. This happens in poor legal enforcement countries like Czech Republic (Johnson et al., 2000), India (Bertrand et al., 2002), and even developed country like Korea (Bae et al., 2002). Samsung SDC of Korea sells 3.21 million shares of its bonds with warrant to the Controller’s family member, at only 7,150 Won per share while the over-the-counter market price is traded at 55,000 Won per share (Bae et al., 2002). Does tunnelling exist in Hong Kong? It is reported that Hong Kong listed companies are predominantly controlled by families and they are vulnerable to tunnelling activities (La Porta et al., 1999). Therefore, it is worthwhile for a further investigation; however, tunnelling issue is not examined in this study.

To achieve good corporate governance, it is believed that an independent board, sometimes referred to as “board independence”, which comprises a majority of INEDs, is an essential element at any listed company (CFA Institute, 2010). In Asia, INEDs play a necessary and critical role. They act as a counterweight to controlling management on the board because they are appointed to ensure that decisions are made in the best interest of the company as a whole and are fair and beneficial to all shareholders (CFA Institute, 2010).

There are numerous studies on the relationship between board composition in the world in terms of contribution of INEDs, the number of INEDs and financial performance; however, empirical evidence is viewed as ‘mixed’, ‘inconsistent’, and ‘contradictory’
(Dalton and Daily, 1999). There is growing empirical evidence that suggests that the appointment and presence of INEDs on a board is strongly related to greater firm value (Black et al., 2006). And the appointment of INEDs on boards in Asia should thus increase investors’ confidence and send a positive signal to the shareholders that the company’s management is being monitored (Mak et al. 2003). Their study focuses on stock market reaction to board appointments; and find that the market views the appointment of Non-INEDs favourably if they are not related to the family controlling shareholders. Their study of the listed equity market in Singapore reveals evidence that the appointment of family-related directors is viewed negatively by the stock market. Black et al. (2006) analyse the South Korean equity market to determine whether corporate governance is able to predict firm value. Consistent with the findings of other researchers, they find that South Korean companies with 50 percent of INEDs on the boards achieve better financial performance.

Furthermore, Nowland (2008) finds evidence to support the importance of INEDs on the boards in his study of seven East Asian countries. His research indicates that board independence is positively related to profitability. Lei and Song (2008) conduct research on corporate governance, board independence, and firm value. They find that firm value is positively related to board independence. They also find a strong positive effect on firm value if there is no family member on the board. Their finding suggests that an independent board increases firm value. Therefore, even if companies have a dominant shareholder, an independent board, i.e., 50 percent of the board consists of INEDs, assumes the monitoring role is capable to help ensure that managers and large shareholders are acting in the best interests of all shareholders.
In summary, corporate governance factors such as board independence is important for monitoring management and dominant shareholders because good corporate governance reduces the opportunities of the dominant shareholders to expropriate minority shareholders’ wealth. The presence of INEDs gives shareholders’ confidence in the board and its ability to monitor management. It is argued that agency problems arise unless there is separation of power between large shareholders and management (Ho, 2003). Furthermore, it is argued that without proper external corporate governance mechanisms or legal regulatory framework in place to effectively control the behavior of the dominant shareholders, the interests of minority shareholders would be affected (Ang et al., 2000).

This study further contributes to the existing literature by examining the representation of women on the board and their influence on financial performance of a listed company, which is rarely studied by Asian researchers. Although the American companies make some progress towards the inclusion of more women on their boards, the proportion of women is increased in recent years. However, it is still below the respective proportions of women in the workforce. Women hold 14.7 percent of the board seats of the Fortune 500 companies in 2005, an increase from 13.6 percent in 2003 and 9.6 percent in 1995 (Catalyst Inc., 2006). However, it is worth noting that 46 percent of the U.S. labor force is made up of women. There is more than 50 percent of management and professional occupation being held by women; and 32 percent of all MBA degree holders are women (Catalyst Inc., 2006).

Empirical investigation on board diversity and corporate financial performance is problematical and having different findings for several reasons (Hermalin and Weisbach, 2003). First, the theoretical link between board composition (including diversity) and
firm performance is not well developed because there is limited research in this area, especially in Asia. In other words, one cannot expect board diversity to produce a beneficial impact on board process, which in turn improves board performance. Furthermore, it is quite challenging to prove how does board performance translate into increased financial performance and shareholder value? Second, empirical tests of the link between board composition and firm performance may be subject to the problem of joint endogeneity of board characteristics, board actions, and firm performance. This creates both econometric estimation difficulties and confusion in interpreting the results of the empirical analysis (Hermalin and Weisbach, 2003).

1.1.2 Corporate Governance Issues in Hong Kong

Although most of Hong Kong listed companies comply with the indicators of corporate governance while the current status of board independence in Hong Kong is still an issue to be dealt with. A recent survey shows there is a lack of board independence in the Hong Kong property sector. The report examines the governance disclosure of Hong Kong property developers as well as the independence, quality and leadership of boards. There are findings that show listed property companies in Hong Kong tend to have a large influence from a single group of family shareholders, who may not always act in the best interest of minority shareholders (Responsible Research, 2010). Furthermore, the low representation of INEDs on the boards in Hong Kong listed companies may lead to the abuse of minority shareholders’ rights and interests (CFA Institute, 2010).

In Hong Kong, over the last few years, there are a number of major corporate governance issues and scandals related to the property industry. Sun Hung Kai Properties (SHKP) is one of the leading Hong Kong property companies listed on the
Main Board of Hong Kong Stock Exchange (SEHK) by market capitalisation. SHKP achieves the highest standards of corporate governance over the last decade. It is named top overall in Asiamoney’s corporate governance poll of polls every year for the period 2004-2009, attesting to its long standing commitment to governance and investors’ ongoing recognition of its highest standards (Asiamoney, 2009).

However, in February 2008, people are shock by the power struggle between Mr. Walter Kwok, Chairman and CEO of SHKP, and his two younger brothers (Mr. Raymond Kwok and Mr. Thomas Kwok) who seek to oust their eldest brother from the company to become Co-Chairmen of the company. As a result of this internal family dispute and power struggle, SHKP’s share price drops by 10 percent in the month of May 2008, wiping over US$4 billion off its market value (The New York Times, 2008). SHKP’s investors during this period of time are seriously affected financially because of this incident. Investors wonder why this incident happens in such a well-run and highly respectable company like SHKP? Can the INEDs exercise their oversight duty to prevent this incident from happening? Is there a need to review the “comply or explain” Code of corporate governance on board composition to enforce the separation of roles of Chairman and CEO? This incident raises a lot of concerns both locally and internationally about the effectiveness of corporate governance on board composition in Hong Kong. It is argued that tighter regulatory measures can help prevent such an incident from happening again.

In the same year 2008, there is another shocking case related to a corporate governance scandal in Hong Kong. Mr. Leung Chin Man is the Director of Buildings of the Hong Kong government for the period 1999-2002. From July 2002, Mr. Leung becomes the
Permanent Secretary of Housing, Planning and Lands, a very high-ranking government official in Hong Kong. While Mr. Leung is in this government office, he recommends the government sell an unused private-sector-participation-scheme project for low-income families (“The Hunghom Peninsula” Project located at Hunghom Bay, Kowloon) to New World Development (NWD) at a below-market price for only HK$864 Million. The Hong Kong government never asks why this property needs to be sold to the private investor in such a short notice and at such a big discount nor do they conduct any study to justify for this public asset disposal. Soon afterwards, NWD sells half of this property to SHKP and make a huge profit. In 2004, the joint owners (SHKP and NWD) announce the demolition of these buildings to make way for luxury apartments for sales. However, there is a widespread public outcry against this plan because there is nothing wrong with the structures of these buildings. In December 2004, because of the strong opposition from the public and the environmental protection pressure groups, these two developers change the demolition plan to a renovation plan. These low-income public housing estates are then nicely renovated to become luxurious private residential apartments, which attract a lot of investment from the Mainland Chinese investors.

In July 2008, corporate governance becomes a headline generating huge public concern when Mr. Leung is appointed as deputy managing director of New World China Land, a subsidiary of NWD, earning a HK$3.12 million annual salary package. After a 12 month ‘sterilisation period’ from his retirement in 2007, the Secretary for the Civil Service actually approves Mr. Leung to take up this job in the private sector. However, the public strongly opposes that this job offer to Mr. Leung, which they believe it is just a reward for his favouritism towards NWD in 2004. As a result of this, Mr. Leung is forced to resign from this position after he is asked to attend public hearings about the
possible conflict of interest matters. This can be viewed as an unfair decision made by NWD’s board of directors particularly the chairman because Mr. Leung should not hold any directorship in a private company immediately after his resignation as a government official. He can only do so after a two-year cooling period. This is a classic example of corporate governance problem when the absolute power rests in the hands of the chairman who is also the concentrated owner of the listed company. Under this circumstance, the chairman has the absolute power to appoint Non-INEDs and INEDs that he trusts without having to justify to the board. It is argued that this particular problem can be resolved by imposing tougher rules and regulations on either internal corporate governance mechanism such as listing rules or external corporate governance like statutory law.

Corruption and fraud cases in large listed companies especially in the property industry are rare in Hong Kong, however, on 30 March 2012, Hong Kong people and the whole world are surprised to hear the news that a former Chief Secretary Mr. Rafael Hui Si-Yan and Co-Chairmen of SHKP, Thomas Kwok and Raymond Kwok, are arrested by the Independent Commission Against Corruption (ICAC) on suspicion of corruption and misconduct in public office. ICAC alleges these three individuals committed offences under the Prevention of Bribery Ordinance. ICAC also confirms that another senior executive of the listed company and four others are arrested earlier, under allegations that they play key roles in the same case. Thomas Chan Kui-Yuen, an executive director of SHKP, is reportedly under ICAC probe on 19 March 2012. Mr. Chan works at SHKP for about 40 years and fully in charge of land acquisition and project planning. It is widely believed by the general public that there are even more corruption and fraud cases in property industry, which are not found today. During the Asian financial crisis
over the period 2007-2009, there are about 50 top managers and professionals prosecuted by the ICAC for corruption and related offences in connection with Hong Kong listed companies (ICAC, 2009)

To further discuss on Mr. Rafael Hui’s background, he joins the public service in 1970 and works briefly for ICAC in the late 1970s. He quits the government in 2000 as Head of Financial Services Bureau, but returns as Chief Secretary in Donald Tsang’s Administration in July 2005. Mr. Hui offers consultancy services to SHKP in 2004. Interestingly, SHKP is the only client to whom he provides consultancy and advisory services. He admits advising SHKP on “economic and political” matters, including the buyout of “Hunghom Peninsula”, but he claims he is not involved in lobbying the government or lawmakers. His close relationship with the Kwok brothers is discovered in 2005 when the media finds Mr. Hui is living in a more than 4,000sqf luxurious apartment at Leighton Hill, Happy Valley owned by SHKP. He then claims that he rents it from SHKP and pays HK$160,000 per month (SCMP, 2012).

On 30 March 2012, it is reported that SHKP suffers its heaviest loss in 14 years, US$5 Billion is wiped off the market value of SHKP in a single day after anti-graft investigators arrest the Kwok brothers who run Hong Kong’s biggest property developer on suspicion of corruption. SHKP’s stock price plunges 13 percent, the most since January 1998 to close at HK$96.50 on 30 March 2012. Hence, from 19 March 2012 when executive director Thomas Chan Kui-Yuen is arrested by the ICAC, until 30 March 2012, when the Kwok brothers are arrested by ICAC, SHKP’s stock price drops by as much as 17 percent (Reuters, 2012).
On 30 March 2012, an analyst at Citigroup says investor’s short-term concern on SHKP’s corporate governance is understandable. On the same day, Citigroup downgrades SHKP’s share price as it expects the difference between the market value and the value of the developer’s assets to widen following the news of the arrests of two large shareholders at SHKP’s. Standard & Poor also subsequently lowers the outlook on SHKP from A+ credit rating to negative and mentions that ICAC’s probe may weaken the stability of its management and reputation of the company (Reuters, 2012).

Since SHKP and NWD are two leading property developers in Hong Kong, which are considered having the highest standards of corporate governance, after the above-mentioned incidents, both foreign and local investors wonder if internal self-regulated corporate governance on board composition can foster fairness and protect their interests. The effectiveness of “self-regulation” within the Hong Kong corporate governance mechanism is questioned and challenged by academics, regulators, investors and the general public. There are debates on whether it is now the right time for the government to implement stricter rules and regulations in order to prevent similar problems from happening again in the future. What are the board composition reforms that need to be implemented quickly in order to protect the interests of the minority shareholders in Hong Kong listed property companies from being affected by the large dominant shareholders? And more importantly, how the new reforms of the board composition can effectively prevent the fraud and corruption cases in order to maintain Hong Kong’s image and position as an attractive, fair, safe and regulated financial centre in Asia?
1.1.3 Hong Kong Regulatory Framework

The current regulatory framework of corporate governance in Hong Kong includes both statutory and non-statutory requirements. Statutory requirements consist of the Securities and Futures Commission (SFC), Companies Ordinance, Securities (Disclosure of Interests) Ordinance, Securities (Insider closure of Interests) Ordinance, Securities (Insider Dealing) Ordinance, and Takeover Codes. Non-statutory requirements are those specified under the Listing Rules covering the number of INEDs, disclosures of connected transactions, and disclosures of the different components of directors’ remuneration.

SFC is one of the most important statutory bodies in Hong Kong formed by the Securities and Future Commission Ordinance (SFCO). The SFCO and nine other securities and futures related ordinances are grouped into the Securities and Futures Ordinance (SFO) with effect from 1 April 2003 (SFC, 2003). The major statutory regulatory objectives, which are set out in the SFO as follows:

i) To maintain and promote fairness, efficiency, competitiveness, transparency and orderliness of the securities and futures industry;

ii) To promote understanding by the public of the operation and functioning of the securities and futures industry;

iii) To provide protection for members of the public investing in or holding financial products;

iv) To minimise crime and misconduct in the securities and futures industry;

v) To reduce systematic risks in the securities and futures industry; and

vi) To assist the Financial Secretary in maintaining the financial stability of Hong Kong by taking appropriate steps in relation to the securities and futures industry.
For Hong Kong to continue its status as an international financial centre and the capital market of choice for Mainland Chinese and other international investors, constant improvement on corporate governance with regard to board composition is necessary. Hong Kong needs to continually learning from international developments in corporate governance namely the US Sarbanes-Oxley Act, the UK Higgs Report on Non-INEDs, the Smith report on Audit Committees, and the Australian Financial Services Reform Act.

1.2 Justification for the Research

Hong Kong is one of the leading financial centres in Asia. It attracts a lot of foreign companies to be listed on the Main Board of Stock Exchange of Hong Kong (SEHK) because of its perceived good reputation as ”laissez-faire” yet a regulated capital market with high-standard corporate governance practices. Thus, there is a considerable amount of discussion and debates as to whether compliance with the Code of corporate governance on board composition actually helps companies improve their financial performance and reduce the principal-agency problems? Is it necessary for the government or the regulators to implement tighter regulation on the minimum board size, separation of Chairman and CEO roles, minimum number of INEDs as well as minimum percentage of INEDs on the board in the near future?

This study focuses on Hong Kong listed property companies to investigate the relationship between board composition and financial performance for many reasons. First, Hong Kong property prices are the highest in the world and way beyond the affordability of most average or even above-average income earners (Demographia, 2011). The average income earner’s quality of life in Hong Kong is affected by high
rental rates resulting from high property prices. Therefore, a new public housing policy to improve the living conditions for low-income earners and anti-speculation measures to bring down the property prices are the most important manifesto of the new Hong Kong Chief Executive election in 2012.

Second, the property industry is important because it attracts a lot of local and foreign investment, especially the Mainland Chinese investors. Since more than 58 percent of Hong Kong’s stock trading is dominated by institutional investors, and 39 percent by overseas investors, these investors are concerned about the “form” of corporate governance, i.e., compliance with the Code on corporate governance, as well as the “substance”, which refers to corporate financial performance (Sheng, 2004).

Third, in the last few years, there are so many corporate governance issues and scandals as highlighted above, which are related to board composition, corruption and fraud cases of board members in Hong Kong listed property companies involving government officials. It is important that the Hong Kong government and regulators must take immediate actions to restore the confidence of the Hong Kong people as well as international investors. If the government were not able to make tougher laws to supplement the existing flexible and relaxed Code of corporate governance on board composition, then Hong Kong’s image as the leading Asian financial centre would be damaged.

Fourth, Hong Kong property industry is one of the largest contributors of Hong Kong economy. The property industry ranks the 4th largest industry in Hong Kong, accounting for 16.36% (HK$773 Billion out of HK$4,724 Billion) of total market capitalisation in
1999. Over the twelve years period 1999-2010, the Hong Kong property & construction industry becomes the 2\textsuperscript{nd} largest industry accounting for 12.64% (HK$2,647 Billion out of HK$20,941 Billion) of total market capitalisation in 2010 (HKEX Fact Book, 1999 & 2010). There is growing concern that the over-reliance on the property industry as a major contributor to Hong Kong’s economy can be a problem because the global economic downturn and instability may cause a direct or indirect negative effect on Asian economies in general and Hong Kong in particular. It is critical for Hong Kong to ensure that effective mechanisms of corporate governance of board composition are put in place to prevent the next housing-market bubble from bursting like what happens between 2002-2008. Within two years period from 2000-2002, the Hong Kong property market value drops 39 percent, which is equivalent to HK$275 Billion loss in market value. And within a one-year period from 2007-2008, the Hong Kong property market drops 56 percent of its value in the stock market, which is equivalent to a HK$1,650 billion loss in market value (Exhibit 2).

One may ask if the majority of family-controlled shareholders of Hong Kong listed property companies are financially affected during the above two major market-correction periods. The answer is probably “yes” but the biggest losers seem to be the private institutional, and minority shareholders. No one can predict when the next housing bubble is to hit Hong Kong again, however, if it does happen again next time, the magnitude will be devastating and it may cause severe damage to the Hong Kong economy as well as affecting Hong Kong’s image as the leading Asian financial centre.
1.3 Objectives of the Study

This study has two main objectives. The first objective is to investigate whether there is an association between board composition, in terms of board size, percentage of INEDs on the board, CEO-duality, and percentage of women on the board, and the financial performance of Hong Kong listed property companies. The second objective is to investigate the correlation between compliance with the Code of corporate governance on board composition and the financial performance of Hong Kong listed property companies in the same period of study. An assessment of the effectiveness of the corporate governance reform on board composition is carried out by comparing the empirical results of the two periods of study, i.e., Pre-2005 (1999-2004) and Post-2005 (2005-2010).

