



THE HONG KONG
POLYTECHNIC UNIVERSITY

香港理工大學

Pao Yue-kong Library

包玉剛圖書館

Copyright Undertaking

This thesis is protected by copyright, with all rights reserved.

By reading and using the thesis, the reader understands and agrees to the following terms:

1. The reader will abide by the rules and legal ordinances governing copyright regarding the use of the thesis.
2. The reader will use the thesis for the purpose of research or private study only and not for distribution or further reproduction or any other purpose.
3. The reader agrees to indemnify and hold the University harmless from and against any loss, damage, cost, liability or expenses arising from copyright infringement or unauthorized usage.

IMPORTANT

If you have reasons to believe that any materials in this thesis are deemed not suitable to be distributed in this form, or a copyright owner having difficulty with the material being included in our database, please contact lbsys@polyu.edu.hk providing details. The Library will look into your claim and consider taking remedial action upon receipt of the written requests.

**CONTROLLING SHAREHOLDER BUYOUT
IN HONG KONG**

YANG LI

Ph.D

The Hong Kong Polytechnic University

2013

The Hong Kong Polytechnic University

School of Accounting and Finance

Controlling Shareholder Buyout in Hong Kong

YANG Li

A thesis submitted in partial fulfilment of the requirements

for

the Degree of Doctor of Philosophy

December 2012

CERTIFICATE OF ORIGINALITY

I hereby declare that this thesis is my own work and that, to the best of my knowledge and belief, it reproduces no material previously published or written, nor material that has been accepted for the award of any other degree or diploma, except where due acknowledgement has been made in the text.

_____ (Signed)

_____ YANG Li _____ (Name of Student)

Dedication

To my parents,

YANG Liangbao and QIN Xiangdi

Abstract

This study examines the going private transactions led by controlling shareholders in Hong Kong. A major concern around these transactions is that the controlling shareholders may use their power to pursue their own interests at the expense of other shareholders. We specifically try to answer the following four questions: (1) Is there any evidence of earnings management preceding going private transactions in Hong Kong? (2) What are the determinants of going private transactions? (3) Are there wealth gains to public shareholders in these transactions? If yes, why are the controlling shareholders willing to pay significant offer premiums to outside shareholders? (4) How does the ownership structure in Hong Kong affect the controlling shareholders' decision to privatize and the offer price?

We first find evidence of earnings management prior to going private transactions, supporting the argument that controlling shareholders might try to opportunistically manipulate earnings in an attempt to depress stock prices. We find that controlling shareholders are willing to pay premiums of approximately 50% on average to buy back the publicly held shares. The market also reacts favourably to privatization announcements: an average of 35% cumulative abnormal returns (CARs) is realized around the announcement of a controlling shareholder buyout (CSBO). However, we find that the privatization offer prices of CSBO firms are not significantly different from their initial public offering (IPO) prices. The overall results suggest that the offer prices only represent an artificial premium due to the low market prices of CSBO firms before privatization.

In the going private literature, hypotheses such as incentive realignment, free cash flow, financial visibility, and tax benefits are frequently cited as important factors in driving going private decisions as well as the sources of wealth gains in these transactions. Our study finds support for the undervaluation hypothesis: firms with a lower price-to-NAV ratio are more likely to be privatized by their controlling shareholders and tend to offer higher premiums. The incentive realignment hypothesis, free cash flow hypothesis, and tax benefits hypothesis have little explanatory power for our sample.

In this study, we further relate controlling shareholders' expropriation to going private transactions. We use earnings management and related-party transactions to proxy for controlling shareholders' expropriation. By examining how controlling shareholders' pre-buyout earnings management affects the likelihood of a firm being privatized and investigating controlling shareholders' pre-buyout expropriation as a source of offer premiums in CSBOs, we integrate the two strands of research that used to be isolated in the going private literature. We find that the relation between discretionary accruals and the odds of a firm engaging in a CSBO is significantly negative. We also find that lower discretionary accruals and larger connected transactions are associated with higher offer premiums and higher abnormal returns. The results are robust after controlling for a range of hypotheses which have been used to explain premiums in previous literature. The overall results suggest that controlling shareholders who have an agenda in privatizing the firm will engage aggressively in earnings manipulation. Those firms with negative discretionary

accruals are more likely candidates for CSBOs. In addition, the results also suggest that controlling shareholders' expropriation through earnings management and connected transactions serves as potential sources of wealth gains in CSBOs. Controlling shareholders who have successfully exploited public shareholders would be willing to spare part of their expropriation as offer premiums to secure the success of privatization.

Lastly, we find that the negative relation between discretionary accruals and offer premiums/CARs is more pronounced among CSBO firms with less analyst coverage and in firms with family ownership concentration, especially among firms where pyramid structures exist, cash-flow rights are largely deviating from voting rights, and firms with a single controlling owner (i.e., where there are no other large shareholders). Moreover, the positive relation between connected transactions and offer premiums/CARs is also much stronger in these firms. The overall results support the argument that since controlling shareholders having strong motivation to appropriate minority shareholder wealth in going private transactions, such expropriation is much more easily accomplished in family controlled firms and in firms with high information asymmetry.

Acknowledgement

I would like to take this opportunity to express my sincerest gratitude to my supervisor, Professor Wayne Yu. I have benefited a lot from his insightful suggestions and invaluable advice. Without his patient guidance and constant encouragement, the completion of this thesis would not have been possible. I would also like to thank my co-supervisor, Professor Steven Wang, for his unconditional support. Last but not least, I would like to give thanks to all my teachers and friends at the Hong Kong Polytechnic University.

TABLE OF CONTENTS

1. INTRODUCTION.....	1
1.1. Objectives and Motivation	1
1.2. Overview of Research Methods and Major Findings.....	11
1.3. Contribution	16
1.4. The Structure of the Thesis	17
2. LITERATURE REVIEW	19
2.1. The Evolution of the Going Private Transaction Around the World.....	19
2.2. Literature on Earnings Management Preceding MBOs	20
2.3. What Motivates Going Private?.....	25
2.3.1. Incentive Realignment Hypothesis	26
2.3.2. Free Cash Flow Hypothesis.....	29
2.3.3. Undervaluation Hypothesis.....	30
2.3.4. Tax Benefit Hypothesis.....	32
2.3.5. Financial Visibility Hypothesis	35
2.3.6. Takeover Defence Hypothesis	36
2.3.7. Transaction Costs Hypothesis.....	38
3. DEFINITION, DATA SOURCES, AND DESCRIPTIVE STATISTICS.....	40

3.1. Going Private Transactions in Hong Kong.....	40
3.1.1. Definition	40
3.1.2. Techniques for Going Private	41
3.1.3. Changes of “Codes on Takeovers and Mergers”.....	44
3.2. Sample Selection and Data Sources	45
3.3. Sample Descriptive Statistics	47
3.3.1. Ownership Variables	49
3.3.2. Undervaluation Variables	52
3.3.3. Control Variables	55
4. CONTROLLING SHAREHOLDER EXPROPRIATION IN CSBO TRANSACTIONS.....	59
4.1. Earnings Management Preceding CSBOs.....	60
4.1.1. Total Discretionary Accruals.....	61
4.1.2. Performance-Adjusted Current Discretionary Accruals (PACDA)	65
4.1.3. Robustness Test: Earnings Management or Deteriorating Firm Performance?	67
4.2. Tunneling in CSBO Firms.....	70
4.3. Ownership Structure and Controlling Shareholder Expropriation	73
5. WEALTH EFFECTS: METHODS & RESULTS	76

5.1. Methodology	76
5.1.1. Premium Analysis Methodology	76
5.1.2. Event Study Methodology	78
5.2. Valuation Effects of CSBOs.....	78
5.3. Firm Characteristics and CSBOs Wealth Effects	82
6. REGRESSION ANALYSIS.....	86
6.1. Determinants of Engaging in CSBOs	86
6.2. Premiums/CARs Regression Analysis.....	92
6.2.1. Determinants of Wealth Gains in CSBOs.....	92
6.2.2. Effect of Ownership Structure and Information Asymmetry on CSBO Wealth Gains	95
7. CONCLUSION, LIMITATIONS, AND SUGGESTIONS FOR FUTURE RESEARCH	99
7.1. Conclusion	99
7.2. Limitations and Suggestions for Future Research	102
APPENDIX.....	103
REFERENCES.....	115