1.4 Research Questions

There are five research questions concerning the relationship between board composition and financial performance in Hong Kong listed property companies, which will be the basis of hypotheses formulation in this study. They are summarised as follows:

   Research question 1: What is the association between board size and financial performance of Hong Kong listed property companies?

   Research question 2: What is the association between the percentage of INEDs on the board and financial performance of Hong Kong listed property companies?

   Research question 3: What is the association between CEO-duality and financial performance of Hong Kong listed property companies?

   Research question 4: What is the association between the percentage of women on
the board and financial performance of Hong Kong listed property companies?

Research question 5: Does compliance with the Code of corporate governance on board composition have an effect on the financial performance of Hong Kong listed property companies?

1.5 Significance of the Study

In the previous studies, there is a lack of empirical research on the relationship between board composition in terms of board size, percentage of INEDs on the board, CEO-duality, percentage of women on the board, and the financial performance of Hong Kong listed companies, especially in the property industry. This study contributes to the existing literature by investigating the association between the compliance with the Code of corporate governance on board composition and financial performance of Hong Kong listed property companies for the period 1999-2010. The sampling strategy adopted in this study is to choose a large sample size (over 60 percent) of medium and large Hong Kong listed property companies, which accounts for more than 80 percent of market capitalisation within the “Properties” industry. Therefore, the empirical results in this research can be generalised to the whole property industry. The findings of this study can serve as a reference for Hong Kong’s government and regulators in the formulation of new regulations on listed property companies, and for the institutional, as well as individual investors in their decision to invest in the listed property companies in Hong Kong. This study contributes to future studies of corporate governance practices in emerging markets, in different industries and enhances corporate governance in Asia.
1.6 Limitation of the Study

There are several limitations of this study, which are highlighted as follows:

(i) This empirical study focuses on Hong Kong property companies listed on the Main Board of Hong Kong Stock Exchange; however, other industries are not being studied. As a result, comparison among various industries regarding the association between board composition and financial performance cannot be assessed.

(ii) Board composition is a broad concept, which consists of many important determinants having a direct or indirect impact on corporate financial performance. These determinants can be related to board diversity in terms of ethnicity, religious association, age, and so on; family ownership structure; and characters of boards encompass many aspects namely, directors’ backgrounds, their education, relevant industry experience, and tenures. But some of these determinants are not easily obtained and measured, nor is data and information readily available for this study period. Therefore, in this study, the scope of board composition is limited to the board size, percentage of INEDs on the board, CEO-duality, and percentage of women on the board, with other characteristics of board composition not taken into account. As a result, the findings may be biased.
1.7 Structure of the Dissertation

This Dissertation follows the five-chapter structural framework recommended by Perry and Coote (1996). Chapter 1, Introduction, presents an overview of the Dissertation providing a background and context to the research problem; research question definition and justification for this study. Chapter 2 discusses the prior literature on the relationship between board composition and financial performance; various theoretical foundations of corporate governance; and identification of five research questions. Chapter 3, the research methodology, justifies the adoption of the quantitative research methodology to answer these research questions. Chapter 4 presents empirical results and analysis. Chapter 5 discusses the findings, recommendation and conclusion of the study.
2.1 Corporate Governance and Board Composition in Hong Kong

2.1.1 Corporate Governance Definition

Board composition is an important subject within the broad concept of corporate governance. Although corporate governance attracts a great deal of public interest worldwide, however, it is still considered a poorly defined concept because it covers so many distinct economic phenomena (Daily et al., 2003). Basically, corporate governance is defined as a system by which business corporations are directed and controlled (Cadbury, 1992). Gillan and Starks (1998) define corporate governance as the system of laws, rules and regulations that control operations at a company. Corporate governance is described by the Organization for Economic Cooperation and Development (OECD) as a set of relationships between a company’s management, its board, its shareholders and other stakeholders (OECD, 2004a). The shareholders, as the owner of the company, appoint the directors to run the operation and be responsible for overall performance of the business on their behalf. Hence, the directors are accountable to the shareholders that appoint them (Tirole, 2006).

O’Donovan (2003) in her paper on “Change Management – A Board Culture of Corporate Governance” – defines corporate governance as an internal system encompassing policies, processes and people, which serves the needs of shareholders and stakeholders, by directing and controlling management activities with good business
acumen, objectivity, accountability and integrity. She further posits that good corporate governance relies on external market place commitment and legislation.

The CFA Institute defines corporate governance as the system of internal control and procedure by which individual companies are managed. It provides a framework that defines the roles, responsibilities and rights of various groups of management, the board of directors, and shareholders within an organisation. Corporate governance is the arrangement of checks, balances, and incentives a company needs in order to minimise and manage the conflicting interests between internal and external shareholders. Its purpose is to prevent one group from expropriating the cash flows and assets of one or more other groups (CFA Institute, 2009). The board of directors is responsible for the oversight of management on behalf of shareholders.

According to the CFA Institute, good corporate governance practices seek to ensure that:

- Board members act in the best interests of the owners of the company, i.e., dominant shareholders, minority shareholders and stakeholders;
- The company acts lawfully and ethically in dealing with all shareholders and stakeholders;
- All shareholders have the right to participate in the overall governance of the company and receive fair treatment from the board and management and all rights of shareowners and other stakeholders are clearly defined and communicated;
- The board and its committees such as the nomination committee and the remuneration committee, are structured to act independently from management and individuals or entities that have control over management and other non-
shareholder groups;
- Appropriate controls and procedures are in place covering management’s activities in running the day-to-day operations of the company;
- The company’s governance activities, as well as its operating and financial activities, are consistently reported to shareholders in a fair, accurate, and timely manner.

Hong Kong Independent Commission Against Corruption states that good governance needs to have an effective board composition with following basic components (ICAC, 2009):
- A balance of members with the appropriate experience and expertise for the running of the company’s business;
- A balanced number of Directors, Non-INEDs and INEDs so as to ensure there is adequate independent judgment from all members of the board;
- Appointment of INEDs representing at least one-third of the board in addition to having at least three INEDs in accordance with the Listing Rules.

Sheng (2000) confirms that an important theme of corporate governance is to ensure the accountability of certain individuals in an organisation through mechanisms that try to reduce or eliminate the principal-agent problem. This accountability can only be carried out by a board, which comprises a majority of INEDs.

To summarise, although the above corporate governance’s definitions in the context of board composition are broad and having different focuses, however, there is a general and common view that the board must be independent and balanced, i.e., the board must
consist of majority of INEDs in order to protect the diverse interests of the shareholders. The members of the INEDs need to have relevant industry experience and have the ability to oversight management decisions in order to protect the interests of all shareholders. In the next section, the definition of INED is examined.

2.1.2 Definition of an INED

The CFA Institute (2009) defines an INED as a board member who must not have a material business, or other, relationship with the following individuals or groups:

- The company or its subsidiaries or members of its group, including former employees and executives and their family members;
- Individuals, groups, or other entities that can exert significant influence on the company’s management, such as controlling individuals, controlling families, or governments;
- Executive managers, including family members;
- Company advisers and their families;
- Any entity that has a cross-directorship relationship with the company;
- Any individual who has material business relationships with a company;
- Any individual or entity that represents a company with substantial voting rights in the company in question.

Every company, every Code of corporate governance, and every stock market has its own definition of an INED. In this study, an INED is defined according to the listing rules of the Stock Exchange of Hong Kong Limited as follows:

- An INED does not have the administrative or management responsibilities in a
company, i.e., he/she does not participate in the day-to-day operation of the company nor does he/she participate in the management;

- An INED must be independent of management, without any direct relations with the management;

- An INED does not have any interest other than the remuneration paid by the company. However, there are many expectations from the public about the role of an INED such as having independent thinking and views. He/she must take care of the interests of all shareholders rather than the interests of a particular group.

- Like other directors, an INED must be honest, straightforward and impartial toward the company that appointed him/her and uses his/her caution, skills and hard work throughout the process to influence the operations of the company. He/she should basically have the same responsibilities as executive directors, including bearing the legal responsibilities or fiduciary duties.

2.1.3 Main Objectives of Corporate Governance

The nature and purpose of corporate governance can be illustrated in terms of “Inputs” and “Outputs”. The outputs of corporate governance are the things that the public, investors, and the regulators want to see at the end, for example, companies making decisions that are fair, honest, and add value to all shareholders. However, fairness and honesty are matters related to culture and morals. Therefore, it is difficult, if not impossible for regulators to control the quality of the corporate governance outputs. On the other hand, what the regulators can do instead, is to ensure inputs of corporate governance, i.e., the process of decision-making and accountability by which the company is governed. The regulators can observe whether processes are properly
followed and can take actions if they are not. For example, if the government or the regulators think that the current corporate governance on board composition based on “comply or explain” rules are not effective in protecting minority shareholders and stakeholders of the company, they can enact new company law to ensure that the appointment of INEDs is fair and just. The assumption is that if the inputs are good, then the final outputs should be satisfactory.

Therefore, the main objectives of corporate governance are to ensure that all the rules and check-and-balance mechanism are in place to protect the shareholders from being expropriated by either management or the board of directors themselves. These rules and mechanism are classified as internal factors or inputs that are necessary to ensure good corporate governance; however, this may not be sufficient to ensure good outputs. Thus, it is argued that external mechanism in terms of statutory law to supplement the deficiency of the Code of corporate governance (internal mechanism) is considered to be an important area that the government and regulators should pay more attention (O’Donovan, 2003).

2.1.4 The Roles of an INED

Many Asian countries including Hong Kong have concentrated ownership structures in which the majority of shares are concentrated in the hands of a single shareholder, typically the company’s founding family (Jordan, 2008). (CFA, 2010) states that in Asia, INEDs play a necessary and critical role. They act as a counterweight to controlling shareholders on the board because they are appointed to ensure that the fair and beneficial decisions are made in the best interest of the company for the long term. Where there is no separation of ownership and control, a company’s INEDs serve as the
mechanism for preventing transactions or business decisions that unfairly or improperly benefit controlling shareholders and disadvantage the minority. This monitoring role is particularly important in countries where minority shareholder rights are low, which is the case in Hong Kong (Jordan, 2008).

After the Asian Financial crisis of 1997, Hong Kong regulators begin to realise the significance of INEDs. They address the issue of highlighting the role of the INEDs in various new Code of corporate governance in 2005 and by setting a higher minimum number or proportion of INEDs for corporate boards. In Hong Kong the minimum number of INEDs is raised from two to three persons or one-third of the board members must be INEDs in 2005. Despite these efforts, evidence indicates that the issue of board independence still remains a problem in Hong Kong (CFA Institute, 2010).

It is widely agreed that the lack of true INEDs on the corporate boards is a major issue in Hong Kong. This problem originates in the substantial power a controlling shareholder has in influencing director nomination and appointment. The controlling shareholder, who may also serve as an executive chairman and CEO, can appoint any individual, with whom he/she has a good connection as an INED, thereby effectively controlling the board. In such circumstances, the so-called INEDs nominated and appointed by controlling shareholders are not truly independent.
2.1.5 Challenges to the Roles of an INED

There are a few key challenges of the roles of an INED. The first challenge is the role recognition. An INED is still considered as a new concept in the East Asian area and is not widely recognised in global corporate governance systems. The functions of an INED can be promoted and realised in every country and every system only when there is a considerable understanding and approval of the role of an INED on the part of investors and other directors of the company.

The second challenge is the qualification and willingness of people with corresponding experience to take up the INED role. To make the INED system a success, it requires a considerable number of people with suitable experience and qualifications to take up posts as INEDs.

The third challenge is that the current remuneration of an INED is quite low; therefore, it is difficult to attract and retain dedicated and experienced industry professionals to fill these posts.

The fourth challenge is that the current Code of corporate governance on board composition does not specify how many INED jobs can an individual take? Because the rules and regulations are not clearly stated, some individuals in Hong Kong may take too many INED jobs in various listed companies leading to a lack of time to understand the company’s operational and financial status, competitive landscape and product portfolio. As a result, these INEDs fail to give their professional advice to the board on company’s strategy and to oversight managers’ behaviour and activities.
2.1.6 Key Characteristics of INEDs in Hong Kong Listed Companies

Similar to other Asian markets, corporate governance in Hong Kong is highly concentrated. In the U.S., most of the companies are owned by a diverse group of public shareholders such as individual investors, institutional investors and government. A team of professional managers and senior executives normally runs the company. As a result, it is normal that an agency problem does occur. The shareholders, being the principals, entrust the management of the company to the directors, their agents. However, the agents may extract excessive benefits from the company at the expense of the shareholders, or fail to manage the company well, or not perform their function as agents. Therefore, there are a lot of debates on corporate governance issues related to the agency problems. To resolve this problem, introducing more INEDs, empowering shareholders, and improving transparency are recommended solutions (CFA Institute, 2010).

There are different arguments about the seriousness of the agency problem in Hong Kong listed companies. Some researchers claim the agency problem seems to be a less serious issue because most listed companies in Hong Kong are closely controlled – the directors are the same as, or represent the interests of, the major shareholders (Chow, 2005). On the other hand, the argument against this is a risk that the directors only work in the interests of the major shareholders and may ignore the interests of the minority shareholders. One of the key corporate governance issues in Hong Kong is that INEDs may not be acting independently if the major shareholder makes INED appointment at their own discretion (CFA Institute, 2010).

With regard to the proportion of the INEDs on the board, there is a significant difference in the average percentage of INEDs on boards in Western countries as compared to
Hong Kong. The average percentage of INEDs on corporate boards in the United States, Australia and Canada is 75 percent, 72 percent, and 71 percent respectively (CFA Institute, 2010). On the contrary, the average proportion or percentage of INEDs on corporate boards in Hong Kong accounts for only 35 percent, due to the existence of a family controlling shareholder in most companies, especially in the property industry sector (CFA Institute, 2010).

Hong Kong’s Listing regulators generally agree that many leading markets require at least half a board’s members to be INEDs is highly recommended to maintain a balanced board. While more INEDs do not necessarily create better boards and improve overall financial performance of a company, but it increases the probability of a better balance against any inherent bias from Non-INEDs. The new changes are stated in Listing Rules (Main Board 3.10A & 3.11) that makes Hong Kong’s regulatory requirements tougher and stay in line with those of other leading markets. It marks an important first step in achieving a better balance in the board especially those where there is a strong presence of the dominant family member directors (Corporate Governance Review, 2011)

2.1.7 Code of Corporate Governance on Board Composition in Hong Kong

To ensure that listed companies are properly run and minority shareholders’ vested interests and rights are well protected, Hong Kong has various regulations for specific areas of abuse, in the form of statutory requirements relating to corporate governance. Hong Kong Stock Exchange (SEHK) Listing rules are the main instrument for strengthening the principles and practice of corporate governance in listed companies. The rules state clearly that directors are responsible for the management and operation of the listed companies, and are expected to fulfill their fiduciary duties as set by the laws of
Hong Kong. SEHK’s Code of best practice serves as a guide for directors of listed companies. Listed companies are required to state in their interim reports the extent of their compliance with the Code during the accounting period covered.

With effect from 1st January 2005, the Code of corporate governance on board composition, under Appendix 14, are applied to all listed companies on the Main Board of SEHK. The Code sets out the principles of good corporate governance. There are two tiers of compliance based on these principles:

1st Tier – “Code Provisions” refers to expected standards of board practices. Compliance is not mandatory and the “comply or explain” approach is adopted. Although compliance to the Code sounds like a voluntary activity, however, all listed companies are required to state whether they comply or not and to give reasons for any deviation from the provision of the Code in their half-year and annual result announcements. Two major principles are examined in this study. They are: i) Every board of a listed company must include at least three INEDs; ii) The roles of Chairman and Chief Executive Officer should be separate and should not be performed by the same individual.

2nd Tier – comprises recommended best practices that all listed companies are encouraged to adopt. Listed companies are encouraged, but not required, to state whether they comply, but should provide reasons for deviation from the recommended best practices in their half-year and annual reports. Two important recommended best practices are used in this study. They are: i) A
listed company should appoint INEDs representing at least one-third of the board; ii) A listed company should establish a nomination committee, a majority of the members of which should be INEDs.

Effective corporate governance depends on the separation of authority between a company’s managers, board of directors, and majority and minority shareholders. Managers are held accountable when there is independent oversight of the board of directors and an external auditor (OECD, 1998). INEDs are entrusted to give independent judgment to the company’s overall strategic matters. To ensure their true independence, they must not be connected to the company through any business or financial association. However, the majority of Hong Kong listed property companies are owned by one individual or a family, the functions of Chairman and CEO are often difficult to be separate. Companies also have difficulty hiring truly independent INEDs because unlike Accounting, Finance, and Law disciplines, the INED role is not a professionally accredited job. In many instances, the CEO or Chairman selects INEDs, thus compromising their independence. Therefore, the new Code of corporate governance on board composition in 2005 stresses the roles of Chairman and CEO should be separate and not performed by the same individual (HKEX, 2005).

2.2 Problems and Challenges Faced in the Study of Board Composition

One of the most important mechanisms of corporate governance is the company’s board of directors. Does board composition really affect financial performance? Researchers around the world try to find an answer to this interesting and difficult question (Dalton et al., 1998). However, there is neither a universal nor a definitive answer because the study of these two variables, i.e., board composition and financial performance, is
dependent on many other factors and variables (Dalton et al., 1998). For example: i) different countries may have different unique cultures, norms, business practices, accounting principles, corporate governance rules and regulations; ii) different industries may have different characteristics, natures, and significance; iii) different companies have different family ownership structure, corporate culture, board composition, board size, proportion of INEDs and board diversity in terms of race, gender, age, personality, skills, educational background; and iv) different studies may adopt different theories, assumptions, variables, hypotheses, formulas, methodologies, sample sizes, period of study, and sampling techniques.

Previous researchers often come up with different findings in the study of board composition and financial performance; some find a positive relationship; some find a negative relationship and some find no relationship at all (Dalton et al., 1998). In this study, grounded with the Agency theory, the main objective is to find out whether there is an association between board composition and firm performance in Hong Kong property listed companies. Previous studies conducted by (Jensen and Meckling, 1976); (Agrawal and Knoeber, 1996a; Jensen and Meckling, 1976); (Shleifer and Vishny, 1997; Dalton et al., 1998); (Deegan, 2006); and (Kaymak and Bektas, 2008; Nicholson and Kiel, 2007) strengthen the contribution of this study’s findings, i.e., there is a positive association between board size and financial performance; and there is a positive association between the percentage of INEDs on the board and financial performance.
2.3 Corporate Governance Mechanisms in Hong Kong

The mechanism of corporate governance can be categorised into internal corporate governance controls and external corporate controls. The function of internal corporate controls is usually established to ensure the correctness of important decisions by optimizing the rights of directors, as well as to constitute and bring in effective plans on motivation of management. Hong Kong follows the principles formulated by the OECD on corporate governance, which is defined as a system involving a set of relations between a company’s management, its board, its shareholders and stakeholders. The relationship forms a structure framing the company’s mission and objectives, also providing a framework for achieving results, monitoring performance and making improvements. Corporate governance mechanisms can be classified as internal and external mechanisms (Agrawal and Knoeber, 1996b). Internal mechanisms are decided by the company’s internal decision makers that consist of insider shareholders, board members and other characteristics such as board size, number of INEDs, remuneration committee, nomination committee, and debt financing. Whereas, external mechanisms that are determined by outsiders namely institutional shareholders, majority shareholders, and takeover bidders.

A study of corporate governance comparisons among Asian countries indicates that Hong Kong along with Singapore and Malaysia achieve significantly higher standards of corporate governance and develops regulatory measures to protect property rights which are superior to those in the rest of the countries in the region. (Nam et al., 1999)
Board of directors also plays the role of monitoring and controlling. Directors have the rights and obligation to monitor and evaluate CEO and senior management team’s performance. The greater the degree of director control, the greater is the benefit to be derived from the directors’ ability to limit the agent incentives that allow managers to pursue their own objectives rather than those that are in the best interests of the firm. (Bennett and Robson, 2004)

Base on the above understanding, good corporate governance requires an outstanding combination and interaction of internal mechanism and external mechanism, and they supplement one another. Internal mechanism is capable to ingeniously react to the information, which provided by external mechanism, while the external mechanism can solve the problems caused by information-asymmetry between owners and management teams. Taking benefit into account, good corporate governance can appropriately deal with all the relations among stakeholders so as to achieve the maximisation of firm’s value.

The Securities and Futures Ordinance from Securities and Futures Commissions (SFC) underpins Hong Kong governance structure, which is characterised by a series of checks and balances. The objective of SFC is to act with credibility, dedication, fairness and transparency at all levels to fulfill their mandates. Established in 1989, SFC is an independent statutory body set up to regulate the securities and futures markets in Hong Kong.

It derives a broad range of investigative, remedial and disciplinary powers from the Securities and Futures Ordinance (SFO) and a subsidiary legislation. The SFC works to ensure orderly securities and futures market operations, to protect investors and help
promote Hong Kong as an international financial centre and a key financial market in China.

2.4 The Significance of the Property Industry in the Hong Kong Economy

Amongst the Asian countries, Hong Kong is a major economic force, which is transformed from a manufacturing-based economy to a services-based economy over the last twenty-five years (Newell et al., 2004). Listed property companies make a significant contribution to the market capitalisation of the Asian stock market (Newell and Chau, 1996; Steinert and Crowe, 2001). Hong Kong is recognised as having one of the World’s most dynamic and volatile property market (Chau et al., 2001). It is the 14th largest property market in the World, accounting for 1.2 percent of the global property market (PREI, 2003). Furthermore, Hong Kong is the 7th most transparent property market, exceeded only by Australia (1), New Zealand (2), U.S. (3), U.K. (4), Canada (5), and the Netherlands (6) (JLL, 2004).

Hong Kong listed property companies make a significant contribution to the Hong Kong economy. The property industry has 108 out of 701 companies listed on the Main Board of the Hong Kong Stock Exchange as of December 1999 (Exhibit 1).

The property industry’s market capitalisation is HK$773 Billion as of December 1999, representing about 16.36 percent of the Hong Kong stock market capitalisation. The property sector is ranked the 4th largest on the stock market, which exceeds only by Finance (25.91 percent), Consolidated Enterprises (24.77 percent) and Utilities (23.96 percent) (Exhibit 2).
In 2007, there is a slight modification in the Hang Seng Industry Classification System resulting in hotels and construction being grouped together with the property industry to form a new industry classification named “property & construction” industry. Thus, after the grouping, the property & construction industry has 194 companies with a market capitalisation of HK$2,647 Billion or 12.64 percent of the total stock market as of December 2010. This property & construction industry moves up two notches to become the 2\textsuperscript{nd} largest on the stock market capitalisation, which exceeds only by financials industry (32.88 percent) (Exhibit 2).

After reviewing the related literature with regard to board composition and financial performance, the next section discusses the hypotheses development and how these hypotheses are related to the above-mentioned three corporate governance theories. These hypotheses are then tested empirically in Hong Kong property companies listed at the Main Board.

2.5 Hypotheses Development

2.5.1 Theoretical Foundation of Corporate Governance

Pettigrew (1992); Tricker (2000) and Parum (2005) argue that corporate governance research lacks coherence of any form, empirically, methodologically or theoretically. As a result, a number of different theoretical frameworks, originating from a broad range of disciplines including economics, law, finance, and management used by researchers in explaining and analysing corporate governance. Although different corporate governance theories are discussed in this study in the literature review section, however, the main focus is on agency theory as the underpinning theoretical foundation in
explaining the empirical findings of board composition and financial performance relationship.

Agency Theory:

There are several theories applied in corporate governance literature, namely the Agency theory, Stewardship theory and Resource Based View of the firm (RBV) theory. The most recognised and widely adopted theoretical perspective is agency theory, which advocates a clear separation of the ownership and control of management to avoid the agency problem (Shleifer and Vishny, 1997; Dalton et al., 1998). Agency-based literature sees management as opportunistic and argues that managers are keen to maximise their own interest at the expense of shareholders (Jensen and Meckling, 1976). As a result, this can jeopardise the economic benefits of the owners and other shareholders (Deegan, 2006). Major agency problems exist between management and minority shareholders (Agrawal and Knoeber, 1996a; Jensen and Meckling, 1976). It is argued that in order to reduce the agency problem, the board must comprise more INEDs to monitor any self-interested actions by managers and controlling shareholders (Kaymak and Bektas, 2008; Nicholson and Kiel, 2007).

Many Asian countries including Hong Kong have large listed companies, which are generally controlled by families with concentrated ownership. It is argued that family-controlled companies cause agency problems due to a lack of separation of ownership and control (La Porta et al., 1999; Ho, 2003). Large companies in Hong Kong have multiple owners or shareholders. These owners are the principals of the firm who hire executives or managers to run the company on their behalf. The appointed executives are normally obliged to maximise the returns for the shareholders and principals. However,
once the managers obtain such delegated power, some may want to expropriate shareholder’s wealth by choosing to invest in projects that could benefit themselves rather than the shareholders (Ho, 2003). Managers can exercise their power to enter into large contracts with other companies to earn high sales commissions and bonuses, regardless of whether these contracts would eventually bring profits to the company in the future (Ho, 2003).

In order to better align agent-principal interests, earlier agency theorists (Demsetz and Lehn, 1985; Fama and Jensen, 1983a; Jensen and Meckling, 1976) suggest having an effective governance mechanism, which includes the appointment of a board of directors. The agency theory suggests that managers and directors must be monitored by this board of directors, whose main task is to ensure that managers carry out their duties in the best interest of shareholders. The agency theory proposes that the key function of the board is to minimise the agency costs resulting from the separation of ownership and control (Fama and Jensen, 1983b). Thus, the board size and the number of INEDs on the board are regarded as proxies for board of directors when it is measured against a firm’s financial performance. However, empirical studies on the effect of board size and the number of INEDs on financial performance, is scarce (Lei and Song, 2004).

Agency theorists argue that in order to protect the interests of shareholders, the board of directors must assume an effective oversight function. Corporate governance problems arise from the non-separation of powers between the controlling owners/directors and the minority shareholders within a company, which give rise to informational asymmetries and agency costs (Fama & Jensen, 1983a). The essence of the agency problem, according to Jensen and Meckling (1976) and Fama and Jensen (1983b), is the
Williamson (1984) suggests that a board of directors should be established to protect all shareholders’ interests. The OECD (2004a) recommends that a sufficient number of INEDs on a board must be in place in order to ensure the board of directors perform their duties of monitoring managerial performance and preventing conflicts amongst various interests groups, which may affect the overall financial performance of the company. Furthermore, the OECD (2004a) also proposes to strengthen the objectivity of the board by separating the role of CEO and the Chairman. CEO-duality is considered to be an inappropriate practice because it may lead to imbalance of power, hamper accountability and influence the board’s capacity to make decisions independent of management (OECD, 2004b).

Agency theory’s validity is dependent on the existence of mechanisms by which the board of directors are able to monitor the performance of managers to make sure that firm’s managers are using their experience, skills, and firm’s resources, to achieve the best returns for the shareholders (Fama, 1980). Agency theory identifies the board of directors as the primary internal control mechanism to control the management behaviour. The board of directors are capable of firing managers whom misuse company’s resources, engage into illegal or fraud activities, and make decisions, which may impact the shareholder investments. It is for this reason that advocates of corporate governance reform emphasise the independence of board members as being the critical to their ability to carry out the monitoring function. Increasing the number of INEDs on a board increases the board’s independence, according to agency theory (Baysinger and Butler, 1985; Waldo, 1985).
Apart from agency theory, the other two commonly used theories of corporate governance are examined, namely Stewardship theory (Donaldson and Davis, 1991) and the Resource-based View of the firm theory (Barney, 1991; Grant, 1996), to explain some of the issues facing around corporate governance on board composition.

Stewardship Theory:

Stewardship theory assumes that directors, as the stewards of the shareholders to protect their interests. This theory develops on the assumption that job satisfaction and a sense of responsibility counters or negates directorial selfishness. Unlike agency theory, which focuses on the personal self-interest as a starting point, stewardship theory rejects the self-interest concept. Andersen and Reeb (2003a, 2003b) find that U.S. firms with founding ownership concentration actually perform better, on average, than non-family firms, which demonstrates that the benefits of family influence outweigh the costs associated with it. As a result, it is argued that family representation on the board provides real benefits to minority shareholders, and the overall board performance of the firm.

Base on the stewardship theory, managers are assumed to improve their own position while the board seeks to control managers and hence, close the gap between the two structures. Executives or major shareholders of a company tend to be more motivated to act in the best interest of the company rather than in their own self-interests. This theory argues that over time, senior executives tend to view themselves as part of the company; therefore, there is a minimal agency cost involved.
According to Tricker (1994), the concept that directors are good stewards for the shareholders is one of the basic principles of company law. Donaldson and Davis (1991) take the theory further by arguing that monitoring and incentive arrangements for directors are not really necessary because executive managers are not opportunistic, and wanting to do a good job, i.e., to be the stewards of corporate assets. Also, under the stewardship theory, there is no conflict of interest between directors and shareholders. Thus, it is argued that in Hong Kong, there are a lot of family-controlled companies especially in the Hong Kong property industry, family owners and directors are involved and committed in maximising the company’s financial performance because they benefit the most as a dominant shareholder. As a result, the minority shareholders are better off instead of worse off financially if they are investing more money in the company.

Donaldson and Davis (1991) find there is a positive effect of CEO-duality on shareholder returns, which also supports stewardship theory. They find that shareholder returns, in terms of returns on equity, are superior when there is CEO-duality. This is quite contrary to what is suggested by the agency theory. Stewardship theory implies that self-regulation by directors is far more important than external regulation and punishment for wrongdoings by directors. However, numerous past incidents suggest that self-regulation should be encouraged and accompanied by strict rules and regulations in order to curb potential malpractice by irresponsible directors.

Resource Based View of the Firm Theory (RBV):
A research in the area of corporate governance follows a general trend in the area of strategic management to see the firm as a pool of talented human resources when used effectively can generate great results and competitive advantage to the firm (Barney,
1991; Grant, 1996). This is known as the Resource based View of the firm (RBV). Some corporate governance researchers believe it is not always right to keep focussing on the monitoring of the role of boards, and that more emphasis should be paid to the skills and other knowledge resources that the directors and other INEDs can bring to the firm (Short et al., 1999). This coincides with other efforts in corporate research to increase the focus on firm context and board process (Huse, 2004). In contrast to agency theory, with its emphasis on managing conflicting goals among managers and shareholders within the firm, the RBV underlies the role that INEDs can play in bringing unique resources to the firm. According to this theory, it is the task of management to gather and deploy the unique assets of the firm so as to achieve competitive advantage and produce good financial performance for the company (Wernerfelt, 1984).

While agency theory sees the role of INED primarily in terms of monitoring, the RBV sees INED as someone who brings to the firm a wide variety of competences such as financial skills, marketing skills, technical skills, as well as the ability to be a mentor which can be contributed to the overall performance of the company (Kakabadse et al., 2001). It is argued that board diversity, i.e., a board consists of INEDs with different age groups, and genders, ethnic minorities, nationalities, and background experience can create innovation and values in improving the overall company’s performance. In a broader context, INEDs are called upon to provide guidance with regard to growth strategies, general problem solving, strategic planning, recruitment and even staff development (Boussouara and Deakins, 2000).

In this study, although the above three theories are relevant and can be used to explain the important role of INEDs in the board of the company, however, the focus is on
agency theory, which is adopted as the foundation of hypothesis development and explanation of why the majority of INEDs in the board is important to protect the interests of the shareholders in the Hong Kong listed property companies. The main reason for the adoption of the agency theory in this study because the majority of the Hong Kong listed property companies in Hong Kong is under family-controlled (Jordan, 2008). When the majority shareholders are family controlled, they have the absolute power to appoint INEDs at their own discretion, acting on their own self-interests. As a result, the minority shareholders’ rights and interests can be in great jeopardy (CFA Institute, 2010).

2.5.2 Board Size and Financial Performance

The board of directors plays a major role in formulating the strategic corporate policies of a large company (Fama and Jensen, 1983b). According to the agency theory, the primary responsibility of the board of directors is to supervise and control the management of the company on behalf of the shareholders. Therefore, the make-up of the board can influence its effectiveness. Very small boards lack the advantage of having the spread of expert advice and opinion around the table that is found in larger boards. A meta-analysis based on 131 studies by Dalton and Dalton (2005) reveals that larger boards are correlated with higher firm performance, which is in contrast to the results of an earlier meta-analysis by Dalton et al. (1998). As for overall board size, between 8 and 15 persons for large publicly listed companies is recommended (Salmon, 2000). Expropriation of wealth by the CEO or inside directors is relatively easier with smaller boards since they are also associated with a smaller number of external INEDs. The few directors in a small board are preoccupied with the decision-making process, leaving less time for monitoring activities. A larger board can accommodate a greater variety of
specialists who can make the board more capable of gaining full information about decisions (Goodstein et al., 1994).

On the contrary, there are previous studies in favour of smaller board size. Prevost et al. (2002) suggest that large board size may hinder corporate performance. The number of external INEDs on a board is also a concern in board composition, because they can play a better monitoring role. In contrast, inside directors can provide more relevant experience, know-how and expertise to better support the company’s operations, although this risks potential self-interest and share price manipulation problems.

Hermalin and Weisbach (2003) argue that larger boards can be less effective than smaller ones. The main reason is that when boards consist of too many members, agency problems may increase, as directors may need more time to discuss various issues before reaching a consensus in making a decision. Lipton and Lorsch (1992) recommend limiting the number of directors on a board to seven or eight, as a greater number would be difficult for the CEO to control. Furthermore, a large board can also result in less meaningful discussion and a lack of cohesiveness (Lipton and Lorsch, 1992). When a board becomes too big, it often moves into a more symbolic role, rather than carrying out its intended function as part of the management (Hermalin and Weisbach, 2003).

Yermack (1996), Eisenberg et al. (1998), and Barnhart and Rosenstein (1998) find a negative association between board composition in terms of board size and firm performance. Yermack (1996) analyses a sample of 452 large U.S. industrial corporations in the period 1984-1991 and finds a consistent inverse relationship between board size and firm value, even when regressions are carried out using numerous models.
such as fixed effects, random effects and Ordinary Least Square estimates. When firm value, represented by Tobin’s Q, is substituted with other proxies such as return on assets, return on sales and sales/assets, the negative relation persists. Similarly, Barnhart and Rosenstein (1998) find that the firms with smallest boards are better performed financially and thus can be regarded as having better monitoring abilities. Mak and Yuanto (2003) find that listed company valuations of Singaporean and Malaysian companies are highest when the board consists of five members.

Wu (2000) finds that on average, board sizes of corporations (Forbes 500) decrease over the period 1991-1995. He argues that the cause of the decrease can partly be due to pressure from large active investors, implying that the market is generally more confident if monitoring is carried-out by a smaller board.

In this study, since the majority of the Hong Kong listed property companies has large family-controlled ownership, therefore, it is believed that there must be a strong influence of the family members on who should be invited to sit on the board and a strong preference of having a smaller board size so that the family members can easily take control the board’s decisions. To avoid this absolute control of family members on the board, the perfect board size should consist of minimum 50 percent of INEDs on the board who are appointed by the nomination committee and not by the Chairman/CEO from family-controlled companies (CFA Institute, 2010). If the Chairman/CEO of a family-controlled company is able to form teams of executive directors and non-executive directors including the appointment of INEDs, then expropriation from minority shareholders will be almost certain (CFA Institute, 2010).
Mohamed (2009) examines the correlation between board size and firm performance in the banking industry. The sample is composed of 174 banks over the period of 1995-2002. The findings also show a positive correlation between board size and firm performance. The total number of seats for all the members of the board is used as a variable to fully utilise their well-rounded experience and demonstrate their ability to make good independent judgment in delivering positive financial performance. Thus, the first hypothesis in this study is proposed as follows:

\[ H1: \text{There is a positive association between board size and financial performance in Hong Kong listed property companies.} \]

2.5.3 The Percentage of INEDs on the Board and Financial Performance

The board of directors normally consists of INEDs and Non-INEDs. Discussions on the board of directors tend to focus on the advantages and disadvantages of INEDs and the majority representation of INEDs on the board, which is sometimes referred as board independence.