1. Introduction

1.1. Objectives and Motivation

This study examines firms in Hong Kong that are privatized by their controlling shareholders.¹ Privatization (also known as going private or leveraged buyouts (LBOs)) refers to transactions in which the publicly traded shares of a firm are bought out by a group of private investors and the firm is then delisted from the stock exchange and converted into private ownership. This transaction is referred as a management buyout (MBO) when the group of private investors includes incumbent managers (see Amihud 1989; Lee 1992). Leveraged buyouts are noted as having been an important restructuring tool for the corporate sector in the US during the 1980s (Jensen 1989; Baker and Wruck 1989; Palepu 1990). However, going private has generally had a derogatory term in Hong Kong. A well-known going private transaction in Hong Kong is Richard Li's attempt at privatizing PCCW. On 4 November, 2008, the majority shareholders of PCCW, Pacific Century Regional Developments (PCRD, interested in 27.88% of PCCW's issued equity) and the China Network Communications Group (CNC, interested in 19.84%) jointly announced a proposed privatization of PCCW with a cash payment of HK\$4.20 for each share. Compared with its prevailing market price (HK\$2.75 on the day prior to the privatization announcement), the offer represented a premium of approximately 52.73%. The news of PCCW's privatization immediately attracted massive media and public attention. The independent shareholders of PCCW,

¹ We use "controlling shareholder buyout" or "CSBO" for this type of going private transaction throughout this study.

who seemed about to benefit from the privatization, nevertheless fiercely resisted the proposal. They claimed that PCCW had once reached a peak price of HK\$28.5 (equal to HK\$142.5 after reverse stock split), which is far higher than the offer price. Moreover, as stated in the privatization proposal, PCCW intended to declare a special cash dividend with an aggregate amount between HK\$16.964 billion and HK\$17.565 billion for the post-buyout shareholders immediately after privatization; while the amount required to buy out all publicly held shares was HK\$14.871 billion, which would literally enable the controlling shareholders to buy out the firm for nothing.²

Why would controlling shareholders want to take a firm private, considering that companies that obtain a listing status are generally too proud of it to even rationally consider delisting? In almost all the privatization circulars in Hong Kong the controlling shareholders claim that their firm has suffered persistently weak share performance and relatively low trading liquidity. Their firm is not only failing to be an attractive fund raising avenue due to limited access to the equity capital market, but is also struggling with the high costs and management resources associated with the maintenance of listing status. Controlling shareholders also claim that the offer price largely exceeds the open market stock price and thus privatization provides public shareholders with an opportunity to realize their investment in the firm. However, privatization will always receive fierce criticism and resistance from outside investors. Critics argue that the offer price, though higher than the prevailing market price, is nonetheless inadequate

² Refer to Appendix A for more details.

compared with the true value the firm could have achieved. They argue that, by listing the company at a high price and later privatizing it at a much lower price (and several years later even seeking a second listing), going private is merely a way for controlling shareholders to expropriate public shareholders. For example, China Properties Group (CPG), approximately 75% of which was beneficially owned by Mr Wong Sai Chung, was listed on the Hong Kong Stock Exchange in 2007. Before its IPO, it was disclosed that substantially all of the members of CPG were subsidiaries of Pacific Concord Holding (PCH), which was privatized by Mr Wong, in 2003. Mr Wong also listed a subsidiary of PCH, Concord Land Development Company (CLD) on the Stock Exchange in 1996 and privatized it five years later, in 2001. The independent financial advisor, Asia Financial Capital Limited, advised that the terms of both privatization offers were “not fair and reasonable”.³ Though the privatization price is higher than the market price, it represents a substantial discount (over 50%) of the firm’s net asset value. Furthermore, the financial advisor disclosed that the realization value for PCH (if the firm disposed its major assets within a short time span) would be more than the value offered under the proposal. Moreover, even in a forced sale scenario, the adjusted net tangible asset value (NTAV) would be 58.3% higher than the offer price.⁴

Going private has been quite a controversial topic ever since it emerged in the world

³ Among all the successful privatization cases in Hong Kong, Pacific Concord Holding (PCH) and Concord Land Development Company (CLD) are the only two for which the independent financial advisor viewed the offer terms as unfair and unreasonable.

⁴ Refer to Appendix A for more details.

capital market. There are roughly two strands of research in the literature. In the first, proponents of LBOs claim that going private creates improved incentives – concentrated ownership, high leverage, and active monitoring – which ultimately lead to higher firm valuation through “financial, operational, and governance engineering” (Kaplan and Strömberg 2009; Guo, Hotchkiss, and Song 2011; Baker and Wruck 1989; Palepu 1990). Extant empirical studies have documented unambiguous evidence of wealth gains through going private: substantial premiums are paid to public shareholders and significantly positive cumulative abnormal stock returns (CARs) are documented around privatization announcements.⁵ Hypotheses such as the reduction of agency costs (free cash flow or incentive realignment), undervaluation, tax savings, financial visibility, transaction costs reduction, and takeover defence are proposed to explain the sources of wealth gains.

In the second strand of research, critics argue that going private transactions, especially MBOs, are fraught with opportunities of illegal/unethical transfer of wealth from public shareholders to insider-managers (Brudney and Chirelstein 1978; Stein 1985; Rappaport 1990; Schadler and Karns 1990). In addition, MBOs create severe conflicts of interest for insider-managers: as agents of public shareholders, corporate managers should have done their fiduciary duty negotiating the highest possible price for the publicly held

⁵ Appendices B1 and B2 provide a summary of international evidence for wealth gains in going private transactions in the US and UK markets. Appendix B1 presents offer premiums that public shareholders received and Appendix B2 presents cumulative abnormal stock returns (CARs) around privatization announcements. The evidence shows that the premiums paid range from 33% to 56% and typical CARs appear to be around 20% (see a review in Renneboog and Simons (2005) and Renneboog et al. (2007)).

shares; yet being themselves purchasers of these shares, managers have a strong motivation to depress the pre-buyout stock price in order to minimize the total buyout value. This line of research focuses on investigating managers' earnings management behaviour preceding going private transactions (DeAngelo 1986; Fischer and Louis 2008; Perry and Williams 1994; Wu 1997; Li, Qian, and Zhu 2012; Hafzalla 2007). Extant empirical findings are, however, inconclusive. Previous studies investigating sources of wealth gains generally examine one or several hypotheses, but fail to provide consistent evidence to support one explanation over another (see a review in Renneboog and Simons 2005). In addition, the empirical evidence for managers' manipulation of stock prices before buyout transactions is also mixed.

In this study, we employ a sample of firms privatized by their controlling shareholders in Hong Kong during the period 1989-2009 and re-tackle the questions which remain unanswered in the going private literature. We specifically try to answer the following four questions: (1) Is there any evidence of earnings management preceding these going private transactions in Hong Kong? (2) What are the determinants of these transactions? (3) Are there wealth gains for public shareholders in these transactions? If yes, why are the controlling shareholders willing to pay significant offer premiums to outside shareholders? (4) How does the ownership structure in Hong Kong affect the controlling shareholders' decision to privatize and the offer price?

Going private activities have grown to record levels in recent years in Hong Kong.

However, there has been no related study on this. Currently, most of what is known about going private has been drawn from US and UK samples. For the following reasons, we believe that the US and UK studies might not be extrapolated to CSBOs in Hong Kong.

First, Halpern et al. (1999) state that the mixed evidence drawn from the literature arises from the fact that in the US and UK markets there are actually two types of poorly performing firms that go private: firms in which managers own an insignificant fraction of their firm's stock and which are vulnerable to a hostile takeover, and firms in which managers own a significant fraction of their firm's stock and which face little risk of hostile takeover. More specifically, the pre-transaction characteristics of high prior and low prior managerial equity LBO clusters differ significantly from one another and from corporations that remain public concerns. High prior managerial equity LBOs display higher managerial stock ownership, poorer stock performance, greater use of debt, and higher expenditures on taxes than companies that remain public corporations. On the contrary, low prior managerial equity LBOs display lower managerial stock ownership, less use of debt, and poorer stock performance when compared to these same firms. The heterogeneity hypothesis describes the LBO population in previous studies, and why they "derived very different empirical results from sample to sample, depending upon the mix of LBOs in one's sample" (Halpern et al. 1999). Firms in Hong Kong are usually characterized as having concentrated insider ownership and family ownership control (Claessens, Djankov, and Lang 2000; Jaggi, Cheung, and Gul 2009; Ho and

Wong 2001). By manually collecting ownership data for our sample firms from their privatization circulars, we confirm that all the buyout groups in our sample own a significant proportion of their firm's stock. Thus, our sample is not hindered by the heterogeneity concern. More importantly, the Hong Kong going private sample provides an opportunity to investigate firms that are privatized by their controlling shareholders, which is never tested in previous literature.