Theoretically, both INEDs and Non-INEDs have their own advantages in board governance mechanism. Non-INEDs can obtain a better understanding of operations of the company because they have access to critical information, and have good relationship with the key managers, which can help them make informed decisions more accurately and promptly. And an independent board is usually recognised as one of important determinants of good board because of its fairness and independent views. Many researchers obtain different findings concerning the association between proportion of INEDs and firm value or firm performance. Some evidence support the
hypothesis that the higher the percentage of INEDs, the better the firm performance. Some find the result that board independence has a negative impact on firm performance. Others suggest there is no significant relationship between the percentage of INEDs and firm performance (Dalton et al., 1998).

Judge et al. (2003) find that there is no clear or explicit empirical evidence about the relationship between INEDs and firm’s performance in the case of developed economies. However, Cho and Kim (2007); Chen et al. (2005); Balatbat et al. (2004) and Dalton and Daily (1999) find an insignificant relationship between board composition and firm performance, in terms of the proportion of INEDs.

Rashid et al. (2010) observe 274 Bangladeshi firms and find INEDs do not add value to corporate economic performance in Bangladesh, but they can improve transparency. Nevertheless, Chowdhury critically challenges Rashid et al.’s empirical findings. First, Chowdhury says the model is considered to be ad-hoc. Second, there is no former theoretical underpinning. Third, the research omits important relevant variables, which may lead to biases. Rashid et al. claim that INEDs are ‘good monitors’ but this has not been tested in the paper (Chowdhury, 2010).

Kiel and Nicholson (2003) and Agrawal and Knoeber (1996b) are among a small group of researchers who find a negative relationship between board composition and corporate performance.

Sheng (2000) concludes that the importance of corporate governance is to ensure the accountability of certain individuals in an organisation through mechanisms that try to
reduce or eliminate the principal-agent problem. This accountability can only be properly and adequately rendered by a board, which comprises a majority or supermajority of INEDs. Hutchinson (2002) investigates the relationship between a firm’s investment opportunities, board composition and firm performance of 229 Australian firms. The results suggest that firms perform better with more INEDs on the board.

Choi et al. (2007) find that the effect of INEDs on firm performance is strongly positive. The results also suggest that there may be a possibility that the effect of INEDs on firm performance is linked to culture and situation. Luan and Tang (2007) find empirical evidence that more INEDs on the board improve a company’s economic performance.

In family-controlled companies, INEDs remain one of the major lines of defence that minority shareholders can trust in protecting their rights and interests against the influence and power of the controlling shareholders. For example, INEDs can actually prevent large family-controlled shareholders from expropriating a company’s resources via excessive compensation, special dividends, unreasonable acquisition of unrelated assets and investment in projects that yield low return on investment. INEDs at the board level can protect minority shareholders in objecting to the appointment of an unqualified or incompetent family member to the CEO role (Shleifer and Vishny, 1997).

Anderson and Reeb (2004) examine the mechanisms used to limit expropriation of firm wealth by majority shareholders among S&P 500 firms with founding-family ownership concentration. Consistent with the agency theory, they find the most valuable firms are those in which INEDs balance family board representation. The study shows that firms
with continued founding-family ownership and relatively few INEDs perform worse than non-family owned firms. The findings confirm the importance of INEDs in mitigating conflicts between minority shareholders and major family-controlled shareholders. It follows that the presence of more INEDs can protect the best interests of the minority shareholders.

Based on the above arguments and empirical studies emphasising the importance and effectiveness of the majority representation of INEDs on the board to protect the minority shareholders, a second hypothesis is developed as follows:

\[ H2: \text{There is a positive association between the percentage of INEDs on the board and financial performance in Hong Kong listed property companies.} \]

2.5.4 CEO-duality and Financial Performance

CEO-duality is always the focal point of discussion in board composition. Although there is not many previous empirical studies, which prove there is an association between family ownership concentration and financial performance. However, (Jordan, 2008) finds that almost 90 percent of the property companies listed on the Main Board of Hong Kong Stock Exchange is under family control having strong presence of CEO-Duality. The company’s ultimate decision maker – the one with the final say in the company’s management and resource allocation – is usually the largest shareholder, the Chairperson of the board, the family members of the owner. The CEO is also a family member of the owner of the company, sometimes referred to as CEO-internalization (Lee, 2007). Thus, CEO-duality becomes a very important part of the study of board composition and its impact on corporate performance, because most of the property companies in Hong Kong are family-controlled.
When the CEO role is internalised, he/she is a member of, or appointed by, the ultimate controlling family or stockholders. Therefore, in the decision-making process, the CEO might consider the ultimate family controlled shareholders’ interests above those of the managers or other shareholders. By looking at some of the familiar names of well-known listed property companies in this study’s sample, one can easily find there are a lot of CEO-duality cases. For examples, Cheung Kong Holdings Ltd., Mr. Li Ka-Shing, Chairman and his son Mr. Victor Li Tzar Kuoi, Managing Director & Deputy Chairman are the major shareholders of the company; Pacific Century Premium Development, Mr. Richard Li Tzar Kai, Li Ka-Shing’s youngest son, Chairman and majority shareholder; Sun Hung Kai Properties, the Kwok family is the majority shareholder (Madam Kwong Shiu-Hing, Chairman, the mother of Mr. Thomas Kwok Ping-Kwong, Vice Chairman and Managing Director, Mr. Raymond Kwok Ping-Luen, Vice Chairman and Managing Director, and Mr. Kwok Ping-Sheung, Non-executive Director who was Ex-Chairman & Managing Director); Henderson Land, Dr. Lee Shau Kee, Chairman & Managing Director and his family members are the major shareholders; Sino Land, Mr. Robert Ng Chee Siong, Chairman and his family are the major shareholders.

Large family-controlled shareholdings wield substantial power and influence over a company’s strategic matters, and critical decision-making process. The agency theory suggests they are more inclined to use company resources at their own discretion, for their own benefits. Faccio et al. (2001) find that without carefully keeping an eye on large family-controlled shareholder groups, they are prone to exploit the minority shareholders. Agency theory suggests that minority shareholders are only protected when they have the power to limit majority shareholders’ opportunism.
Kumar and Sivaramakrishnan (2007) use an agency model to analyse how the board-CEO relationship affects shareholder value. They measure board dependence on the CEO by the extent to which the board’s interests are intrinsically aligned with the CEO’s interests, and come to the finding that, other things held constant, a more dependent board exhibits a greater alignment with the CEO. The main finding in their study is that shareholder’s value is increased as board dependence (not independence) increases.

On the other hand, consistent with the Stewardship theory, Lei and Song (2004) find the percentage of shares held by the largest shareholder is positively significant to firm value in Hong Kong. Controlling shareholders are present in most of the companies, therefore, the higher the controlling shareholder stakes in the firm, the more monitoring effort is exerted to protect their own benefits, because more cash flow of the firm belongs to the controlling shareholders. Minority shareholders can then benefit from the effort made by the large shareholders.

Furthermore, Chen et al. (2005) and Kapopoulos and Lazaretou (2007) find that a more concentrated family ownership relates to higher company profitability. Martinez et al. (2007) study the impact of family ownership on firm performance by using a sample of 175 firms listed on the Chilean stock market. They find the group of 100 family-controlled firms performs significantly better than the group of 75 non-family-controlled companies over the period of 1995-2004.

Contrary to agency theory, companies with large family-controlled shareholdings tend to perform better because these shareholders have strong incentives to ensure the business
is running efficiently and profitably (Shleifer & Vishny, 1997). Family-controlled businesses do not incur agency costs because major shareholders are participating in the management process (Fama and Jensen, 1983a).

However, Thaler and Shefrin (1981, as cited in Schulze et al., 2001), find that the agency threats are raised by family-based control, especially for minority shareholders (Villalonga and Amit, 2004). The significant presence of family-controlled companies in Hong Kong makes for an interesting test of agency theory in relation to board independence.

Shleifer and Vishny (1997) propose that legal protection from concentrated ownership is essential for a good corporate governance system. They claim that majority shareholders have the ability to control the management, and legal protection can avoid explicit expropriation from minority shareholders by management. However, the situation can be contradictory. From a regulatory point of view, legal protection can imply more defined regulations. If regulations are vague, then the costs of lawsuits will be high. Conversely, setting more strict regulations and laws may hinder the flexibility of companies; this in turn lowers their profits. Therefore, it is argued that internal corporate governance mechanisms still play a vital role as compared to strict external corporate governance mechanisms, i.e., statutory law.

In Hong Kong, the Code on corporate governance recommends that the roles of Chairman and the CEO should be separate and should not be performed by the same person. Non-compliance needs to be disclosed and explained. It also requires the company to disclose in its annual report the nature of any relationship between the
Chairman and CEO. Nevertheless, to separate the role of Chairman and CEO is not enough to ensure the effectiveness of the board of directors. Although the Chairman and CEO are two separate people, they can still be related to each other to the controlling shareholder. This situation decreases accountability and oversight and gives power to a controlling group. Therefore, in order to achieve board Independence; the Chairman should be an INED. This helps ensure that the board maintains its objectivity and an appropriate balance of power (CFA Institute, 2010).

Base on the above diverse empirical findings with different theoretical perspectives such as agency theory and stewardship theories, and the Hong Kong property industry’s unique characteristic, i.e., strong family controlled property companies, the third hypothesis of this study is proposed as follows:

\[ H3: \text{There is no association between CEO-duality and financial performance in Hong Kong listed property companies.} \]

2.5.5 The Percentage of Women on the Board and Financial Performance

Board diversity attracts more attention from the academics, stock investors, and regulators in the last decade. It is believed that more diversity the board members, there are more ideas, independent judgment, innovation, and harmony amongst the board members in making strategic decisions. As a result, better financial performance can be achieved. Consistent with RBV theory, it is argued that greater diversity promotes a better understanding of market place by matching the diversity of a firm’s directors to the diversity of its potential customers and employees. Brammer et al. (2007) in their study of UK corporate boards find high percentage of women on the boards is associated
with higher firm performance in retailing, banking, media and utility industries.

An empirical study finds an improvement in firm performance when there is board diversity in terms of experience, skills, gender and nationality (Dalton and Dalton, 2005). While many of the studies of diversity focus on race and gender, the concept of diversity is broader and encompasses factors including age, culture, personality, skill, training, educational background, and life experience. Board diversity is increasingly regarded as a business imperative. Studies demonstrate the benefits of a diverse board in areas such as organisational performance and problem solving. The issue receives attention from industry and shareholder groups as well as regulatory and legislative bodies. When managed properly, diversity can provide an important competitive advantage for business (Macfarlane et al., 2010).

Boards of directors, as part of their responsibility to oversee the strategic direction, financial performance and risk management of their companies, should have an understanding of how the issue of diversity affects key areas of their mandate. While successful management of diversity may lead to business benefits or competitive advantages. Failure to adequately address these issues could present a risk to a company’s ability to innovate, attract clients and partners, or keep pace with its industry (Macfarlane et al., 2010).

Catalyst Inc. (2006) finds that the percentage of women in the board is positively related to the return on equity and cumulative return to stockholders for a sample of 353 Fortune 500 firms over the period 1996-2000. Carter et al. (2003) find that Tobin’s Q is positively related to the percentage of female directors on the board.
On the contrary, Farrell and Whidbee (2005) use Poisson regression analysis and an event study to investigate the addition of women to the board have any effect on firm performance. They find no evidence that the addition of a woman to the board affects return on assets or market returns to shareholders. Shrader et al. (1997) find no relationship between the percentage of female directors on the board and profit margin; return on assets, or return on equity. Zahra and Stanton (1988) conduct a canonical analysis and find no relationship between the percentage of women on the board and return on assets, profit margin, earnings per share, or dividends.

In this study, the board diversity is examined in terms of the percentage of women on the board in order to find out if it has an influence on financial performance. Despite the fact that Hong Kong women account for a large percentage of the Hong Kong workforce, they hold only 8.9 percent of directorship in Hong Kong’s top companies (Wassener, 2011). The percentage is even lower, 7 percent, when it comes to executive directorship. In Britain and the United States, the percentage of board positions held by women in top companies is 12 percent and 15 percent respectively (Wassener, 2011). It is argued that this low percentage of women representation in the boards of Hong Kong property listed companies is a reality and it cannot be changed much over time. For this reason, it is quite difficult to measure if a higher percentage of women on the boards are associated to a higher financial performance in Hong Kong listed property companies. Therefore, the fourth hypothesis is developed as follows:

\[ H4: \text{There is no association between the percentage of women on the board and financial performance in Hong Kong listed property companies.} \]
2.5.6 Compliance with the Code of Corporate Governance on Board Composition and Financial Performance

Hong Kong property listed companies’ corporate governance in the area of board composition face a lot challenges from investors, and regulators due to scandals from leading property companies like SHKP, NWD and corrupted government officials as discussed earlier. There is a big concern on the validity, effectiveness, and relevancy of the existing Code of corporate governance on board composition in Hong Kong to protect the investors’ investment and bring the commercial criminals to justice.

By changing the number of INED requirement from two to three persons or one-third of the board consists of INEDs with effect from 2005 onwards is intended to improve the overall corporate governance in Hong Kong (HKEX, 2005). As a matter of fact, it makes it even worse as anyone can see the compliance is so easy just like ‘box ticking’. Therefore, the idea of setting an absolute number of INEDs is a problem due to varying board sizes, number of committees, and the underlying issue of concentrated family ownership as described above.

In Asia, the board of directors traditionally has few INEDs, which may limit their ability to effectively exercise independent and objective judgment. When the majority of board members are not independent, the collective voice of the INEDs diminishes so as is their value on the board. The directors are more likely to be stretched for time because fewer independent members are available to share the committee workload (CFA Institute, 2010). Although Hong Kong listed companies are required to have at least three INEDs in the new Code of corporate governance starting on 1 January 2005, however, this is quite easy for companies to comply with this rule. Compliance with the Code of
corporate governance on board composition is almost certain; therefore, the fifth hypothesis in this study is developed as follows:

\[ H5: \text{There is no association between compliance to the Code of corporate governance on board composition and financial performance in Hong Kong listed property companies.} \]

The next Chapter discusses research methodology where different variables are defined and measured by using different statistical tools in order to validate these hypotheses.
Chapter 3

RESEARCH METHODOLOGY

3.1 Definition of Research Variables

In this study, the independent variables are board size, percentage of INEDs, CEO-duality, percentage of women on the board, and the compliance with the Code on corporate governance of board composition. The dependent variable is referred to as Tobin’s Q, which is considered as a good tool to measure corporate financial performance (Chung and Pruitt, 1994). Tobin’s Q is calculated as market value of total equity plus book value of total debts, divided by book value of total assets. Yermack (1996) uses Tobin’s Q to analyse board performance in his study. Anderson and Reeb (2003a) adopt Tobin’s Q when they examine the governance of family-owned firms. Tobin’s Q is widely used as a proxy in the empirical corporate governance literature (Chung et al., 1994); therefore, in this study Tobin’s Q is adopted to measure the financial performance of Hong Kong property listed companies.

The independent variables used in this study are: i) Board size (BOARDSIZE), which refers to the total number of directors on the board; ii) The percentage of INEDs on the board (PERINED) is measured by dividing the number of INEDs to the total number of board members; iii) CEO-duality (CEODUALITY) is considered because there are a number of studies that find companies with combined Chairman – CEO positions diminish financial performance (Yermack (1996); Shivdasani and Yermack (1999)). The CEO will have more influence on the board structure and its power to oversee management if he/she is also the Chairman of the company (Finkelstein and Hambrick,
1996). If the Chairman and CEO roles are performed by one person, he/she will have the full authority to appoint INEDs at his/her own discretion. Therefore, these INEDs may act in favour of the combined Chairman and CEO’s will instead of acting independently at the board meetings. As a result, CEO-duality may have positive or negative effect on firm’s performance. Dummy variable (1) is assigned if Chairman and CEO are the same person; (0) is assigned if Chairman and CEO are not the same person.; iv) The percentage of women on the board (PERWOMEN) is measured by dividing the total number of women on the board to the total number of board members; and v) Compliance with the Code of corporate governance on board composition (COMPLYCCGBC). A dummy variable (1) is used if the company complies with the Code of corporate governance on board composition; (0) is used if the company does not comply with the Code on corporate governance of board composition. There are two periods of study of COMPLYCCGBC, which are illustrated as Pre-2005 (1999-2004) and Post-2005 (2005-2010).

- Compliance with old Code of corporate governance on board composition from 1999-2004 (Pre-2005) is defined as a listed property company, which has at least two INEDs on the board. Dummy variable (1) is used if the company complies; (0) if the company does not comply.

- Compliance with new Code of corporate governance on board composition from 2005-2010 (Post-2005) is defined as a listed property company, which has at least three INEDs on the board. Dummy variable (1) is used if the company complies; (0) if the company does not comply.
Several control variables are introduced in the analysis namely debt ratio, company size and dividend per share to take into account industry and company characteristics in order to reduce the concerns about heterogeneity and endogeneity.

Company size is an important controllable variable as large companies can have more capacity to raise large capital at lower cost (Short and Keasey, 1999), however, they may have problems of coordination, which can jeopardise the financial performance (Williamson, 1967). The larger the company, the easier it is to raise capital in the financial market (Majumdar and Chhibber, 1999). Logarithm of company size (LOGCOMPSIZE) is measured as the natural logarithm of a company’s total turnover. Company size has two effects on board composition: i) Larger companies have more resources to recruit and retain in-house talented people to run the company; this can reduce the need to get external expertise and skills from INEDs. ii) Larger companies engage in more complex business, processes, having global presence, this would increase the requirement to obtain external talents and experience from INEDs. Thus, it is expected that both board size and the percentage of INEDs on the board will be larger.

Company debt ratio (DEBTRATIO) may serve as a disciplinary device to minimise agency problems, which ultimately can affect the corporate performance (Jensen and Meckling, 1976). Consistent with Agrawal and Knoeber (1996a), a control variable debt ratio, is also considered to identify the potential impact on corporate performance. It is measured as the ratio of total debts to total assets.

Dividend per share (DIVIPERSHARE) is also one of the important control variables. Jensen (1986) argues that the payment of dividends would reduce agency conflicts as it
would reduce the free cash flow available for managers to use for their own “perks” or for investing in projects with sub-optimum returns.

The terms of measurement of dependent variable (TOBIN’s Q), independent variables (BOARDSIZE, PERINED, CEODUALITY, PERWOMEN, and COMPLYCCGBC) and control variables (DEBTRATIO, LOGCOMPSIZE, and DIVIPERSHARE) are summarised in Table 1.

### Table 1
Terms of Measurement of All Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Terms of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOBIN’s Q</td>
<td>Market value of total equity plus book value of total debts divided by book value of total assets.</td>
</tr>
<tr>
<td>BOARDSIZE (Board size)</td>
<td>Total number of directors on the board, which includes INEDs and Non-INEDs.</td>
</tr>
<tr>
<td>PERINED (Percentage of INEDs on the board)</td>
<td>Total number of INEDs on the board divided by the total number of board members.</td>
</tr>
<tr>
<td>CEODUALITY (CEO-duality)</td>
<td>Dummy variable (1) if Chairman and CEO is the same person; (0) if Chairman and CEO is not the same person.</td>
</tr>
<tr>
<td>PERWOMEN (Percentage of women on the board)</td>
<td>Total number of women on the board divided by the total number of board members.</td>
</tr>
<tr>
<td>COMPLYCCGBC (Compliance with Code of corporate governance on board composition)</td>
<td>Compliance with old Code of corporate governance on board composition from 1999-2004 (Pre-2005) is defined as a listed property company, which has at least two INEDs on the board. Dummy variable (1) is used if the company complies; (0) if the company does not comply.</td>
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</table>
Compliance with new Code of corporate governance on board composition from 2005-2010 (Post-2005) is defined as a listed property company, which has at least three INEDs on the board. Dummy variable (1) is used if the company complies; (0) if the company does not comply.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
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<tbody>
<tr>
<td>DEBTRATIO (Debt ratio)</td>
<td>It is measured as the ratio of total debts to total assets.</td>
</tr>
<tr>
<td>LOGCOMPSIZE (Log of company size)</td>
<td>Company size is equal to total sales (measured by logarithm)</td>
</tr>
<tr>
<td>DIVIPERSHARE (Dividend per share)</td>
<td>Total payment of dividend divided by the total number of outstanding shares.</td>
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</table>

3.2 Sample Selection Criteria and Data

There are two major stock trading platforms in Hong Kong – the Main Board and the Growth Enterprise Market (GEM); both managed by Hong Kong Exchange (HKEX). The Main Board is the market for established companies with proven profitable operating track records. GEM as the name implies is a new market to provide capital formation opportunities for growth companies, set up in November 1999 to facilitate capital needs of technology companies. The major difference of Main Board and GEM is that Main Board companies must have a track record of at least three years, with profit of HK$20 Million in latest financial year and an aggregate profit of HK$30 Million in the latest two financial years. GEM companies are not required to have profit records, though companies applying need to have at least 24 months of active business period, with some exceptional cases that shortened the period to 12 months.
In this study, Hong Kong listed property companies on the Main Board of Hong Kong Stock Exchange are considered only. There are a total of 108 companies under “Properties” industry classification listed on the Main Board of the Hong Kong Stock Exchange as of 1999. Under the “Properties” industry classification for the period 1999-2006, hotel and construction materials are not included. With effect from 2007, a new industry classification is introduced by grouping property, hotel and construction materials into one industry called “Property & Construction” industry. To avoid any confusion in data collection and consistency issue, the sample of this study only takes into account the data of 108 companies listed under “Properties” industry classification in 1999 and conduct a longitudinal study of these companies for the twelve years period 1999-2010. The total number of companies listed on the Main Board of Hong Kong Stock Exchange and Clearing by industry for the period 1999-2010 is illustrated in Exhibit 1.

An annual report of listed company is normally published once a year. In order to obtain a better view of the board composition, the sample of listed property companies on the Main Board includes only those companies that listed from 1998 until 2010 with complete published annual reports for the whole period 1999 to 2010. Companies, which are de-listed during the study period due to bankruptcy, spin-offs, merger, and take-over, are not included in the sample. Subsequently, 42 companies are eliminated out of 108 listed companies under “Properties” industry classification. The final sample of 66 out of 108 companies is selected for this study in a 12 years period (1999-2010). Altogether the data sample consists of 792 firm-year observations.
The rationale for the selection of these 66 companies in this study is that they account for HK$621.29 Billion or 80 percent of the whole property industry market capitalisation in 1999, which is equivalent to 13.12 percent of total stock market capitalisation (HKEX, 1999). In 2010, the same 66 companies account for HK$1,585.62 Billion or 60 percent of the whole property industry market capitalisation, which is equivalent to 7.57 percent of the total stock market capitalisation (HKEX, 2010). The drop in the percentage of market capitalisation from 1999 to 2010 is due to the fact that there are many large state-owned Mainland Chinese companies listed in Hong Kong Stock Exchange during the period 2005-2010. If these Mainland Chinese property-related companies and Hong Kong hotel and construction material companies are taken out of 108 companies, these 66 listed property companies represent 80 percent of total market capitalisation in 2010. This indicates their significant contribution to overall Hong Kong economy. The market capitalisation by industry for the period 1999-2010 is illustrated in Exhibit 2.

The rationale for the selection a twelve years study period 1999-2010 is to investigate if the new Code of corporate governance on board composition with effect from 1 Jan 2005 has any impact on the financial performance of Hong Kong listed property companies. To achieve this, Pre-2005 (1999-2004) and Post-2005 (2005-2010) periods are studied and analysed in details for comparison.

3.3 Data Sources

This study uses secondary data. The annual reports of the sample of 66 listed property companies provide all data on board size and membership, INEDs on the board, details of the CEO and Chairman of the board, and number of women on the board. Additional financial related information such as debt ratio, company size in terms of total sales,
dividend per share, after-tax profit, total equities, total assets, total debts, market value, return on assets (ROA), return on equities (ROE) are obtained from DataStream’s database for the whole period 1999-2010.

3.4 Empirical Approach

Following Agrawal and Knoeber (1996a) and Mak and Li (2001), a system of simultaneous equations is developed where financial performance measured by Tobin’s Q is regressed in board size, percentage of INEDs, CEO-duality, the percentage of women on the board and other corporate governance variables as illustrated in the formula below:

\[
\text{Financial Performance (TOBIN’s Q) } = \alpha + \beta_1 \text{BOARDSIZE} + \beta_2 \text{PERINED} + \beta_3 \text{CEODUALITY} + \beta_4 \text{PERWOMEN} + \beta_5 \text{COMPLYCCGBC} + \beta_6 \text{DEBTRATIO} + \beta_7 \text{LOGCOMPSIZE} + \beta_8 \text{DIVIPERSHARE} + \varepsilon
\]

- $\beta$ = the regression coefficient
- $\varepsilon$ = the composite error terms

Through the use of SPSS (Statistical Package for the Social Sciences), various statistical tools are used in the analysis of the data namely descriptive statistics, one-way ANOVA means comparison, correlation analysis, linear regression analysis, and Tobin’s Q.

- Descriptive statistics: are used to explore the data collected and to summarise and describe those data.
- One-way ANOVA Mean comparison: Analysis of Variance (ANOVA) is a collection of statistical models, and their associated procedure, in which the observed variance in a particular variable is partitioned into components attributable
to different sources of variation. One-way ANOVA is conducted to test the differences of the two sample periods. Table 7 in Chapter 4 presents the Mean comparison between Pre-2005 sample period (1999-2004) and Post-2005 sample period (2005-2010) and their difference test results.

- Correlation analysis: Correlation looks at the relationship between two variables in a linear fashion. A Pearson product-moment correlation coefficient describes the relationship between two continuous variables. This Pearson correlation coefficient is sensitive only to a linear relationship between two variables (which may exist even if one is a nonlinear function of the other).

- Linear Regression analysis: is an approach to modelling the relationship between a scalar dependent variable Y (TOBIN’s Q) and one or more explanatory variables denoted X (BOARDSIZE, PERINED, CEODUALITY, PERWOMEN, COMPLYCCGBC, DEBTRATIO, LOGCOMPSIZE, DIVIPERSHARE). Linear regression analysis is used because of its practical applications. This is because models, which depend linearly on their unknown parameters, are easier to fit than models, which are non-linearly related to their parameters. The statistical properties of the resulting estimators are easier to determine.

- Tobin’s Q is used as a dependent variable, which is considered as a good tool to measure the firm financial performance (Chung and Pruitt, 1994). Tobin’s Q is measured as market value of the total equity plus book value of the total assets divided by book value of total assets.

- In the presence of multicollinearity, the estimate of one independent variable’s impact on the dependent variable (Tobin’s Q) while controlling for the other independent variables tends to be less precise than if predictors are uncorrelated with one another. In this model, the assumption is that there is the best regression
model, i.e., the predictor variables each correlate highly with the dependent (outcome) variable but correlate at most only minimally with each other. So long as the underlying specification is correct, multicollinearity does not actually bias results; it just produces large standard errors in the related independent variables.
EMPIRICAL ANALYSIS

4.1 Descriptive Statistics

This section provides the descriptive statistics of the whole sample period’s key financial performance indicators, namely, company size (sales turnover), after-tax profit, total equity, total assets, total debts, market value, return on assets (ROA) and return on equity (ROE). This section also shows the descriptive statistics of dependent, independent, and control variables in the whole sample period: 1999-2010; Pre-2005 sample period: 1999-2004; and Post-2005 sample period: 2005-2010.

Table 2 shows descriptive statistics of key financial performance indicators in the whole sample period (1999-2010). The average company size in terms of sales turnover was approximately HK$2,937 Million ranging from -HK$219 Million to HK$44,313 Million. It reveals that in Hong Kong, there are quite a lot of medium and large listed property companies. The property industry is capital intensive instead of labour intensive; as a result, large property companies such as Cheung Kong, Sun Hung Kai Properties, New World Development and a few other large companies tend to have greater competitive advantages and political clout in winning big property projects in Hong Kong through government land auction.
Table 2
Descriptive Statistics of Key Financial Performance Indicators
For Whole Sample Period: 1999 to 2010 (HK$ Million)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPANY SIZE (TURNOVER)</td>
<td>2,937</td>
<td>5,493</td>
<td>-219</td>
<td>44,313</td>
</tr>
<tr>
<td>AFTER TAX PROFIT</td>
<td>1,012</td>
<td>3,122</td>
<td>-6,719</td>
<td>339,309</td>
</tr>
<tr>
<td>TOTAL EQUITY</td>
<td>13,841</td>
<td>33,861</td>
<td>-734</td>
<td>265,696</td>
</tr>
<tr>
<td>TOTAL ASSETS</td>
<td>23,510</td>
<td>47,941</td>
<td>14</td>
<td>351,601</td>
</tr>
<tr>
<td>TOTAL DEBTS</td>
<td>4,730</td>
<td>8,311</td>
<td>0</td>
<td>65,682</td>
</tr>
<tr>
<td>MARKET VALUE</td>
<td>13,789</td>
<td>38,937</td>
<td>16</td>
<td>333,991</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.03</td>
<td>0.55</td>
<td>-11.34</td>
<td>2.30</td>
</tr>
<tr>
<td>ROE</td>
<td>0.02</td>
<td>1.33</td>
<td>-25.45</td>
<td>18.96</td>
</tr>
</tbody>
</table>

It is generally believed that property companies in Hong Kong are making a lot of profits for their shareholders; however, this study's result show an average after-tax profit of the observations is HK$1,012 Million with a minimum of -HK$6,719 Million and a maximum of HK$339,309 Million. These figures reveal that the Hong Kong property market is not as profitable as one may think. In fact, the property market in Hong Kong is volatile and risky. The mean of equity capital and reserves is about HK$13,841 Million, which shows listed property companies are still able to attract capital investment from the investors.

This sample has a mean of total assets of HK$23,510 Million, which shows listed property companies are able to maintain a high level of net worth of their assets over the last twelve years period. The mean of debts is around HK$4,730 Million, which
shows that listed property companies are using significant debt leverage in financing their long-term projects. The mean of total debts of HK$4,730 is much higher than the mean after-tax profit HK$1,012 Million and mean sales turnover HK$2,937 Million. This is quite an alarming situation because if the global economic condition gets worse, it may affect Hong Kong property companies’ ability to pay back their debts, leading to a higher probability of bankruptcy.

The Hong Kong listed property companies’ average market value is around HK$13,789 Million, which reveals the local and international investors are still bullish about the future investment prospects of the local industry. However, the mean for ROA of -3 percent and the mean for ROE of 2 percent are considered low given the fact that investors have to bear the high investment risk, market volatility, market uncertainty, and the long-term investment duration. One may question why the personal wealth of major shareholders controlled by family in listed property companies are on the rise while the financial performance of their listed property companies are not doing very well? The tunnelling issue is worth investigating and studying in the future studies.

Table 3 illustrates descriptive statistics of all variables used in the model for the whole sample period 1999-2010. The sample has a mean Tobin’s Q of 0.7389, which indicates that the stock market traded at a “discount” to the replacement cost of the property company’s total assets, i.e., the market is considered inexpensive or undervalued. The firm year observations in the sample had minimum board size (BOARDSIZE) of 4 and maximum of 24. The mean of board size (BOARDSIZE) of 9.64 is on the low side as compared to the Western boards. Small board size lacks the advantage of having a spread of expert advice and opinion around the table, leading to lower firm performance
(Dalton and Dalton, 2005; Dalton and Daily, 1999). According to the agency theory, smaller board size in family-controlled companies, the expropriation of wealth by CEO or insider directors is relatively easier because it will associate with smaller number of INEDs leading to less oversight of management decisions and operations (Goodstein et al., 1994).

Table 3
Descriptive Statistics of All Variables
(Whole Sample Period: 1999-2010)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOBIN’S Q</td>
<td>0.7389</td>
<td>1.4394</td>
<td>0.05</td>
<td>34.89</td>
</tr>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOARDSIZE</td>
<td>9.6427</td>
<td>3.24161</td>
<td>4.00</td>
<td>24.00</td>
</tr>
<tr>
<td>PERINED</td>
<td>0.3349</td>
<td>0.10140</td>
<td>0.00</td>
<td>0.63</td>
</tr>
<tr>
<td>CEODUALITY</td>
<td>0.4306</td>
<td>0.49547</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>PERWOMEN</td>
<td>0.0820</td>
<td>0.09698</td>
<td>0.00</td>
<td>0.50</td>
</tr>
<tr>
<td>COMPLYCCGBC</td>
<td>0.9912</td>
<td>0.09366</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Control Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEBTRATIO</td>
<td>0.2593</td>
<td>1.21094</td>
<td>0.00</td>
<td>33.92</td>
</tr>
<tr>
<td>LOGCOMPSIZE</td>
<td>8.8536</td>
<td>.85424</td>
<td>5.34</td>
<td>11.00</td>
</tr>
<tr>
<td>DIVIPERSHARE</td>
<td>0.2651</td>
<td>.88428</td>
<td>0.00</td>
<td>19.60</td>
</tr>
<tr>
<td><strong>Number of Observations</strong></td>
<td>792</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean percentage of Independent Non-Executive Directors (PERINED) is 33.49 percent with a range of 0 to 63 percent across the sample, indicating a critical amount of dispersion among companies. The mean percentage of INEDs on the board is coincidently matching with the required percentage in the best practice of the Code of corporate governance on board composition, i.e., one-third of the board members must
be INEDs. This figure suggests that most of the Hong Kong listed property companies do not believe that more INEDs in the board benefits the oversight of management and created more value to the companies. The mean of CEO-duality (CEODUALITY) is 0.43, which shows the average extent of firms having the roles of Chairman and CEO held by the same person. This figure reveals that less than half of the Hong Kong listed property companies are complying with the recommended best practice of the Code of corporate governance on board composition, i.e., the roles of CEO and Chairman should be separate and performed by different individuals.

The percentage of women on the boards (PERWOMEN) has a mean of 8.20 percent. This figure shows that the Hong Kong property industry is male dominant. The mean of compliance with the Code of corporate governance on board composition (COMPLYCCGBC) is 99.12 percent, which shows there is a very high percentage of the companies complies with the Code of corporate governance on board composition. This figure looks quite impressive because it shows that almost all Hong Kong listed property companies are complying with both the old and new Code, i.e., in the Pre-2005 period, there are at least two INEDs on the board, and in the Post-2005 period, there are at least three INEDs on the board. However, it also suggests that the requirement of the minimum number of INEDs is too low to pose any challenge to the Hong Kong property listed companies to fulfil such a requirement.

Regarding the control variables, the debt ratio (DEBTRATIO) has a mean of 25.93 percent. The minimum of debt ratio is having a range from 0 to 3392 percent showing a big difference among the observations. These figures are considered high and show on average, a Hong Kong listed property company borrowed 25.93 percent of what they
have in terms of assets and some companies even borrow 33.92 times of what they actually own. This is a highly leveraged and risky investment if the property market condition turns poor. The mean of LOGCOMPSIZE is 8.85 with a range from 5.34 to 11.00. The average dividend payout per share (DIVIPERSHARE) is HK$0.26 and the maximum is HK$19.60.