Second, prior studies mainly focus on going private transactions in the US and UK markets where ownership is widely dispersed and conflicts between managers and shareholders (Type I agency problem) are prevalent. By contrast, there is little understanding about the transaction in a setting where conflicts between controlling shareholders and minority shareholders (Type II agency problem) dominate. The key difference between widely-held firms and family business groups is that agency problems in the former involve managers not acting for shareholders, while agency problems in the latter involve managers acting solely for one shareholder, the family, and neglecting other shareholders (Fama and Jensen 1983; Jaggi et al. 2009). Among firms where ownership is widely spread, an increase in managerial ownership after going private transactions⁶ can help align the interests of management and shareholders (McConnell and Servaes 1990; Morck, Shleifer, and Vishny 1988; Demsetz and

⁶ The managerial equity holding after the buyout has indeed largely increased. For example, Kaplan (1989a) documents that the equity holdings of the management team increase from a median of 5.88% before to 22.63% after the MBO. Smith (1990) find that before the buyout, officers, outsider directors, and other major shareholders own a median 35.5% of the stock outstanding, while after the buyout they own more than 95%.

Villalonga 2001). Thus, the incentive realignment hypothesis is documented to be an important factor in driving US/UK firms opting for a private ownership. On the other hand, however, when insider ownership is already substantial, a further increase in insider equity ownership may reduce the efficacy of the corporate governance mechanisms and lower firm valuation (managerial entrenchment). Although there is debate about the precise location of the “turning point”, the general importance of managerial entrenchment is accepted (Morck et al. 1988; McConnell and Servaes 1990; Morck and Yeung 2003). Thus, the ability of the incentive realignment argument to explain going private transactions may be quite questionable in the Hong Kong sample.

Third, the free cash flow hypothesis argues that the LBO form can effectively discipline managers for investing cash flow at below the cost of capital or wasting it on organization inefficiencies (Stulz 1990). Ample empirical evidence supporting the FCF hypothesis has also been documented for both US and UK markets. However, Lehn and Poulsen (1989) find that free cash flow no longer serves as a factor motivating MBO managers to privatize a firm where the equity owned by managers is above the median. Garvey (1992) also confirms that Jensen’s arguments (FCF) apply only to firms with low levels of managerial equity where Type I agency problems are expected to be high. Thus we hypothesize that among Hong Kong firms where Type I agency problem is rare, the free cash flow hypothesis might lose its explanatory power.

Fourth, the high level of managerial ownership of Hong Kong CSBO firms makes it

unlikely that these firms will be taken over by outside parties (Jaggi et al. 2009). Though not a necessary condition, previous US/UK findings generally acknowledge that the threat of a takeover is an important impetus for management to take a firm private. Firms facing takeover threats are more likely to be taken private as corporate managers often use MBO as a defensive strategy against outside acquirers when facing a hostile takeover (Baron 1983). In Hong Kong, without the consent of large shareholders who are usually interested in more than 50% of the existing issued share capital of the company, independent shareholders are unlikely to receive any alternative offer from a third party. The takeover competition is of limited effectiveness since these managers with pre-offer majority control can effectively block another bid (Jensen and Ruback 1983; DeAngelo 1986). Therefore, we do not expect takeover threat to motivate CSBO transactions in the Hong Kong market. Instead, a privatization offer is usually initiated by the incumbent management, who are at the same time the controlling shareholders of the firm.

Fifth, family ownership control and the lack of a takeover market in Hong Kong leave substantial room for controlling shareholders to extract private benefits at the cost of minority shareholders. In family controlled firms, earnings management is widely used to maximize the private benefits of controlling shareholders as the legal protection of investors is weaker and financial reporting is less transparent (Jaggi et al. 2009; Fan and Wong 2002; Ali, Chen, and Radhakrishnan 2007; Anderson and Reeb 2003). Wu (1997) argues that if MBO offers are made after a hostile takeover offer, management will not

usually have had the opportunity to reduce earnings in the prior period unless they had also been planning an MBO. Moreover, managers tend to be very conservative in managing earnings downward because they are afraid of benefits being appropriated by another bidding party if the MBO fails. However, privatization offers in Hong Kong are usually made out of controlling shareholders' voluntary decisions and thus they would have enough time and opportunity to manage earnings if they wanted to. Further, we expect that controlling shareholders in our sample play a more aggressive role in depressing pre-buyout stock prices through reported earnings. Previous studies confirm that reported earnings of firms in East Asia have less credibility to outside investors as their controlling owners are more likely to report accounting information for self-interested purposes (Fan and Wong 2002; Jaggi et al. 2009).

Last but not least, CSBO firms in Hong Kong differ from those in the US and UK with regard to debt levels and corporate borrowing. The US/UK "leveraged" buyout is typically financed with 60 to 90% debt, which usually includes the senior and secured loan portion and junior and unsecured debt portion (high-yield bonds or "mezzanine debt") (Kaplan and Strömberg 2009). It is the increased leverage after the buyout that is alleged to be effective in forcing management to disgorge cash flows and generating tax benefits. However, the debt levels associated with CSBOs in Hong Kong are much lower than the gearing ratio in the US and UK deals. In a typical Hong Kong CSBO, the controlling shareholders already own a majority share of the firm and rarely turn to an outside buyout specialist (such as private equity or venture capital) for debt financing.

Private borrowing through banks rather than issuing public debt is more common in Hong Kong. The small portion of debt employed in Hong Kong CSBOs further casts doubt on the FCF hypothesis and tax benefit hypothesis in motivating CSBOs in the market.

1.2. Overview of Research Methods and Major Findings

We conduct four sets of tests to study the above stated research questions. In the first set of tests, we investigate the controlling shareholders' earnings management activity before CSBO announcements. We find that CSBO firms use discretionary accruals to deflate earnings prior to CSBO transactions. While previous studies generally find negative accruals in the year prior to MBOs, we document that the average levels of discretionary accruals are significantly below zero over a three-year period before the CSBO transactions took place. In comparison, the average levels of discretionary accruals for public control firms are not statistically different from zero. The overall results support the argument that controlling shareholders opportunistically manipulate earnings to specifically prepare for upcoming CSBO transactions. Moreover, negative accruals for CSBOs firms over the three years prior to CSBOs, rather than only one year, suggest that managers of Hong Kong firms engage more aggressively in earnings management before CSBOs.

Firms with concentrated ownership structures and high information asymmetry are a priori likely contexts for controlling shareholders to appropriate minority shareholders

(Fan and Wong 2002; Cheung, Rau and Stouraitis 2006). Other than earnings manipulation, connected transactions between publicly listed firms and their controlling shareholders are proved to be a direct channel through which controlling shareholders can effectively expropriate outside minority shareholders (Cheung et al. 2006). The nonparametric tests show that discretionary accruals are significantly lower and connected transactions are significantly higher in firms where controlling shareholders' cash-flow rights largely deviate from their voting rights, in firms where the controlling owner is families, and in firms where the CEO, board chairman, or vice-chairman are from the controlling family. Moreover, the nonparametric tests also show that firms with less analyst coverage have significantly lower discretionary accruals and larger connected transactions. The overall results support the argument that expropriation is much more easily accomplished in firms with family ownership concentration and high asymmetric information.

In the second set of tests, we use two methodologies that are frequently used in the going private literature to examine wealth gains: premium analysis and cumulative abnormal returns (CARs). We find that controlling shareholders are willing, on average, to pay premiums of approximately 50% to buy back the publicly held shares. The capital market reacts favourably to privatization announcement: an average of 35% cumulative abnormal returns (CARs) is realized around the announcement of CSBOs. However, when we compare the privatization offer price with the CSBO firm's IPO price, we document that the average offer premiums of CSBO firms relative to its IPO price are

not significantly different from zero. The overall results show that the privatization offer price only represents an artificial premium due to the low prevailing market price of firms before CSBOs. Should the public stockholders purchase the firm's shares at its initial public offering, their investment in this company is actually discounted, taking into account the time value of money.