Table 4 presents descriptive statistics for all variables in the Pre-2005 sample period (1999-2004). This sample has a mean Tobin’s Q of 0.7736, which is slightly higher than that of the whole sample period of 0.7389. The mean of board size is 9.32, which is slightly smaller than that of the whole sample period figure of 9.64. The mean percentage of Independent Non-Executive Directors (PERINED) is 30.86 percent, which is slightly lower than that of the whole sample period figure of 33.49 percent. The mean of CEO-duality (CEODUALITY) is 0.47, which is slightly higher than that of the whole sample period figure of 0.43. The mean percentage of women on the board is 7.70 percent, which is smaller than that of the whole sample period figure of 8.20 percent. The mean of COMPLYCCGBC is 98.23 percent, which shows there is a very high percentage of companies comply with the Code of corporate governance on board composition. This figure is slightly smaller than that of the whole sample period figure of 99.12 percent.
Table 4
Descriptive Statistics of All Variables
(Pre-2005 Sample Period: 1999-2004)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOBIN’S Q</td>
<td>.7736</td>
<td>1.93160</td>
<td>.05</td>
<td>34.89</td>
</tr>
<tr>
<td>Independent Variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOARDSIZE</td>
<td>9.3182</td>
<td>3.25145</td>
<td>4.00</td>
<td>23.00</td>
</tr>
<tr>
<td>PERINED</td>
<td>.3086</td>
<td>.10240</td>
<td>.00</td>
<td>.63</td>
</tr>
<tr>
<td>CEODUALITY</td>
<td>.4747</td>
<td>.49999</td>
<td>.00</td>
<td>1.00</td>
</tr>
<tr>
<td>PERWOMEN</td>
<td>.0770</td>
<td>.10095</td>
<td>.00</td>
<td>.50</td>
</tr>
<tr>
<td>COMPLYCCGBC</td>
<td>.9823</td>
<td>.13194</td>
<td>.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Control Variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEBTRATIO</td>
<td>.3259</td>
<td>1.70579</td>
<td>.00</td>
<td>33.92</td>
</tr>
<tr>
<td>LOGCOMPSIZE</td>
<td>8.7515</td>
<td>.79093</td>
<td>5.83</td>
<td>10.41</td>
</tr>
<tr>
<td>DIVIPERSHARE</td>
<td>.2358</td>
<td>1.09018</td>
<td>.00</td>
<td>19.60</td>
</tr>
<tr>
<td>Number of Observations</td>
<td>396</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Regarding the control variables, the debt ratio has a mean of 32.59 percent, which is much higher than that of the whole sample period figure of 25.93 percent. The mean of LOGCOMPSIZE is 8.75, which is slightly lower than that of the whole sample period figure of 8.85. The average dividend payout per share is HK$0.23, which is lower than that of the whole sample period figure of HK$0.26.

Table 5 shows descriptive statistics for all variables in the Post-2005 sample period (2005-2010). This sample has a mean Tobin’s Q of 0.7042, which is smaller than the whole sample period figure of 0.7389 and pre-2005 sample period figure of 0.7736. The mean of board size is 9.97, which is slightly larger than the whole sample period figure of 9.64 and Pre-2005 sample period figure of 9.32. The mean percentage of INEDs on
the board is 36.13 percent, which is higher than the whole sample period figure of 33.49 percent and Pre-2005 sample period figure of 30.86 percent.

Table 5
Descriptive Statistics of All Variables
(Post-2005 Sample Period: 2005-2010)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOBIN’S Q</td>
<td>.7042</td>
<td>.64466</td>
<td>.14</td>
<td>9.78</td>
</tr>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOARDSIZE</td>
<td>9.9672</td>
<td>3.20307</td>
<td>5.00</td>
<td>24.00</td>
</tr>
<tr>
<td>PERINED</td>
<td>.3613</td>
<td>.09335</td>
<td>.14</td>
<td>.60</td>
</tr>
<tr>
<td>CEO DUALITY</td>
<td>.3864</td>
<td>.48753</td>
<td>.00</td>
<td>1.00</td>
</tr>
<tr>
<td>PERWOMEN</td>
<td>.0869</td>
<td>.09272</td>
<td>.00</td>
<td>.40</td>
</tr>
<tr>
<td>COMPLYCCGBC</td>
<td>1.0000</td>
<td>.00000</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Control Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEBTRATIO</td>
<td>.1927</td>
<td>.13371</td>
<td>.00</td>
<td>.80</td>
</tr>
<tr>
<td>LOGCOMPSIZE</td>
<td>8.9571</td>
<td>.90320</td>
<td>5.34</td>
<td>11.00</td>
</tr>
<tr>
<td>DIVIPERSHARE</td>
<td>.2945</td>
<td>.61123</td>
<td>.00</td>
<td>4.20</td>
</tr>
<tr>
<td>Number of Observations</td>
<td>396</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The mean of CEO-duality is 0.39, which is smaller than the whole period figure of 0.43 and Pre-2005 sample period figure of 0.47. The mean percentage of women on the board is 8.69 percent, which is slightly higher than the whole sample period figure of 8.20 percent and Pre-2005 sample period figure of 7.70 percent. The mean of COMPLYCCGBC is 1, which shows there is a 100 percent compliance with the Code of corporate governance on board composition. This figure is slightly higher than the whole sample period figure of 99.12 percent and Pre-2005 sample period figure of 98.23 percent. This may not be a good sign as it shows that the requirement is so low that all listed companies can easily meet the requirement. This implies that most of Hong Kong listed property companies view INEDs as a requirement of regulation rather than enhancement of corporate governance.

With regard to the control variables, the debt ratio has a mean of 19.27 percent, which is lower than the whole sample period figure of 25.93 percent and Pre-2005 sample period figure of 32.59 percent. The mean of LOGCOMPSIZE is 8.9571, which is slightly higher than the whole sample period figure of 8.8536 and Pre-2005 sample period figure of 8.7515. The average dividend payout per share is HK$0.2945, which is higher than the whole sample period figure of HK$0.2651 and Pre-2005 sample period figure of HK$0.2358.

Table 6 provides descriptive statistics of all variables including dependent, independent and control variables by year for the whole sample period 1999 to 2010. The mean, standard deviation, minimum, and maximum of all variables in whole sample figure and a breakdown-by-year figure are shown in this table.
Table 6

Descriptive Statistics of All Variables
Whole Sample Period (1999 – 2010)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Overall</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOBIN’s Q</td>
<td>Mean</td>
<td>.74</td>
<td>.77</td>
<td>.67</td>
<td>.65</td>
<td>.59</td>
<td>1.14</td>
<td>.82</td>
<td>.60</td>
<td>.74</td>
<td>.93</td>
<td>.54</td>
<td>.78</td>
</tr>
<tr>
<td></td>
<td>Std.Dev</td>
<td>1.44</td>
<td>.88</td>
<td>.64</td>
<td>.76</td>
<td>.83</td>
<td>4.25</td>
<td>1.41</td>
<td>.27</td>
<td>.42</td>
<td>.72</td>
<td>.30</td>
<td>1.17</td>
</tr>
<tr>
<td></td>
<td>Min</td>
<td>.05</td>
<td>.08</td>
<td>.05</td>
<td>.06</td>
<td>.06</td>
<td>.10</td>
<td>.11</td>
<td>.14</td>
<td>.17</td>
<td>.34</td>
<td>.15</td>
<td>.22</td>
</tr>
<tr>
<td></td>
<td>Max</td>
<td>34.8</td>
<td>6.13</td>
<td>3.59</td>
<td>5.32</td>
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<td>34.8</td>
<td>10.8</td>
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<td>Max</td>
<td>24.0</td>
<td>19.0</td>
<td>20.0</td>
<td>20.0</td>
<td>20.0</td>
<td>21.0</td>
<td>21.0</td>
<td>23.0</td>
<td>24.0</td>
<td>22.0</td>
<td>21.0</td>
<td>20.0</td>
</tr>
<tr>
<td>PERINED</td>
<td>Mean</td>
<td>.33</td>
<td>.28</td>
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<td>.31</td>
<td>.33</td>
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<td>.09</td>
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<td>.10</td>
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<tr>
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Figure 1 illustrates the movement of Tobin’s Q movement from 1999-2010. Tobin’s Q is declining from 1999 down to 0.585 in 2002 due to the bird flu SAR Epidemic, which affects the whole Hong Kong economy. Then it goes up quickly to 1.14 in 2003 due to strong economic recovery followed by a sharp decrease to 0.54 resulting from global financial crisis in 2008. The U.S. and European economies have no sign of recovery despite government attempts to boost the economy using monetary policy and to save the banks from bankruptcy, therefore, Hong Kong economy is indirectly affected, which is reflecting in low Tobin’s Q of 0.78 and 0.63 in 2009 and 2010 respectively. However, by looking at figure 1, the correlation between the independent variable and Tobin’s Q is not clearly shown.
Figure 2 shows that Hong Kong listed property companies have a small mean board size of 9-10 directors. These figures are consistent with figures reported by Grant Thornton (2009); the board size varies slightly over the twelve years of period. The board size of Hong Kong property companies is considered small when compared to those of American, British, French and Belgian companies, which has a mean board size of 12-13 directors (Andres et al., 2005). And Japanese firms have a mean of 28 directors (Bonn et al., 2004).
Figure 3 show the percentage of INEDs on the board has marginally increases from 1999 to 2010. The mean of the percentage of INEDs on the board for the whole sample period is 33.49 percent. This shows that Hong Kong listed property companies appointed the number of INEDs on the board just to satisfy the requirement of Code of corporate governance on board composition rather than there is a real need for management oversight or to protect the minority shareholders from being expropriated by the dominant shareholders.
Figure 3
Percentage of INEDs on the Board (PERINED)
Whole Sample Period (1999-2010)
Figure 4 shows the percentage of women on the board is relatively low in the Hong Kong property industry. The results show that there is a slow and steady growth from 7 percent in 1999 to 9 percent in 2010. This is considered low as compared to Britain and the U.S., the percentage of women on the boards of top companies is 12 percent and 15 percent respectively (Wassener, 2011)

Figure 4
Percentage of Women on the Board (PERWOMEN)
Whole Sample Period (1999-2010)
As shown in Figure 5, there is a high percentage (close to 100 percent) of Hong Kong listed companies complying with the Code of corporate governance on board composition, i.e., at least two INEDs on the board in the Pre-2005 sample period (1999 to 2004) and at least three INEDs on the board in the Post-2005 sample period (2005 to 2010).

Figure 5

Compliance with Code of Corporate Governance on Board Composition
(COMPLYCCGBC)
Whole Sample Period (1999-2010)
The next section further presents the results of the mean comparison between the Pre-2005 sample period and Post-2005 sample period.

4.2 One-way ANOVA Mean Comparison between the Pre-2005 Sample Period and Post-2005 Sample Period:

One-way ANOVA mean comparison is conducted to test the differences of the two sample periods. Table 7 presents the mean of the Pre-2005 sample period and Post-2005 sample period and their difference test results.

**Table 7**

All Variables Mean Comparison for the Pre-2005 Sample Period and Post-2005 Sample Period

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Figure 6 shows the average Tobin’s Q in the Pre-2005 sample period and Post-2005 sample period does not have significant difference (P=0.498>0.10).

Figure 6
Pre-2005 and Post-2005 Sample Period Mean Tobin’s Q Comparison

![Graph showing mean Tobin's Q comparison between Pre-2005 and Post-2005 sample periods.](image)

Figure 7 reveals the companies’ board size had significant difference in the mean across the sample, i.e., in the Pre-2005 sample period, the average board size is 9.32 and in the Post-2005 sample period, the average board size increases to 9.97 (P=0.005 <0.05). It shows that new Code of corporate governance in 2005, which requires listed companies to increase the number of INEDs from 2 to 3 persons actually help boost up the board size slightly.
Figure 7
Pre-2005 and Post-2005 Sample Period Mean Board Size (BOARDSIZE) Comparison

Figure 8 shows the average percentage of INEDs on the board has significant difference, i.e., Post-2005 sample period (means= 36.13 percent) as compared to Pre-2005 sample period (mean = 30.86 percent) with P=0.000<0.01. The percentage of INEDs increases slightly in Post-2005 sample period as compared to Pre-2005 sample period is attributable to the new requirement of Code of corporate governance to have at least 3 INEDs in Post-2005.
Figure 8
Pre-2005 and Post-2005 Sample Period Means Percentage of INEDs on the Board

(PERINED) Comparison

Percentage of INEDs on the Board

Pre-2005: 30.86%
Post-2005: 36.13%
Figure 9 shows CEO-duality had significant difference (P=0.012<0.05) between the Pre-2005 sample period, of 0.47 and Post-2005 sample period, of 0.49.

Figure 9
Pre-2005 and Post-2005 Sample Period Means CEO-duality (CEODUALITY) Comparison

Figure 10 shows the average percentage of women on the board is 7.70 percent in Pre-2005 and 8.69 percent in Post-2005. It does not have significant differences in these two sample periods, with P=0.153>0.10.
Figure 10

Pre-2005 and Post-2005 Sample Period Means Percentage of Women on the Board

(PERWOMEN) Comparison

Figure 11 reveals the compliance with the Code of corporate governance on board composition (COMPLYCCGBC) has significant means difference in the Pre-2005 sample period and Post-2005 sample period, with $P=0.008<0.10$. 
The mean of debt ratio does not have significant difference between these two sample periods with $P=0.122>0.10$. Results show significant difference of company size in the Pre-2005 sample period and Post-2005 sample period ($P=0.001<0.05$). Dividend per share has no significant difference ($P=0.351>0.10$) in the two sample periods.
In the next section, the correlation analysis is examined. The relationship between corporate financial performance (Tobin’s Q) and board size, the percentage of INEDs, the percentage of women on board and compliance with the Code of corporate governance on board composition.

4.3 Correlation Matrix Analysis

In this study, SPSS (The Statistical Package for Social Sciences) is adopted to conduct correlation analysis to obtain the Pearson’s correlation coefficients. The correlation results are presented in Table 8. Panel A shows the correlation matrix of the whole sample period (1999-2010). Panel B presents the correlation results of the Pre-2005 sample period (1999-2004) and Panel C gives the correlation matrix of the Post-2005 sample period (2005-2010).
Panel A: The inferences drawn from the correlation matrix for the whole sample period 1999 to 2010 are as follows:

(i) Board size is not significantly correlated with Tobin’s Q showing that H1, which posits that there is a positive association between board size and financial performance in Hong Kong listed property companies, is not supported.

(ii) The coefficient for percentage of INEDs on the board and Tobin’s Q is not significant, therefore, H2, which posits that there is a positive association between the percentage of INEDs on the Board and financial performance in Hong Kong listed property companies, is not supported.

(iii) The latter part of Panel A shows that there is no significant correlation between CEO-duality and Tobin’s Q, indicating H3, which posits that there is no association between CEO-duality and financial performance in Hong Kong listed property companies, is supported.

(iv) The percentage of women on board is significantly related with Tobin’s Q. Therefore H4, which posits that there is no association between the percentage of women on the board and financial performance in Hong Kong listed property companies, is not supported.

(v) The coefficient of COMPLYCCGBC and Tobin’s Q is not significant, showing H5, which posits that there is no association between compliance with the Code of corporate governance on board composition and financial performance in Hong Kong listed property companies, is supported.
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Notes: N=792, *at 10% level of significance, **at 5% level of significance and *** at 1% level of significance respectively.
Further to the correlation analysis, Panel B presents the correlation matrix results of firm year observations in the Pre-2005 sample period (1999-2004). Panel B is used to draw the following inferences:

i) It shows board size has no significant correlation with Tobin’s Q. Therefore H1, which posits that there is a positive association between board size and financial performance in Hong Kong listed property companies, is not supported. This result is consistent with the result in Panel A for the whole sample period.

ii) There is no significant correlation between percentage of INEDs on the board and Tobin’s Q. Therefore H2, which posits there is a positive association between the percentage of INEDs on the board and financial performance in Hong Kong listed property companies, is not supported.

iii) The latter part of Panel B shows significant correlation coefficient between CEO-duality and Tobin’s Q showing H3 which posits that there is no association between CEO-duality and financial performance in Hong Kong listed property companies, is not supported.

iv) The correlation between percentage of women on the board and Tobin’s Q is significant. Therefore H4, which posits that there is no association between the representation of women on the board and financial performance in Hong Kong listed property companies, is not supported.

v) The correlation between compliance with the Code of corporate governance on board composition (COMPLYCCGBC) and Tobin’s Q is not significant. Thus H5, which posits that there is no association between compliance with the Code of corporate governance on board composition and financial performance in Hong Kong listed property companies, is supported.
Table 8
Correlation Matrix
Panel B: Tobin’s Q as Dependant Variable (Pre-2005 Sample Period: 1999-2004)

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<td>.128**</td>
<td>-.118**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEBTRATIO</td>
<td>.897***</td>
<td>-.038</td>
<td>-.016</td>
<td>.063</td>
<td>.094*</td>
<td>.014</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOGCOMPSIZE</td>
<td>-.210***</td>
<td>.498***</td>
<td>-.206***</td>
<td>-.184***</td>
<td>-.307***</td>
<td>-.172***</td>
<td>-.139***</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DIVIPERSHARE</td>
<td>-.007</td>
<td>.118**</td>
<td>.036</td>
<td>.060</td>
<td>.059</td>
<td>-.060*</td>
<td>-.030</td>
<td>.018</td>
<td>1</td>
</tr>
</tbody>
</table>

Notes: N=396, *at 10% level of significance, **at 5% level of significance and *** at 1% level of significance respectively.
Panel C presents the correlation results of firm year observations in the Post-2005 sample period (2005 - 2010). Panel C is used to draw the following inferences:

i) The correlation between board size and Tobin’s Q is positive and significant. Thus H1, which posits that there is a positive association between board size and financial performance in Hong Kong listed property companies, is supported. These results are quite different from correlation results in the whole sample period and Pre-2005 sample period.

ii) There is no significant correlation between percentage of INEDs on the board and Tobin’s Q, so H2, which posits that there is a positive association between the percentage of INEDs on the board and financial performance in Hong Kong listed property companies, is not supported.

iii) There is a significant correlation coefficient between CEO-duality and Tobin’s Q showing H3, which posits that there is no association between CEO-duality and financial performance in Hong Kong listed property companies, is not supported.

iv) Results show no significant correlation between percentage of women on the board and Tobin’s Q, indicating H4, which posits that there is no association between the percentage of women on the board and financial performance in Hong Kong listed property companies, is supported.

v) Since all companies comply with the Code of corporate governance on board composition, the COMPLYCCGBC is a constant in this sample period. SPPS automatically wipes out this variable leaving this result as “Not Applicable”.

96
Table 8
Correlation Matrix
Panel C: Tobin’s Q as Dependant Variable (Post-2005 Sample Period: 2005-2010)

<table>
<thead>
<tr>
<th></th>
<th>TOBIN'S Q</th>
<th>BOARDSIZE</th>
<th>PERINED</th>
<th>CEODUALITY</th>
<th>PERWOMEN</th>
<th>COMPLYCGBC</th>
<th>DEBTRATIO</th>
<th>LOGCOMPSIZE</th>
<th>DIVIPERSHARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOBIN'S Q</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOARDSIZE</td>
<td>.107**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERINED</td>
<td>-.028</td>
<td>-.695***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEODUALITY</td>
<td>-.101**</td>
<td>-.195***</td>
<td>.151***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERWOMEN</td>
<td>-.062</td>
<td>-.070</td>
<td>.060</td>
<td>.081</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMPLYCCGBC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEBTRATIO</td>
<td>.052</td>
<td>.102**</td>
<td>-.210***</td>
<td>.041</td>
<td>-.150***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOGCOMPSIZE</td>
<td>-.015</td>
<td>.442***</td>
<td>-.356***</td>
<td>-.082</td>
<td>-.274***</td>
<td>.361**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIVIPERSHARE</td>
<td>.039</td>
<td>.431***</td>
<td>-.096*</td>
<td>-.077</td>
<td>-.038</td>
<td>-.264***</td>
<td>.215***</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Notes: N=396, *at 10% level of significance, **at 5% level of significance and *** at 1% level of significance respectively.
Table 9 summarises the inferences in the correlation analysis relating to the five hypotheses as follows:

Table 9

Hypotheses and Correlation Matrix Results

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>X</td>
<td>√</td>
<td>X</td>
</tr>
<tr>
<td>H2</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>H3</td>
<td>X</td>
<td>X</td>
<td>√</td>
</tr>
<tr>
<td>H4</td>
<td>X</td>
<td>√</td>
<td>X</td>
</tr>
<tr>
<td>H5</td>
<td>√</td>
<td>N.A.</td>
<td>√</td>
</tr>
</tbody>
</table>

Notes: √ = Supported; X = Not Supported; N.A. = Not Applicable
4.4 Linear Regression Analysis

Having used correlation analysis in the previous section to draw inferences, the model is further analysed using regression analysis. The model is regressed using linear regression analysis by the SPSS. The regression examines the effect of board size, percentage of INEDs on the board, CEO-duality, percentage of women on the board, and compliance with the Code’s requirement on board composition, on financial performance (Tobin’s Q) when other variables – debt ratio, company size, and dividend per share – are being controlled. The regression results are presented in Tables 10, 11, and 12 respectively.

- Linear regression results and analysis during the Pre-2005 sample period (1999 - 2004)

As per Table 10, based on the Pre-2005 sample period, the R square of the model is 0.817, showing that 81.70 percent of total variance of Tobin’s Q can be predicted by independent and control variables. The F-statistic of the model is 215.65, significant at 1 percent level.

i) The board size is not significantly related to Tobin’s Q with $\beta_1=0.026$, $t=1.511$, $P=0.131>0.10$, indicating that the H1 posits that there is a positive association between board size and financial performance in Hong Kong listed property companies, is not supported. This finding is quite different from results in the whole sample period, as shown in Table 12.

ii) The percentage of INEDs on the board is not significantly related to Tobin’s Q with $\beta_2=0.704$, $t=1.473$, $P=0.142>0.10$. Thus, the H2 posits that there is a positive association between percentage of INEDs on the
board and financial performance in Hong Kong listed property companies, is not supported.

iii) CEO-duality is significantly associated with Tobin’s Q with $\beta_3=0.193$, $t=2.215$, $P=0.027<0.05$. Thus, the H3 posits that there is no association between CEO-duality and financial performance in Hong Kong listed property companies, is not supported.

iv) The percentage of women on board does not have a significant relationship with Tobin’s Q ($\beta_4=-0.302$, $t=-0.661$, $P=0.509>0.10$). Therefore, the H4 posits that there is no association between percentage of women on the board and financial performance in Hong Kong listed property companies, is supported.

v) Compliance with the Code of corporate governance on board composition (COMPLYCCGBC) was significantly and negatively related to Tobin’s Q ($\beta_5=-0.698$, $t=-2.060$, $P=0.04<0.05$), showing that the H5 posits that there is no association between compliance with the Code of corporate governance on board composition and financial performance in Hong Kong listed property companies, is not supported.
Table 10
Linear Regression Results of Board Composition and Financial Performance
Pre-2005 Sample Period (1999-2004)
Tobin’s Q Performance Measure

\[ \text{Tobin’s } Q = \alpha + \beta_1 \text{BOARDSIZE} + \beta_2 \text{PERINED} + \beta_3 \text{CEODUALITY} + \beta_4 \text{PERWOMEN} + \beta_5 \text{COMPLYCCGBC} + \beta_6 \text{DEBTRATIO} + \beta_7 \text{LOGCOMPSIZE} + \beta_8 \text{DIVIPERSHARE} + \epsilon \]

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>t</th>
<th>Sig.</th>
<th>Predicted Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>2.855***</td>
<td>4.086</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>BOARDSIZE</td>
<td>.026</td>
<td>1.511</td>
<td>.131</td>
<td>Negative</td>
</tr>
<tr>
<td>PERINED</td>
<td>.704 (.478)</td>
<td>1.473</td>
<td>.142</td>
<td>Negative</td>
</tr>
<tr>
<td>CEODUALITY</td>
<td>.193** (.087)</td>
<td>2.215</td>
<td>.027</td>
<td>Negative</td>
</tr>
<tr>
<td>PERWOMEN</td>
<td>-.302 (.454)</td>
<td>-.661</td>
<td>.509</td>
<td>Positive</td>
</tr>
<tr>
<td>COMPLYCCGBC</td>
<td>-.698** (.276)</td>
<td>-2.060</td>
<td>.040</td>
<td>Negative</td>
</tr>
<tr>
<td>DEBTRATION</td>
<td>1.000*** (.025)</td>
<td>40.051</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>LOGCOMPSIZE</td>
<td>-.257*** (.067)</td>
<td>-3.816</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>DIVIPERSHARE</td>
<td>.014 (.039)</td>
<td>.345</td>
<td>.730</td>
<td></td>
</tr>
</tbody>
</table>

R square  .817
Adjusted R square .813
F-Statistic 215.650***
No. of Observations 396

Notes: *At 10% level of significance, **at 5% level of significance and *** at 1% level of significance respectively; Standard errors in parentheses.
• Linear regression results and analysis during the Post-2005 sample period (2005 - 2010)

Table 11 shows that the R square of the model is 0.037, showing that 3.7 percent of total variance of Tobin’s Q can be predicted by independent and control variables. The F-statistic of the model was 2.115, significant at 5 percent level.

i) The board size has significant relationship with Tobin’s Q ($\beta_1=0.040$, $t=2.362$, $P=0.019<0.05$), indicating that the H1 posits that there is a positive association between board size and financial performance in Hong Kong listed property companies, is supported.

ii) The percentage of INEDs on the board has no significant relationship with Tobin’s Q ($\beta_2=0.672$, $t=1.307$, $P=0.192>0.10$) showing that the H2 posits that there is a positive association between percentage of INEDs on the board and financial performance in Hong Kong listed property companies, is not supported.

iii) CEO-duality is significantly and negatively associated with Tobin’s Q ($\beta_3=-0.118$, $t=-1.717$, $P=0.087<0.10$). Therefore, the H3 posits that there is no association between CEO-duality and financial performance in Hong Kong listed property companies, is not supported.

iv) The percentage of women on the board is not significantly but negatively related with Tobin’s Q ($\beta_4=-0.477$, $t=-1.299$, $P=0.195>0.10$), presenting that the H4 posits that there is no association between the percentage of women on the board and financial performance in Hong Kong listed property companies, is not supported.
v) The compliance with the Code of corporate governance on board composition (COMPLYCCGBC) may be related to Tobin’s Q or not; the result is not available because all companies in the sample period show compliance, i.e., COMPLYCCGBC = 1. Under such circumstance, the SPSS program automatically deletes this variable. Thus, H5, which posits there is no association between COMPLYCCGBC and financial performance, is “Not Applicable” in this case.
Table 11
Linear Regression Results of Board Composition and Financial Performance
Post-2005 Sample Period (2005-2010)
Tobin’s Q Performance Measure

\[
\text{TOBIN’s Q} = \alpha + \beta_1 \text{BOARDSIZE} + \beta_2 \text{PERINED} + \beta_3 \text{CEODUALITY} + \beta_4 \text{PERWOMEN} + \beta_5 \text{COMPLYCCGBC} + \beta_6 \text{DEBTRATIO} + \beta_7 \text{LOGCOMPSIZE} + \beta_8 \text{DIVIPERSHARE} + \varepsilon
\]

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>t</th>
<th>Sig.</th>
<th>Predicted Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>.873*</td>
<td>1.790</td>
<td>.074</td>
<td></td>
</tr>
<tr>
<td>BOARDSIZE</td>
<td>.040</td>
<td>2.362</td>
<td>.019</td>
<td>Positive</td>
</tr>
<tr>
<td>PERINED</td>
<td>.672</td>
<td>1.307</td>
<td>.192</td>
<td>Negative</td>
</tr>
<tr>
<td>CEO DUALITY</td>
<td>-.118*</td>
<td>-1.717</td>
<td>.087</td>
<td>Negative</td>
</tr>
<tr>
<td>PERWOMEN</td>
<td>-.477</td>
<td>-1.299</td>
<td>.195</td>
<td>Negative</td>
</tr>
<tr>
<td>COMPLYCCGBC</td>
<td>N.A</td>
<td></td>
<td></td>
<td>NOT APPLICABLE</td>
</tr>
<tr>
<td>DEBTRATION</td>
<td>.405</td>
<td>1.403</td>
<td>.162</td>
<td></td>
</tr>
<tr>
<td>LOGCOMPSIZE</td>
<td>-.089**</td>
<td>-1.984</td>
<td>.048</td>
<td></td>
</tr>
<tr>
<td>DIVIPERSHARE</td>
<td>.002</td>
<td>.031</td>
<td>.975</td>
<td></td>
</tr>
<tr>
<td>R square</td>
<td>.037</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R square</td>
<td>.020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-Statistic</td>
<td>2.115**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of Observations</td>
<td>396</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: *At 10% level of significance, **at 5% level of significance and *** at 1% level of significance respectively; Standard errors in parentheses.
• Linear regression results and analysis for whole sample period (1999 - 2010)

As shown in Table 12, based on data of the whole sample period, the R square of the model is 0.731, showing that 73.1 percent of total variance of Tobin’s Q can be predicted by independent and control variables. The F-statistic of the model is 264.077, significant at 1 percent level.

i) The coefficient of $\beta_1$ is 0.032, which is significant ($t=2.870$, $P=0.004<0.01$). Therefore H1, which posits that there is a positive association between board size and financial performance in Hong Kong listed property companies, is supported.

ii) The coefficient $\beta_2$ is 0.736, which is significant ($t=2.297$, $P=0.022<0.05$). Therefore H2, which posits that there is a positive association between the percentage of INEDs on the board and financial performance in Hong Kong listed property companies, is supported.

iii) CEO-DUALITY does not have significant coefficient with Tobin’s Q with $\beta_3 = 0.034$, $P=0.538>0.10$. Thus H3, which posits that there is no association between CEO-duality and financial performance in Hong Kong listed property companies, is supported.

iv) The percentage of women on the board is not significantly associated with Tobin’s Q with $\beta_4=-0.318$, $t=-1.084$, $P=0.279>0.10$. Thereby H4, which posits that there is no association between the percentage of women on the board and financial performance in Hong Kong listed property companies, is supported.
v) The coefficient $\beta_5$ between COMPLYCCGBC and Tobin’s Q is -0.466 which is not significant with $t=-1.576$, $P=0.115>0.10$, showing that H5, which posits there is no association between COMPLYCCGBC and financial performance in Hong Kong listed property companies, is supported.

Table 12
Linear Regression Results of Board Composition and Financial Performance
Whole Sample Period (1999-2010)
Tobin’s Q Performance Measure

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>t</th>
<th>Sig.</th>
<th>Predicted Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.973***</td>
<td>4.224</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>BOARDSIZE</td>
<td>.032***</td>
<td>2.870</td>
<td>.004</td>
<td>Positive</td>
</tr>
<tr>
<td>PERINED</td>
<td>.736**</td>
<td>2.297</td>
<td>.022</td>
<td>Positive</td>
</tr>
<tr>
<td>CEODUALITY</td>
<td>.034 (.056)</td>
<td>.617</td>
<td>.538</td>
<td>Positive</td>
</tr>
<tr>
<td>PERWOMEN</td>
<td>-.318 (.294)</td>
<td>-1.084</td>
<td>.279</td>
<td>Positive</td>
</tr>
<tr>
<td>COMPLYCCGBC</td>
<td>-.466 (.296)</td>
<td>-1.576</td>
<td>.115</td>
<td>Positive</td>
</tr>
<tr>
<td>DEBITRATION</td>
<td>1.006***</td>
<td>45.189</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>LOGCOMPSIZE</td>
<td>-.175***</td>
<td>-4.637</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>DIVIPERSHARE</td>
<td>.036 (.032)</td>
<td>1.148</td>
<td>.251</td>
<td></td>
</tr>
</tbody>
</table>

R square .731
Adjusted R square .729
F-Statistic 264.077***
No. of Observations 792

Notes: *At 10% level of significance, **at 5% level of significance and *** at 1% level of significance respectively; Standard errors in parentheses.
Table 13 summarises all the hypotheses and the linear regression results as follows:

Table 13
Hypotheses and Linear Regression Results

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>X</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>H2</td>
<td>X</td>
<td>X</td>
<td>√</td>
</tr>
<tr>
<td>H3</td>
<td>X</td>
<td>X</td>
<td>√</td>
</tr>
<tr>
<td>H4</td>
<td>√</td>
<td>X</td>
<td>√</td>
</tr>
<tr>
<td>H5</td>
<td>X</td>
<td>N.A.</td>
<td>√</td>
</tr>
</tbody>
</table>

Notes: √=Supported; X= Not Supported; N.A. = Not Applicable
Chapter 5

FINDINGS, RECOMMENDATIONS AND CONCLUSION

5.1 Findings

There are five key findings of this empirical study, which meet all of the objectives set forth earlier to address the corresponding five key hypotheses regarding board composition and financial performance of Hong Kong listed property companies. Before discussing each finding in details, it is worth mentioning an interesting finding that a longitudinal empirical study (minimum 12 years study period) on the association between board composition and financial performance of firms must be investigated in a specific industry, within a particular country in order to achieve reliable findings and conclusions. This study demonstrates the importance of a longitudinal empirical study because the results of the two different sample periods of study, i.e., Pre-2005 (1999-2004) and Post-2005 (2005-2010) are quite different in supporting or not supporting the five hypotheses in the correlation analysis and regression analysis. However, the results of the whole sample period (1999-2010) support all five hypotheses set forth in the scope of this study in the regression analysis.

The first four findings correspond to the first objective of the study, which is to investigate whether there is an association between board composition and financial performance in Hong Kong listed property companies. These four findings are basically providing answers to the first four hypotheses as follows:
This study’s findings support the first hypothesis positing that there is a positive association between board size and financial performance in Hong Kong listed property companies. The results also support the agency theory that the board of directors plays a crucial role in supervising and controlling the management of the company in order to protect the interests of all shareholders and stakeholders. The idea of having more INED watchdogs on the board to protect the minority shareholders from being expropriated by large family-owned shareholders is good in corporate governance context. It supports the Dalton and Dalton (2005) Meta analysis of 131 studies that larger boards are associated with higher firm performance. According to the recommendations of Salmon (2000), the ideal board size for large companies is between 8 and 15 persons. This study’s findings also support Goodstein et al., (1994) that a larger board can accommodate more ideas and specialised knowledge to make the board more informed and capable of making complex business decisions promptly. Furthermore, it also supports Mohamed (2009) that the larger the board size, the company has better rounded experience to exercise their independent judgment in delivering positive financial results.

Nevertheless, the results of this study contradict previous empirical studies conducted by Hermalin and Weisbach (2003), Mak and Yuanto (2003), Prevost et al. (2002), Wu (2000), Eisenberg et al. (1998), Barnhart and Rosenstein (1998), Yermack (1996), Lipton and Lorsch (1992), claiming that smaller boards would be more efficient in decision making, reach consensus more readily, be more cohesive and have more relevant knowledge and know-how than larger boards, which includes external INEDs.
Thanks to the corporate governance reform on board composition in 2005, which uplifts the number of INEDs on the board from two to three persons, therefore, overall board size becomes bigger. In this study, it is empirically tested that larger boards actually have greater advantage in improving the financial performance of the Hong Kong listed property companies.

ii) The findings of this study also support the hypothesis positing that there is a positive association between the percentage of INEDs on the board and financial performance in Hong Kong listed property companies. Over the past decade, the global economy is to support the “Pro-INEDs movement”. A presumption that underlies this movement is that board with more INEDs fosters better decision making, better management oversight, better protection of minority shareholders’ interests and rights and, as a result, achieves better corporate financial performance. This study’s findings confirm that companies that have a higher percentage of INEDs on the board achieve a better financial performance as compared to those that have a lower percentage of INEDs. The results suggest that increasing the percentage of outside INEDs helps improve corporate financial performance among Hong Kong property listed companies. The results of this study are consistent with the CFA Institute’s result that the percentage of INEDs on the board of Hong Kong listed companies is about 35 percent, which is on the low side as compared to the average percentage of INEDs on corporate boards in the United States (75 percent), Australia (72 percent), and Canada (71 percent).
The empirical evidence in this study supports similar findings from Choi et al. (2007), Luan and Tang (2007), Prevost et al. (2002), Hutchinson (2002), Sheng (2000), CFA Institute (2010), Dalton and Daily (1999), Mak et al. (2003), Black et al. (2006), Nowland (2008), Lei and Song (2008), Shleifer and Vishny (1997), that the higher the percentage of INEDs on the board, the better the corporate financial performance. The study results support the agency theory and board independence concept (50 percent or more INEDs on the board) that concludes the importance of corporate governance is to reduce or eliminate the principal-agent problem, and board independence, which is crucial to prevent the minority shareholders from being expropriated by the large shareholders. The findings totally support Responsible Research (2010), that there is a lack of board independence in the Hong Kong property sector. Thus, to avoid the box ticking issue from happening, it is recommended that the regulators improve and strengthen the implementation, compliance and monitoring process of corporate governance related to legislations while increasing the percentage of INEDs on the board to at least 50%.