In the third set of tests, we contrast CSBO firms with a control sample of firms that remain publicly listed using a logistic regression and discern those firm characteristics that best describe the CSBO firms. We first include frequently cited hypotheses, such as incentive realignment, undervaluation, free cash flow, financial visibility, and tax benefits, for examination. We find that undervaluation is an important factor in motivating management to take a firm private in Hong Kong. Firms with a lower price-to-NAV ratio are more likely targets of CSBO transactions. CSBO firms in Hong Kong have higher levels of insider ownership than matched firms that remain publicly quoted, rejecting the incentive realignment hypothesis. However, the result is consistent with the argument in Maupin, Bidwell and Ortegren (1984) that "the greater the percentage of shares held by management and the board of directors, the more easily a management buyout can be accomplished". The free cash flow hypothesis is also unsupported in our sample. The finding is as expected: FCF generally has little explanatory power among firms where managers already own a significant portion of issued equity prior to going private transactions, because agency costs of FCF in such firms are minimal. In contrast to the FCF hypothesis, we find that CSBO firms actually

have higher sales growth than matched control firms. Further, though descriptive statistics show that CSBO firms in Hong Kong have less analyst coverage and stay in the public market for fewer years than publicly controlled firms, the financial visibility hypothesis does not find support in the logistic regression analysis. Lastly, we do not find evidence supporting the tax benefits hypothesis either. Due to the limited debt involved in CSBO transactions in Hong Kong, the tax benefits associated with high leverage is quite limited in our sample.

We then relate controlling shareholders' earnings management to CSBOs. By examining how insider-managers' pre-buyout earnings management might affect the likelihood that a firm will be privatized, we integrate the two strands of research that used to be isolated in the going private literature. We find that the relation between discretionary accruals and the odds of a firm engaging in CSBOs is significantly negative, suggesting that firms with negative discretionary accruals are more likely candidates for CSBOs. Controlling shareholders who have an agenda in privatizing the firm will engage aggressively in earnings manipulation before buyout. In a further analysis, we find the negative relation is more pronounced in firms with less analyst coverage, confirming that firms with high information asymmetry are a priori likely contexts for controlling shareholders exploiting public shareholders.

Finally, we investigate why the controlling shareholders are willing to pay large offer premiums to outside shareholders. More specifically, we examine whether

undervaluation, as suggested in the logistic regression, is an important source of wealth gains in CSBOs. More importantly, we examine how the controlling shareholders' pre-CSBO expropriation would affect their decision in determining the offer premiums to public shareholders in CSBOs. To examine the controlling shareholders' pre-buyout expropriation as a source of offer premiums in CSBOs, we again integrate the two strands of going private research. A preliminary nonparametric test shows that firms with lower firm valuation, more negative discretionary accruals, and larger connected transactions have significantly higher offer premiums and abnormal returns. The regression results also show that firms with a lower price-to-NAV ratio tend to offer higher premiums and are accompanied by higher CARs around CSBO announcements. In addition, lower discretionary accruals and larger connected transactions are associated with higher offer premiums and higher abnormal returns. The results are robust after controlling for a range of hypotheses that are used to explain premiums and CARs in previous literature. The overall results again support the undervaluation argument. Moreover, the results suggest that the controlling shareholders' expropriation through earnings management and connected transactions serves as potential sources to the wealth gains in CSBOs. Controlling shareholders who have successfully exploited public shareholders would be willing to set aside part of their expropriation as offer premiums to secure the success of privatization.

A further analysis shows that the negative relation between discretionary accruals and offer premiums/CARs is more pronounced among CSBO firms with family ownership

concentration, especially among firms where pyramid structures exist, where cash-flow rights largely deviate from voting rights, and where there is a single controlling owner (i.e., no other large shareholders). Moreover, the positive relation between connected transactions and offer premiums/CARs is also much stronger in these firms. As discussed earlier, such firms are a priori likely contexts for controlling shareholder expropriation. Controlling shareholders are neither genuinely kind-hearted in providing public shareholder an opportunity to liquidize their investment nor generous enough in over-compensating them for tendering their public shares. Instead, higher offer premiums are public shareholders' own money which has been expropriated by controlling shareholders before CSBOs.

1.3. Contribution

This study contributes to the literature in the following ways. First, it complements the going private literature. To the best of our knowledge, this is the first study to investigate going private transactions led by their controlling shareholders. Extant literature in LBOs generally focuses on the US and UK markets, where ownership is widely dispersed and the firm usually faces a takeover threat. The existing empirical evidence documented is not applicable in controlling shareholder buyout. The Hong Kong CSBO sample provides a precious opportunity to investigate controlling shareholders' decision to initiate a privatization, their opportunistic behaviours throughout CSBO transactions, and their role in determining privatization offer prices.

Second, this study relates controlling shareholders' expropriation to going private transactions. Previous studies investigating the sources of wealth gains in going private and earnings management preceding going private are usually isolated. This study integrates the two strands of research and highlights controlling shareholders' pre-buyout expropriation as an important factor in predicting a firm's likelihood of engaging in CSBOs and also as a source of the offer premiums they are willing to pay.

Third, this study contributes to the literature on the role of corporate governance. Specifically, the empirical results in this study show that the ownership structure and information asymmetry reinforce the relation between the wealth gains in CSBOs and controlling shareholders' expropriation. Controlling shareholders in firms with weak governance and great asymmetric information can expropriate extensively before privatization, which is why they are willing to pay higher premiums. These results enrich the literature of ownership (information) and expropriation, highlighting the importance of corporate governance. Aligning cash-flow rights to voting rights and appointing a non-family member as board chairman would be positive steps towards improving governance.

1.4. The Structure of the Thesis

The rest of the study is organized as follows. Section 2 provides an overview of worldwide going private transactions and related empirical studies. Section 3 describes the controlling shareholder buyout transactions in Hong Kong, discusses the sample

selection, lists the data sources, and presents descriptive statistics. Section 4 investigates the earnings management issue preceding privatization announcements, as well as controlling shareholder's expropriation through connected transactions. Section 5 explains the methodology measuring offer premiums and cumulative abnormal stock returns around the privatization announcements, and presents results. Section 6 presents the cross-sectional regression analysis. Section 7 concludes and discusses limitations and suggestions for future research.

2. Literature Review

2.1. The Evolution of the Going Private Transaction around the World

US public corporations in the 1960s and 1970s were characterized by deficiencies in corporate governance regulation and lack of managerial incentives to focus on corporate value. These problems were addressed in the 1980s by a wave of corporate restructuring including corporate takeovers and going private transactions. In less than a decade, the US going private market developed from less than US\$1 billion (in 1979) to a peak of more than \$60 billion (in 1988). And in the “deal decade”, \$1.3 trillion in total asset value had changed hands (Renneboog et al. 2007; Shleifer and Vishny 1990). Jensen (1989) even predicted that the leveraged buyout structure was so superior that LBOs would eventually replace public corporations and become the dominant corporate organizational form. However, the junk bond market, on which LBOs were highly leveraged, crashed in early 1990s. A large number of leveraged buyouts resulted in default and bankruptcy. Strong public and political reaction led to an abrupt slowdown in going private activities. Though the leveraged buyout market remained stagnant, it had not died. The US experienced a second leveraged buyout boom in the late 1990s which reached a peak in 1997. In contrast to the first wave, explanations for the second wave emphasize the increased presence of private equity and debt financiers. Moreover, the disregard for small companies by institutional investors serves as an important reason for small firms opting for private status in the late 1990s.

Besides the US, the phenomenon of going private activities has been witnessed in

markets all over the world. The going private transactions in the UK market, though much smaller in scale, kept pace with those in US (Renneboog and Simons 2005; Wright, Thompson, Robbie, and Wong 1995; Wright, Hoskisson, Busenitz, and Dial 2000). The first wave of LBOs in the UK peaked in 1989 and the second started in 1997. The market for going private activities in continental Europe has also evolved over the last 30 years. The total value of LBO activity over the period 1997-2003 amounts to 28 billion Euros. However, the first wave of buyouts in the US (and then Europe) did not spill over to the Asian region to any great degree (Cumming, Fleming, Johan, and Takeuchi 2010). The Asian LBO market started to boom in the mid-to-late 1990s and has grown to record levels in recent years.

2.2. Literature on Earnings Management Preceding MBOs

The literature has clearly shown that in events where new shares are issued (e.g., IPOs, SEOs, and stock-based acquisition), managers of the issuing company (or acquirer) tend to inflate stock prices so that they can issue shares at artificially high prices (or acquire target firms at better terms) (Gong, Louis, and Sun 2008; Teoh, Welch, and Wong 1998). In contrast to inflating stock prices in the above mentioned scenarios, the MBO transaction has concerned investors as insider-managers have strong incentives to depress stock prices prior to the privatization announcement. In order to purchase all common stocks held by outsiders to delist the firm, managers would be motivated to depress the pre-buyout stock price to minimize the total buyout compensation, which ultimately leads them to breach their fiduciary duty to negotiate fair value for public

shareholders.

The benefits of deflating pre-MBO stock prices are obvious. For example, Wu (1997) reports that the potential benefit from depressing pre-MBO stock prices is estimated to be almost \$50 million on average for his sample firms. Compared with inflating stock prices prior to IPO/SEO, managers of MBO firms would find it easier to manipulate earnings as they have few concerns regarding the consequences of their opportunistic behaviour. After the completion of MBOs, the firm becomes privately held and is not subject to periodic disclosure requirements. This fact that the firm may be less exposed to scrutiny and risk of lawsuits following deal completions may provide an additional incentive for managers of MBO firms to aggressively engage in opportunistic activities. The conflicts of interest for insider-managers are so obvious that early in the mid-1970s, when going private transactions started to emerge, the US Securities and Exchange Commission (SEC) expressed concern (Sommer 1974) and required special disclosure requirements for management buyouts. Rule 13e-3, which was finally adopted in 1979, requires managers to state whether they believe the proposed transaction is fair or not to public stockholders, and provide a list of factors supporting that judgement (DeAngelo, DeAngelo, and Rice 1984). The SEC also requires the MBO firm to engage an independent financial expert to express its view on the fairness of the MBO transaction. Earnings-based multipliers are the methodology most commonly used by the board and independent financial advisors to assess the fairness of buyout transactions.

Thus, extant studies investigating insider-managers' opportunistic behaviour prior to MBOs mainly focus on examining the target firm's reported income. DeAngelo (1986) may be the first to empirically examine insider-managers' accounting decisions before management buyout transactions. She argues that as the courts and investment bankers generally employ earnings-based valuation methods to assess fair value, MBO managers thus have incentives to understate reported income. Lower reported earnings preceding the MBO can be used to justify the fairness of the buyout price. Intriguingly, managers' decisions to lower income through accounting choices are accommodated by the inherent bias in accounting and auditing standards and procedures against attempts to increase income (Perry and Williams 1994). Evidence for insider-managers manipulating earnings prior to MBO announcements is widely documented in the literature. For example, employing a sample of 175 management buyouts during the period 1982-8, Perry and Williams (1994) find that discretionary accruals are negative in the year preceding the public announcement of MBOs, consistent with the earnings management hypothesis. Wu (1997) examines earnings manipulation using a sample of 87 management buyout cases during the period 1980-7 and also finds evidence favouring the earnings management hypothesis. Specifically, he finds that the earnings changes of MBO firms are significantly lower than the industry median change in the year before the MBO. The pre-MBO stock prices also exhibit a downward movement and this downward movement is systematically associated with pre-MBO earnings changes. In addition to discretionary accruals, Li, Qian, and Zhu (2012) report that MBO managers also engage in real earnings management activities to decrease

accounting earnings. They find that during the year prior to MBO announcements, the target firms exhibit abnormally low discretionary accruals and abnormally high discretionary expenses (R&D and advertising expenses), and realize losses from asset sales. In addition, high expenses and losses from asset sales are associated with lower pre-MBO abnormal stock returns, suggesting that these earnings-reducing activities allow managers to acquire their targets “on the cheap”.

Hafzalla (2007) reports that managers can also manipulate MBO firms’ voluntary disclosure to achieve a lower pre-MBO stock price. He examines firms’ voluntary disclosure in the period before the announcement of management buyouts and finds that managers involved in MBOs selectively release negative disclosures to denigrate their firm just before the MBO transaction: they issue more bad news disclosures and more pessimistic quotes. Additionally, they issue less optimistic quotes, fewer good news disclosures, and less positive earnings forecasts. Hafzalla claims that selective disclosure is a less costly tool than manipulating real activities because no actual damage is caused to the firm’s operation.

Despite compelling theoretical predictions, the existing empirical evidence on earnings management preceding MBOs is inconclusive. Using a sample of 64 New York and American Stock Exchange companies with management buyout proposals during the period 1973-82, DeAngelo (1986) finds that the accrual changes and earnings changes are nonetheless not significantly different from zero over the three-year period prior to

MBOs. DeAngelo (1986) considers several possible explanations for her results, including the power of the test and the possible irrelevance of reported earnings. She concludes that the most plausible explanation is that a management buyout is usually accompanied by detailed scrutiny which may deter managers from systematically reducing earnings through accounting choices. In addition, Perry and Williams (1994) apply their methodology to detect earnings management in DeAngelo's sample and find no evidence of negative abnormal accruals in the two years prior to the MBOs. Perry and Williams (1994) posit that the difference in samples should account for the inconsistent results, confirming DeAngelo's conjecture of detailed scrutiny in her sample. In addition, Fischer and Louis (2008) point out that managers' motivation to depress earnings is also tempered by their need for external debt financing. They hypothesize that though managers have incentives to depress earnings to obtain a lower purchase price, they would also need to enhance prospective external financiers' perceptions of the firm value to secure financing and lower their financing costs. Thus, corporate managers face conflicting reporting incentives prior to management buyouts. Fischer and Louis' results confirm their hypothesis showing that managers who rely the most on external funds to finance their MBOs tend to report less negative abnormal accruals prior to MBOs.

All in all, it is well acknowledged that though managers have strong incentives to understate earnings and deflate pre-MBO stock prices, their ability to do so is constrained by the extent to which their accounting decisions are monitored by other

parties. First, managers' ability to underreport earnings is constrained by public shareholders. Public stockholders will recognize those managers who have incentives to understate earnings, and then take actions to uncover managerial opportunism. Second, management opportunism is also constrained by financial experts and the courts. In the "privatization circular", a financial advisor is usually engaged to express their independent opinion on the fairness of the buyout transaction. The independent financial advisor can both detect any income manipulation and convince outsiders (e.g., the courts and the Stock Exchange) of its importance. Third, the market for corporate control is asserted to be the ultimate protection for shareholders. Insider-managers are generally quite conservative in earnings-reducing activities because they fear the consequences of being appropriated by another bidding party if their MBO fails. In addition, if an MBO offer is made as a response to a hostile takeover offer, management will not normally have had the opportunity to reduce earnings in the preceding period, unless they had also been planning an MBO (Wu 1997). Finally, in the presence of a bid competition, the very fact that an LBO bid has been made and that the structure of the bid is known may provide important information about insider valuation (DeAngelo et al. 1984; Stoughton 1988).

2.3. What Motivates Going Private?

The extant literature has proposed several hypotheses for the motivations of LBO transactions as well as the sources of wealth gain. These hypotheses include reduction of agency costs (due to free cash flow problems and/or incentive realignment),

undervaluation, tax savings, financial visibility, takeover defence, and reduction of transaction costs. These hypotheses are competing and not mutually exclusive. In this section, we review these hypotheses and the related literature.

2.3.1. Incentive Realignment Hypothesis

The incentive realignment hypothesis posits that the need to realign the incentives of managers with those of outside shareholders is an important factor in motivating going private transactions. In firms with low managerial ownership, corporate managers are likely to shirk their responsibility and consume perquisites at the expense of outside shareholders. An increase in managerial equity holding directly induces inside managers to internalize a great share of any agency costs (Lehn and Poulsen 1989) because they have a greater stake in any value-increasing actions that are taken (Jensen and Meckling 1976). Thus, the incentive realignment hypothesis posits that the need to realign the interests of corporate managers and outside shareholders serves an important factor in motivating going private transactions, and the most likely candidates for LBOs are therefore firms with lower managerial ownership. In addition, the hypothesis also predicts a negative relation between pre-buyout managerial equity ownership and wealth gains from going private as firms with lower prior inside equity holding are expected to increase their value more after a buyout. Supporting evidence for incentive realignment has been widely reported for both US and UK markets. For example, using a sample of LBOs effected during the period 1981-6 in the US market, Halpern et al. (1999) finds that LBO firms demonstrate lower managerial stock ownership than firms remaining as

public corporations, suggesting that firms with low prior managerial ownership are more likely to go private. Moreover, using a sample of UK firms going private, Renneboog et al. (2007) report a negative relation between wealth gains and managerial ownership level. They find that firms with lower levels of managerial ownership tend to have higher offer premiums and market returns around offer announcements.