The findings provide a new perspective on the role that INEDs play in corporate governance. Although family ownership structure among the Hong Kong listed property companies is not part of the scope of this study, base on the prior research conducted by Jordan (2008) and full sample observations, it is assumed that the majority of these companies are family-owned, therefore, their influence in these companies is extremely high. The results are still generally consistent with the hypotheses that INEDs minimise conflicts between shareholder groups with diverging interests, in particular in companies with family controlling
shareholders and that there is a positive relation between financial performance and board independence. The results of this study are unique, which are different from the research findings found by Rashid et al. (2010), Cho and Kim (2007), Chen et al. (2005), Balatbat et al. (2004), Judge et al. (2003), that posit the percentage of external INEDs on the board makes little or no impact on the corporate financial performance.

iii) With regard to CEO-duality, this study’s findings support the hypothesis positing that there is no association between CEO-duality and financial performance among Hong Kong listed property companies. Hong Kong listed property companies are generally family-owned and family-controlled according to Jordan (2008), therefore, there is a very high chance that the Chairman is also acting as CEO. Agency theory suggests that if the roles of Chairman and CEO are not separated; then he/she wields absolute power and influence over the company’s strategic matters at the expense of the minority shareholders. The CEO-duality ratio based on the findings of this study is not alarming, i.e., around 0.43. Although less than half of Hong Kong listed property companies complies with the recommended best practice of corporate governance on board composition, the finding demonstrates that CEO-duality do not have any association with financial performance in Hong Kong listed companies. This finding contradicts findings conducted earlier by Anderson and Reeb (2004) and Faccio et al. (2001), that in large family-owned and controlled companies where the CEO-duality ratio is high, they are prone to exploit the minority shareholders.
However, the findings do not support those of Kumar and Sivaramakrishnan (2007), Kapopoulos and Lazaretou (2007), Martinez et al. (2007), Chen et al. (2005) and Lei and Song (2004), namely that CEO-duality has a positive impact on the firm performance because in majority family-owned companies normally has CEO-duality. Although CEO-duality is viewed as unfavourable to corporate governance, however, the compliance is relatively low, i.e., only 0.47 compliance in the Pre-2005 sample period and 0.49 compliance in the Post-2005 sample period (Figure 9). The findings of this study confirm that the adoption of the separation of Chairman and CEO roles does not have a significant impact on financial performance in Hong Kong listed property companies. Having said that, to avoid the situation where the Chairman exercises his/her own power to appoint their friends to the board, which may affect the board independence, the Chairman is preferably performed by an INED (CFA Institute, 2010).

iv) With regard to the percentage of women on the board and financial performance, the findings of this study support the hypothesis positing that there is no association between the percentage of women on the board and financial performance in Hong Kong listed property companies. The findings do not support the concept that board diversity, in terms of the inclusion of women, can improve the financial performance of the firms contrary to the previous studies conducted by Dalton and Dalton (2005), Macfarlane et al. (2010), Catalyst Inc. (2006) and Carter et al. (2003). Since the percentage of women on the board is far too small and does not change much over the course of 12 years time, therefore, there is no significant contribution being recognised. The findings of this study support those of Farrel and Whidbee (2005), Shrader et al. (1997) and
Zahra and Stanton (1988), that there is no evidence that the addition of a woman to the board have a positive effect on the financial performance of a Hong Kong listed property company.

The fifth finding of this study corresponds to the second objective of this study, which is to investigate whether there is any association between the compliance with the Code of corporate governance on board composition and financial performance of Hong Kong listed companies.

- The findings of this study support the hypothesis, which posits that there is no association between the compliance with the Code of corporate governance of board composition and financial performance of Hong Kong listed property companies. The findings show an extremely high level of compliance with the Code of corporate governance, i.e., 98.23 percent of companies complies with the requirement of having a minimum of two INEDs on the board in the Pre-2005 sample period (1999-2004), and 100 percent of companies complies with the requirement of having at least three INEDs on the board in the Post-2005 sample period (2005-2010). On average, 99.12 percent of companies comply with the requirement of having the minimum number of INEDs on the board during the whole sample period (1999-2010) which does not have any impact on the financial performance of Hong Kong listed property companies. Thus, the findings confirm that Hong Kong corporate governance on board composition is basically a “box ticking” exercise to check compliance, in order to meet the regulators’ requirement. It clearly shows that the compliance is with the “form” instead of the “substance”.

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5.2 Recommendations

Based on the findings of this study, there is a need to improve corporate governance of board composition, in terms of board size and percentage of INEDs on the board, so as to improve the financial performance of Hong Kong listed property companies as well as to protect the minority shareholders from being expropriated by dominant shareholders. Thus, there are some practical recommendations for possible reform on board composition in order to better improve the corporate governance in Hong Kong. They are proposed as follows:

i) Based on the study’s findings that there are, on average, nine members on the board of directors, three being INEDs, and the best way to increase the board size by increasing the percentage of INEDs on the board from the current 33.33 percent to 50 percent. Given the current number of Non-INEDs and INEDs is unchanged, i.e., the total new board size should be increased to twelve members and the board independence will be reached at 50 percent. It is most important to ensure that there are enough INEDs to oversee management decisions. Once this is enforced, the overall board size will definitely be increased so as the number of INEDs, thereby tightening the checks and balances mechanism and protecting minority shareholders’ interests. Increasing the number of INEDs requirement alone may not achieve overall effectiveness because the dominant shareholders of the companies can always increase the number of executive directors in order to maintain a dominant view and representation on the board. If the board independence with 50% of INEDs on the board is proven successful, the regulators can consider a graduate increase of 60% and 70% to match with other
Western countries’ requirement in order to foster even better corporate governance. To avoid the box-ticking issue, the regulators need to improve and strengthen the implementation, compliance and monitoring process of corporate governance related to legislations.

ii) Although this study’s empirical results cannot prove CEO-duality has an impact on the financial performance of the Hong Kong listed property companies, there is a need for reform to enforce strict compliance to the CEO-duality rule. The reason is that if some large property companies in Hong Kong such as SHKP and NWD do not comply with this CEO-duality, their power and influence can be absolute in the appointment of INEDs and other directors on the boards and this can pose a major problem for Hong Kong corporate governance. As described earlier in Chapter 1, the corporate governance issue related to “The Hunghom Peninsula” project scandal, followed by the arrests of the Kwok Brothers and some other government officials, is a big corporate governance problem, which hurts Hong Kong’s image as a leading financial centre in Asia if the CEO-duality rule is not enforced. To secure board independence apart from increasing the percentage of INEDs to 50 percent, and introduction of new legislations to enforce true compliance, it is highly recommended that the CEO-duality must be enforced in a stricter manner and ideally the Chairman’s role must be filled by an INED.

iii) The findings of this study show that the internal self-regulation, i.e., the “comply or explain” principle of corporate governance mechanism does not work well especially in the property industry, therefore, the current Code of corporate
governance on board composition is not effective or adequate to maintain a high level of fairness, and guarantee protection of minority interests. Thus, The Hong Kong regulators namely SFC needs to consider formulating tougher SFO to rectify some of the deficiencies in the Code of corporate governance on board composition in order to restore Hong Kong’s status as a leading international financial centre in Asia.

iv) To ensure there is a highly qualified professional INED talent pool to serve at the boards of publicly listed companies in Hong Kong, and to avoid the unfair arbitrary appointments of INEDs by the Chairman and CEO, the establishment of a non-profit “Professional Institute of INEDs” organisation is recommended. Similar to Accounting, Finance and Law professionals, professional INED accreditation and training must be given to individuals with good industry experience who would like change their careers to become a full-time INED at listed companies in Hong Kong. Qualified INEDs will be offered a reasonably good salary matching with their experience and qualification plus other benefits in order for the Professional Institute of INEDs to attract and retain good INEDs in the market place. However, there are a lot of challenges in establishment of this Professional Institute of INEDs because it needs to go through lengthy public consultation and debate processes. The disadvantages faced are increased regulations and complexity in the field of corporate governance, which may affect foreign investors to come to Hong Kong for future investment.

v) The findings of this empirical study do not show the addition of a woman in the board can help improve the overall corporate financial performance in Hong
Kong listed property companies. Based on the current findings, the percentage of women is relatively low as compared to other countries like the United Kingdom and the United States, which were 12 percent and 15 percent respectively. It is highly recommended that Hong Kong government and regulators review the current system of equal employment opportunities and make appropriate changes to recognize women's contribution to the overall labor force in Hong Kong.

5.3 Conclusion

Hong Kong listed property companies are, in general, willing to adopt corporate governance best practices because it is compulsory. However, they are reluctant to adopt the recommended best practices if they have cost implications. Pure self-regulation of corporate governance practices is not efficient and effective in Hong Kong. Therefore, there is a need to introduce stricter regulations in order to protect the rights and interests of the shareholders and stakeholders in Hong Kong listed property companies.

Although this study provides a better understanding of the association between board composition and corporate financial performance among Hong Kong listed property companies on the Main Board of the Hong Kong Stock Exchange, it does have some limitations.

i) This study focuses on medium and large listed property companies in Hong Kong; therefore, the results may not be applicable to smaller listed property companies.
ii) The empirical model of this study does not examine sales growth, earnings per share, return-on-assets and return-on-equity, which may affect the findings on relationship between board composition and financial performance.

iii) There are multicollinearity issues faced in this multivariate regression model, i.e., the estimate of one independent variable’s impact on the dependent variable (Tobin’s Q) while controlling for the other independent variables tends to be less precise than if predictors are uncorrelated with one another.

It is widely agreed that regulatory enforcement alone is not sufficient to ensure good corporate governance. Good governance is not solely a matter of rules and regulations. It is partly a matter of ethics of people. And ethics unfortunately cannot be regulated. Therefore, all INEDs and Non-INEDs must behave and act professionally, ethically and honestly. In this regard, they must take a long-term perspective as a high compliance standard can only be fostered over time. The regulators can help promote good corporate governance by means of mandating disclosure, encouraging transparency and raising public awareness through education and training, but other market participants such as accountants, lawyers, financiers, consultants, advisers and even investors themselves in the whole investment community must play their part as well. Board members of listed companies have the primary responsibility because they are the decision makers and initiators of all business transactions.

To conclude, corporate governance on board composition is no doubt one of the most important concepts, which needs to be addressed in a more serious manner by the business community and government as it does have an impact on corporate financial performance. It is widely agreed that firms with a higher quality of corporate governance
will tend to have higher market value (Brennan, 2006). Therefore, with the objective to minimise or eliminate the principal-agent problem (Sheng, 2000), in the next corporate governance reform 2012, the Hong Kong regulators and policy makers may need to consider: i) Increasing the required percentage of INEDs to a minimum 50 percent in order to ensure the accountability of board members; ii) Enforcing the separation of Chairman and CEO roles and Chairman role to be filled by an INED. Board independence helps ensure management balance their interests with the interests of the majority, as well as other minority shareholders (Rose, 2005). In order to ensure Hong Kong listed property companies adhere to the Code of corporate governance on board composition both in “form” and “substance”, external regulation such as statutory law must be introduced to police the serious violation of corporate governance, thereby restoring Hong Kong’s image and reputation as one of the leading financial centres in Asia.
### Exhibit 1

**Total Number of Companies Listed on the Main Board of Hong Kong Stock Exchange and Clearing by Industry (1999-2010)**

<table>
<thead>
<tr>
<th>Industry Classification</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
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<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance</td>
<td>52</td>
<td>60</td>
<td>59</td>
<td>71</td>
<td>75</td>
<td>79</td>
<td>80</td>
<td>82</td>
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<tr>
<td>Utilities</td>
<td>14</td>
<td>12</td>
<td>11</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>18</td>
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<tr>
<td>Properties</td>
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<td>99</td>
<td>99</td>
<td>101</td>
<td>103</td>
<td>105</td>
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<tr>
<td>Consolidated Enterprises</td>
<td>224</td>
<td>230</td>
<td>243</td>
<td>259</td>
<td>271</td>
<td>295</td>
<td>302</td>
<td>311</td>
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<tr>
<td>Industrials</td>
<td>289</td>
<td>309</td>
<td>328</td>
<td>355</td>
<td>379</td>
<td>389</td>
<td>417</td>
<td>441</td>
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<tr>
<td>Hotels</td>
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<td>15</td>
<td>15</td>
<td>15</td>
<td>13</td>
<td>12</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Miscellaneous</td>
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<td>9</td>
<td>8</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>7</td>
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<tr>
<td>Total</td>
<td>701</td>
<td>736</td>
<td>756</td>
<td>812</td>
<td>852</td>
<td>892</td>
<td>934</td>
<td>975</td>
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<table>
<thead>
<tr>
<th>Industry Classification</th>
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<th>2010</th>
</tr>
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<tbody>
<tr>
<td>Energy</td>
<td>26</td>
<td>31</td>
<td>39</td>
<td>49</td>
</tr>
<tr>
<td>Materials</td>
<td>74</td>
<td>85</td>
<td>96</td>
<td>111</td>
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<tr>
<td>Industrial Goods</td>
<td>102</td>
<td>103</td>
<td>101</td>
<td>112</td>
</tr>
<tr>
<td>Consumer Goods</td>
<td>288</td>
<td>286</td>
<td>291</td>
<td>316</td>
</tr>
<tr>
<td>Services</td>
<td>157</td>
<td>171</td>
<td>179</td>
<td>191</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>16</td>
<td>15</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Utilities</td>
<td>17</td>
<td>21</td>
<td>29</td>
<td>36</td>
</tr>
<tr>
<td>Financials</td>
<td>96</td>
<td>94</td>
<td>96</td>
<td>101</td>
</tr>
<tr>
<td>Properties &amp; Construction</td>
<td>163</td>
<td>172</td>
<td>188</td>
<td>194</td>
</tr>
<tr>
<td>Information Technology</td>
<td>85</td>
<td>88</td>
<td>90</td>
<td>97</td>
</tr>
<tr>
<td>Conglomerates</td>
<td>27</td>
<td>24</td>
<td>23</td>
<td>22</td>
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<tr>
<td>Total</td>
<td>1048</td>
<td>1087</td>
<td>1148</td>
<td>1244</td>
</tr>
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</table>

Source: HKEX Fact Book (1999-2010) - Hang Seng Industry Classification System (HSICS), which is provided by Hang Seng Indexes Company Limited.
### Exhibit 2

Market Capitalisation by Industry (1999 - 2010)  
(HK$ Billion)

<table>
<thead>
<tr>
<th>Industry Classification</th>
<th>1999</th>
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<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance</td>
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<td>1,441</td>
<td>1,142</td>
<td>1,264</td>
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<tr>
<td>Utilities</td>
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<td>290</td>
<td>266</td>
<td>272</td>
<td>346</td>
<td>420</td>
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<tr>
<td>Properties</td>
<td>773</td>
<td>698</td>
<td>577</td>
<td>423</td>
<td>592</td>
<td>803</td>
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<tr>
<td>Consolidated Enterprises</td>
<td>1,170</td>
<td>1,968</td>
<td>1,435</td>
<td>1,087</td>
<td>1,504</td>
<td>1,987</td>
</tr>
<tr>
<td>Industrials</td>
<td>377</td>
<td>334</td>
<td>431</td>
<td>483</td>
<td>909</td>
<td>1,032</td>
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<tr>
<td>Hotels</td>
<td>39</td>
<td>35</td>
<td>28</td>
<td>27</td>
<td>37</td>
<td>58</td>
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<tr>
<td>Miscellaneous</td>
<td>9</td>
<td>29</td>
<td>6</td>
<td>3</td>
<td>11</td>
<td>13</td>
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<tr>
<td>Equity total</td>
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<td>4,795</td>
<td>3,885</td>
<td>3,559</td>
<td>5,477</td>
<td>6,627</td>
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<table>
<thead>
<tr>
<th>Industry Classification</th>
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<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
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<td>813</td>
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<td>712</td>
<td>1,291</td>
<td>1,687</td>
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<td>293</td>
<td>599</td>
<td>183</td>
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<td>Industrial Goods</td>
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<td>331</td>
<td>130</td>
<td>270</td>
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<td>Consumer Goods</td>
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<td>663</td>
<td>1,647</td>
<td>2,216</td>
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<tr>
<td>Services</td>
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<td>912</td>
<td>1,474</td>
<td>595</td>
<td>1,190</td>
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<td>393</td>
<td>659</td>
<td>249</td>
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<td>828</td>
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<tr>
<td>Conglomerates</td>
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<td>854</td>
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<td>562</td>
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<tr>
<td>Equity total</td>
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<td>20,534</td>
<td>10,253</td>
<td>17,768</td>
<td>20,941</td>
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Source: HKEX Fact Book (1999-2010) - Hang Seng Industry Classification System (HSICS), which is provided by Hang Seng Indexes Company Limited.
REFERENCE


Ho, S.M. (2003), “Corporate Governance in Hong Kong: Key Problems and Prospects”, Centre for Accounting Disclosure and Corporate Governance, School of Accountancy, The Chinese University of Hong Kong.


JLL (2004), Jones Lang LaSalle, “Global Real Estate Transparency Index 2004”, Hong Kong


http://www.reuters.com/article/2012/03/30/sunhunghkai-idUSL3E8ET6FM20120330


South China Morning Post (SCMP) (2012), ICAC arrests Kwok’s Brothers, Directors of Sun Hung Kai on 30 March 2012. Accessed on 29 July 2012 at