However, many studies provide empirical evidence that contradict the incentive realignment argument (Maupin et al. 1984; Kieschnick 1998; Weir, Laing, and Wright 2005; Halpern et al. 1999; Bharath and Dittmar 2010). Weir et al. (2005) find that firms that go private in the UK are more likely to have higher CEO ownership. Maupin et al. (1984) find that the MBO firms show an average of 56% of shares in the hands of management and the board of directors, while management and directors of the control firms only held 38% of the outstanding shares. The conflicting empirical results regarding the effect of managerial ownership on a firm's odds of going private are the result of there being two types of firms going private: those with low prior managerial ownership and those with high prior managerial ownership (Halpern et al. 1999). The incentive realignment hypothesis only holds among firms whose prior managerial ownership is low. When corporate managers own a significant amount of issued equity of the firm, the entrenchment effect dominates and the major agency problem lies in controlling shareholder expropriating minority shareholders (Morck et al. 1988; McConnell and Servaes 1990). In such a context, firms with concentrated ownership are more likely to be privatized. Maupin et al. (1984) argue that the positive correlation

between the likelihood of MBO transactions and inside ownership is consistent with the logic that “the greater the percentage of shares held by management and the board of directors, the more easily a management buyout can be accomplished”.

The relation between insider ownership and the wealth effects of going private transactions with higher levels of managerial ownership is somewhat ambiguous. For example, Renneboog et al. (2007) document a negative relation between high levels of managerial equity ownership (>25%) and wealth gains. They argue that a large share block can effectively discourage other bidders from making a counter bid and therefore allow them to pay a lower offer price.⁷ On the other hand, however, DeAngelo et al. (1984) show that in transactions when the pre-buyout management stake is 50% or more, the CAR is 20% higher than in transactions where the management owns less. Halpern et al. (1999) argue that when management owns a large portion of the firm’s stock, but are facing no significant competition, they still have strong incentives to pay higher premiums simply to ensure the success of the transaction. Intuitively, the premiums paid in going private transactions should be determined by the potential performance improvement in the post-buyout period. However, as is widely documented in the literature, the relationship between managerial ownership and firm valuation is contested at higher levels of insider ownership where the entrenchment effect may dominate. Thus, the effect of a further increase in the level of managerial ownership on

⁷ Previous studies document that competing bids can effectively increase offer premiums (Lowenstein 1985; Amihud 1989; Easterwood et al. 1994). See detailed discussion of the takeover defence hypothesis.

firm valuation, and how much the management would be willing to pay, remains empirical questions.

2.3.2. Free Cash Flow Hypothesis

The free cash flow hypothesis is the leading argument for what motivates and describes going private transactions in the US/UK markets. Free cash flow (FCF) is defined as “cash flow in excess of that required to fund all projects with positive net present values when discounted at the relevant cost of capital” (Jensen 1986, 323). It is asserted that the large amount of debt used to finance going private transactions can effectively drive “managers to disgorge cash rather than investing it at below the cost of capital or wasting it on organization inefficiencies” (Jensen 1986, 323). For example, Kaplan (1989a) documents that industry-adjusted capital expenditures fall significantly after the buyout, consistent with the curbing of management’s “empire-building tendencies”. Thus, the free cash flow hypothesis predicts that firms with high FCF are more likely to go private and are associated with greater wealth gains. The FCF hypothesis also predicts that firms with low growth prospects and low dividend payout are likely candidates for LBOs and will benefit from the reduced agency costs of FCF induced by going private transactions.

Though the theory sounds compelling, the extant empirical evidence is not conclusive. Lehn and Poulsen (1989) and Singh (1990) find that firms going private have greater FCF than firms remaining public. Moreover, they find that firms going private exhibit

lower sales growth and poorer growth prospects, further supporting Jensen's (1986) FCF hypothesis. Opler and Titman (1993) also document that firms initiating LBOs are more likely to exhibit the combined characteristics of low Tobin's Q and high FCF than firms remaining public. In addition, Kim and Lyn (1991) find that firms whose managers pay small dividends to increase the resources under their control are more likely to be taken private.

On the other hand, however, Lehn and Poulsen (1989) find that the free cash flow hypothesis genuinely loses explanatory power for firms in which the equity owned by managers is above the median. Garvey (1992) confirms that Jensen's arguments (FCF) apply only to firms with low levels of managerial equity where Type I agency problem is expected to be high. Halpern et al. (1999) also find that, in the cluster where managers own a significant portion of equity, the FCF level and Tobin's Q of LBOs are no different from those of firms acquired by another company or firms remaining public. We thus hypothesize that among Hong Kong firms where the Type I agency problem is rare, the FCF can hardly be a factor motivating controlling shareholders to take a firm private.

2.3.3. Undervaluation Hypothesis

The proposal of undervaluation as an explanation for motivating LBO transactions is based on the same reasoning used in the case of stock repurchases. Leveraged buyout transactions are regarded, in a sense, as an extreme form of corporate stock repurchase

(Kaestner and Liu 1996; Lehn, Netter, and Poulsen 1990; Dittmar 2000). The undervaluation hypothesis is founded on the premise that information asymmetry between insiders and shareholders may cause the misevaluation of a firm (Dittmar 2000).

Managers are assumed to possess superior information relative to investors about the “intrinsic” value of a firm. If they believe that the stock is undervalued, they may bid to take the company private. The undervaluation hypothesis thus posits that the more severe the management perceives the undervaluation problem to be, the more likely they will take their firm private. In addition, the more severe a firm is undervalued, the more likely its management will offer a higher price as there is more room for them to create value (Lang, Stulz, and Walking 1989).

Maupin et al. (1984) surveyed financial officers who participated in successful buyouts of their firms and the managers acknowledged that a prime motive in their decisions to propose buyouts was their belief that their firm’s shares were underpriced. Moreover, they admitted that they were willing to pay higher premiums for firms which they believed were severely undervalued as they expected to create additional value once they were private. There is a great deal of supporting empirical evidence for the US and UK markets. For example, Renneboog et al. (2007) find that pre-transaction undervaluation and expected shareholder gains are positively correlated, suggesting that undervaluation of the pre-buyout target firm is one major source of shareholder wealth gain. Using both an objective measure of undervaluation and management’s perceived

undervaluation measure, Weir et al. (2005) find that undervaluation significantly influences UK firms decision to go private by means of management buyout.

Evidence contradicting the undervaluation hypothesis, though counter-intuitive, is also documented in the literature. In a similar survey study, financial managers of firms that experienced a management-led leveraged buyout after 1980 responded that they believed their firms were performing better than their industry peers before the buyout (Frankfurter and Kosedag 1996). Mehran and Peristiani (2010) document that young firms that went private in the period 1990-2007 are actually solid performers and frequently outshine their industry peers. Moreover, Kaplan (1989a) argues that the fact that some informed parties actually sell their shares in going private transactions rather than participate in the buyout provides a rationale for the rejection of the undervaluation hypothesis. Kaplan reports that those non-buyout informed parties (officers and directors as well as hostile third parties) hold a median of 10% (around \$17 million) of total issued capital. If the firm is underpriced, the action of selling these shares would be deemed irrational, as they have the same information as the participating management team.

2.3.4. Tax Benefit Hypothesis

The tax benefits argument is another widely cited motivation for going private and is suggested to be a significant source of wealth gains in this kind of transaction (Jensen, Kaplan, and Stiglin 1989; Kaplan 1989b; Halpern et al. 1999; Renneboog et al. 2007).

The literature asserts that going private transactions can potentially reduce a firm's tax liability in two ways. Firstly, the large amount of debt used to finance the transaction creates interest tax shields. Secondly, an asset write-up following the buyout increases the depreciation deductions.⁸ Thus, the tax benefit hypothesis predicts that low pre-buyout leverage ratio⁹ and high pre-buyout tax bills are positively related to the wealth gains in the going private transaction.

Using a sample of 76 MBO firms in the period 1980-6, Kaplan (1989b) investigates in detail the evidence for taxes as a source of value. He documents that, in total, the median value of the combined benefit from interest and depreciation deductions ranges from 21% to 143% of the premium paid to pre-buyout shareholders. More specifically, he finds that the median estimated value of interest deductions varies from 14% to 130% of the premium paid to pre-buyout shareholders, while for those companies that elect to step up their asset basis, the median value of the increased depreciation deductions is 30% of the premium paid. In addition, Kaplan also reports a significant correlation between buyout premiums and the estimated tax benefits from a buyout, supporting the argument that tax benefits account for a significant fraction of the premium paid to pre-buyout shareholders. Other supporting evidence for tax benefits of MBO transactions can be found in Halpern et al. (1999) and Kieschnick (1998). For example,

⁸ Kaplan (1989b) also briefly discusses the potential tax benefits available to a MBO from the use of an Employee Stock Ownership Plan (ESOP). MBOs which borrow through an ESOP can deduct principal repayments as well as interest payments on the loan. However, as this plan is infrequently used (only five of the 76 companies in his sample), the value of the ESOP benefits is not included in the calculations of total tax benefits.

⁹ The unused debt capacity is likely to create a large additional tax shield.

Halpern et al. (1999) find that tax expenditure is a significant factor influencing the odds of a firm engaging in a going private transaction. Kieschnick (1998) shows that the ability to reduce tax is linked to the premiums paid to shareholders when going private. Moreover, using a sample of ReLBO firms, Kosedag and Lane (2002) report that a firm's tax savings potential is still an important motivator for firms electing to go private for a second time. The underlying logic is simple: if the tax benefits argument is an explanation for going private activities in general, then regardless of a firm's past experience it should also hold for a second transaction.

However, the tax benefit hypothesis only finds weak support in extant UK empirical studies. For example, Renneboog et al. (2007) find that, in contrast to US research, the taxes paid are not related to the wealth gains generated in the going private transactions. They only find weak support for the idea that higher premiums are paid for firms with a low leverage ratio. Dicker (1990) points out that the differences in the tax regimes relating to the treatment of interest on debt between the two countries may help explain the inconsistency. Additionally, Weir et al. (2005) also explain the weak tax advantages in the UK findings with the fact that UK firms use less debt to finance the transaction than firms in the US. Adopting a similar argument, the effect of tax benefits in motivating CSBOs in Hong Kong remains an empirical question. All in all, the extent to which tax benefits can play a role in the wealth gains in going private transactions depends on the fiscal regime and the marginal tax rates to which a company is subject (Renneboog et al. 2007).

Another problem regarding the tax benefits argument is that this tax benefit is not straightforward, but difficult to interpret. A high tax bill can represent potential savings in cash outflows (by creating leverage-induced tax shields), it may also reflect past accounting profitability. Renneboog et al. (2007) thus suggest including both the tax variable and an interaction term of taxes and high performance (a dummy that equals 1 if ROA is above the median) in the premium regression analysis. They argue that a significant positive relation between the wealth gains and the interaction term of taxes and performance may imply that bidders are willing to pay more for a firm with high past earnings profitability. This may indicate that the tax shields induced by the increased leverage are high and will be sustainable in the future due to high earnings profitability.

2.3.5. Financial Visibility Hypothesis

Corporate managers have claimed that one important reason for them taking their firm private is that there is a lack of market interest in their shares and they feel “unliked”. For example, previous studies consistently document that small firms have more incentives to go private. Small firms are usually overlooked by analysts and the financial press. Institutional investors and fund managers also have little interests in small firms.

In a recent theoretical study, Boot, Gopalan, and Thakor (2008) develop a model contrasting the costs and benefits of public ownership. Their model predicts that firms with lower investor participation have greater incentives to go private, while greater

investor interest encourages firms to remain public or to go public if they are privately owned. Mehran and Peristiani (2010) may be the first to systematically investigate the financial visibility hypothesis. Using a sample of firms going private between 1990 and 2007, Mehran and Peristiani find that a large fraction of the firms are fairly young, with an average of about five years before choosing to revert to a private ownership structure. They also document that firms with declining growth in analyst coverage, falling institutional ownership, and low stock turnover are more likely to go private and opt to do so sooner. Mehran and Peristiani conclude that the inability of new IPO firms to attain a critical mass of financial visibility and investor interest is the primary reason behind firms' decision to abandon their public listing in the second LBO wave. In addition, Bharath and Dittmar (2010) also confirm that firms are more likely to go private if they have less analyst coverage, are smaller, and have spent fewer years in the public market from their initial public offer to privatization.

2.3.6. Takeover Defence Hypothesis

The takeover defence hypothesis posits that the threat of a takeover (e.g., published rumours, takeover negotiations, or an offer for the shares) is an important impetus for management buyout transactions. Weir et al. (2005) propose that firms facing the threat of a hostile takeover have ineffective internal governance mechanisms: low managerial shareholdings, low external shareholdings, duality and low non-executive director representation. In such a context, the management who are afraid of losing their jobs and

perquisites as a consequence of a takeover¹⁰ would choose to take the firm private via an MBO. Thus, the MBO here is used by management “as a final defensive measure against a hostile takeover or tender offer” (Lowenstein 1985; Shleifer and Vishny 1988; Stulz 1988). The market for corporate control is therefore regarded as a substitute for weak internal governance. The LBO form was prevalent as a mechanism for restructuring deficient conglomerates in the 1980s.

The positive relation between the presence of competing bidders and the likelihood of going private is widely reported in literature (Lehn and Poulsen 1989; Singh 1990; Halpern et al. 1999). Takeover speculation also plays a role in the premiums paid in going private transactions. Renneboog et al. (2007) argue that market pressure for corporate control is expected to force up the premiums paid because the management will have to come with a high bid to pre-empt bidding by other contestants. Lowenstein (1985) documents that the premiums paid to shareholders in MBO transactions involving three or more competing bidders are on average 19% higher than the premiums paid in cases with a single bidder. Amihud (1989) also finds that, out of 15 largest LBO transactions over the period 1983-6, nine received competing bids and the final premium paid was 52.2% compared to an average of 30.7% for cases without bidder competition.

¹⁰ Franks and Mayers (1996) show that over a period of two years subsequent to a takeover in the UK, virtually all board members of the target firm left the merged firm.

However, the takeover defence hypothesis did not find much support in the UK market. Weir et al. (2005) find no evidence that pressure from the market for corporate control acts as an impetus to going private. They state that in the context of increasing globalization, the firms going private are too small to be attractive to a corporate buyer and therefore were under less pressure from the risk of takeover. More importantly, with the improvements in corporate governance and active monitoring by institutional investors, the market for corporate control cooled down in the 1990s.

2.3.7. Transaction Costs Hypothesis

The costs of maintaining a stock exchange listing can be very high, including fees for registration, listing, and other stockholders' servicing costs which are unique to the public corporation. Benoit (1999) reports that the fees paid to stockbrokers, registrars, lawyers, merchant bankers and financial PR companies, as well as the exchange fee and the costs of auditing, printing and distribution of accounts amount to £250,000 for UK quoted firms. The estimated servicing costs for a US listing mentioned in previous studies range from \$30,000 to \$200,000, management time not included. Thus, the transaction costs hypothesis suggests that taking a firm private directly generates savings from a reduction in the cost of public ownership and results in increases in firm value.

However, the extent to which the elimination of stockholders' servicing costs can contribute to increases in firm value is rarely tested in the literature, largely because

listing costs are difficult to measure. Renneboog et al. (2007) use the dummy variable of AIM listing to proxy for transaction costs. The listing costs of AIM-listed firms are lower than those for firms listed on the official market of the LSE. Therefore, an AIM-listing is expected to be related to lower expected wealth effects. Renneboog et al. find that the savings realized by the direct and indirect costs of listing significantly contribute to the shareholder wealth effects from going private. On the contrary, by employing the NYSE and AMEX fee schedules to roughly proxy annual listing costs, Travlos and Cornett (1993) find that the elimination of stockholders' servicing costs associated with a public corporation is not an explanatory factor of the documented stock price reactions and conclude that the transaction cost hypothesis is not upheld.

3. Definition, Data Sources, and Descriptive Statistics

This section discusses going private transactions in Hong Kong: the definition for controlling shareholder buyout (CSBO), the techniques used to privatize a firm in Hong Kong, as well as the regulation changes. This section also describes sample selection and data sources and presents descriptive statistics.

3.1. Going Private Transactions in Hong Kong

3.1.1. Definition

In a typical Hong Kong going private transaction, the company is bought out by controlling shareholders who are usually at the same time chairman or executive directors of the firm (Jaggi et al. 2009; Ho and Wong 2001). In fact, most of our sample firms are identified in the section of “Privatizations by major shareholders” of the Fact Book issued by the Hong Kong Stock Exchange. The controlling shareholders acquire all outstanding publicly traded shares of a corporation and then merge the assets of the firm with a privately-held shell corporation (Muscarella and Vetsuypens 1990) or with another publicly listed company under their control (DeAngelo 1986). Unlike the leveraged buyouts in US, the buyout team of a Hong Kong firm surrenders very little of the equity to an outside party. After the completion of the buyout, the controlling shareholders become the sole owners of the firm. The controlling shareholder buyout (CSBO) is our focus in this study.

Some firms are privatized by non-controlling shareholders in Hong Kong, although only

a few. As discussed earlier, without the consent of controlling shareholders who are usually interested in more than 50% of the existing issued share capital of the company, the independent shareholders are unlikely to receive any alternative offer from a third party. Indeed, the common case in this type of going private transaction is that major shareholders tender their shares to a third party according to a precedent “Share Purchase Agreement”. After the completion of the acquisition from large shareholders, a mandatory offer is usually triggered pursuant to Rule 26.1 of the Takeovers Code to acquire the remaining issued share capital of the company. We include this type of going private transaction as a control group in our study.¹¹ For simplicity, we term these transactions LBOs regardless of the debt employed.

3.1.2. Techniques for Going Private

In Hong Kong, a listed company may be privatized by way of a “scheme of arrangement” or “general offer”. To effect a privatization via a scheme of arrangement, the controlling shareholders request the company to propose to its shareholders a scheme of arrangement to cancel all the shares held by minority shareholders in accordance with the company law of the jurisdiction in which the company is incorporated. The scheme must be voted upon by all minority shareholders. In addition

¹¹ The Pacific Century Insurance Holdings Limited privatized by Fortis Insurance International N.V. is a good example of this type of transaction. The offeror (Fortis) and PCRD entered into a “share purchase agreement,” following the completion of which, on 15 May 2007, Fortis and parties acting in concert with it controlled 50.54% of the issued share capital of Pacific Century Insurance. As a result, the offeror is required to make an unconditional mandatory cash offer to acquire all the disinterested shares pursuant to Rule 26.1 of the Takeovers Code, and all outstanding options pursuant to Rule 13.1 of the Takeovers Code.

to satisfying any voting requirements imposed by law, the “Codes on Takeovers and Mergers” (SFC) requires that the scheme must be approved by at least 75% of the voting rights attached to the disinterested shares (i.e., shares other than those held by the controlling shareholder and his concert parties) that are either cast in person or by proxy at a shareholders’ meeting, and the number of votes cast against the resolution must not be more than 10% of the voting rights attached to all disinterested shares. After obtaining approval at the shareholders’ meeting, the scheme is still subject to approval of the court. If the scheme is approved, it is binding on all shareholders and the shares held by minority shareholders will be cancelled, resulting in the controlling shareholders holding 100% voting rights of the company. An application can be made to the stock exchange for withdrawal of the firm’s listing.

A second way to privatize a company is via a general offer. The Companies Ordinance is germane for privatization through “general offer” (The Ninth Schedule s.168). The acquiring party makes a general offer to purchase all the issued share capital of the company at a given price which is higher than the prevailing market price. The shareholders of the firm can choose whether or not to tend their holdings to the acquirer. In most cases, the acquiring party is also the controlling shareholders of the company; otherwise, the acquiring party has obtained the consent of the controlling shareholders who have agreed to tend all their holdings before they bring up a general offer. Once the acquiring party (including persons acting in concert with him) has obtained acceptances which in aggregate represent 90% in value of the shares within four months, he may opt

to compulsorily acquire the remaining shares (pursuant to Rule 2.11 of the Takeovers Code). If the target is incorporated overseas, the privatization exercise will have to be conducted in compliance with the laws of the relevant jurisdiction.

Though not specified in the Takeovers Code, there is actually a third way to privatize a company. The controlling shareholders sell most of the firm's assets (very substantial disposal), leaving the firm consisting wholly or substantially of cash or short-dated securities. According to Rule 14.82 of the Listing Rules, the "cash company" will be regarded as unsuitable for listing and trading in its securities will be suspended. Under Chapter 14 of the Listing Rules, disposal of assets is subject to approval by a simple majority of the independent shareholders voting in person or by proxy at the Extraordinary General Meeting. In contrast with the stricter privatization rules, the controlling shareholder can "privatize" the company in an easier but more subtle way. The privatization of Sunday Communications falls into this category. After the privatization offer was blocked, the controlling shareholders of Sunday Communications sold substantially all of its operating businesses and assets to PCCW, another company they controlled, and Sunday Communications was delisted from the Hong Kong Stock Exchange in 2006. The regulation loophole was closed in June 2008 and the requirements for the disposal of major assets have been revised in compliance with those on privatization via a scheme of arrangement.

3.1.3. Changes of “Codes on Takeovers and Mergers”

The rules governing privatization through a scheme of arrangement have been changed several times over the sample period. The earliest requirements on privatization can be traced to 1992. A scheme of arrangement must be approved by a majority in number representing 90% in value of disinterested shares that are either cast in person or by proxy at a shareholders' meeting. Effective since 1998, the requirement is that a scheme can only be blocked by (a) more than 10% in value of the independent shareholders voting in person or by proxy against the proposal and (b) those shareholders holding more than 2.5% of the total voting rights (the 2.5% proposal). In April, 2000, the privatization requirements in the “Codes” changed again to allow a scheme arrangement to be approved by a majority in number representing 90% in value of those disinterested shares or by less than 2.5% of all voting rights against. The current edition of “Codes on Takeovers and Mergers” (SFC) has been effective since 2002 and was not changed in the 2005 and 2010 editions.

The stockholder voting mechanism actually suffers from a well-known free-rider problem (DeAngelo 1986). Even when minority shareholders suspect the unfairness of a privatization offer, many have reduced incentives to veto it, either in person or by proxy, when each assesses the small probability that his vote will affect the election outcome. Thus, after careful examination, we conclude that the 1992 edition of “Codes on Takeovers and Mergers” (SFC) imposed the most restrict requirements on privatization, whereas the 1998 edition requirements are the loosest.

3.2. Sample Selection and Data Sources

The firms going private in my sample were firstly identified in “Privatization by major shareholders” in the Fact Book issued by the Hong Kong Stock Exchange each year. We supplemented the sample by searching the “webb-site.com”¹² database for firms delisted due to privatization. This initial sample comprises 115 firms going private from 1989 to 2009. We excluded nine firms whose financial data is not available and thus retain a sample of 106 firms. The Fact Book contains data on firm name, the offer price, last trading date, as well as the delisted date. The details of the going private transactions were collected from the circulars that the firm discloses to its investors after the announcement of a proposed privatization (normally within 21 days). The circular explains the effects of privatization on public shareholders, the expected timetable, the recommendation of the independent board committee, advice from the independent financial advisor, as well as the financial information of the company. If the company is to be privatized by way of a scheme of arrangement, the circular is also accompanied by notices of meeting to be held.

As discussed, in this study we focus on the going private transactions led by controlling shareholders. We conducted a review of all circulars associated with each privatization to determine the buyout party in the privatization. We determined that out of the 106 firms that went private, 87 firms were privatized by controlling shareholders. Nineteen

¹² David M. Webb is a well-known activist and share market analyst in Hong Kong. He devotes much time to advocating solutions for better corporate and economic governance in Hong Kong. We thank “webb-site.com” for its company information.

other transactions were led by a non-controlling third party, which we refer to LBOs for simplicity in the rest of the study. The LBO firms serve as a good comparable sample providing information on how these firms differ from the CSBO firms. Appendices C1 and C2 list the names of firms going private, the date of privatization announcement, and the date they were delisted from the Hong Kong Stock Exchange.

We also constructed a matched sample of firms (“PUBLIC”) that did not receive a privatization proposal and that remain publicly listed to address the question of why some firms go private and not others. Firms in the control sample were individually matched to CSBO sample firms based on industry (as classified in DataStream) and total assets at the end of the fiscal year preceding the privatization proposal. Perry and Williams (1994) assert that firms in the same industry and of similar assets are “subject to similar economic and competitive factors, and therefore have comparable operating, investing, and financing opportunity sets”. As a result, the public control sample offers a benchmark to determine the distinct firm characteristics that motivate the decision to go private. In addition, we used the control group to investigate how comparable firms that are not involved in going private transactions differ from the CSBO firms in terms of earnings management activities.

Managerial ownership¹³ data was manually collected from privatization circulars for

¹³ Managerial ownership and controlling shareholder ownership are used interchangeably in the rest of the study.

firms going private. For public control firms, we used the “closely held shares” from the WorldScope database, defined as the percentage of shares held by senior corporate officers and directors, and their immediate families; shares held in trusts; shares held by another corporation (except shares held in a fiduciary capacity by financial institutions); shares held by pension and benefit plans; and shares held by individuals who hold 5% or more of shares outstanding.¹⁴ If ownership data was not available in the database, we consulted the annual report. We used the WorldScope database to collect accounting data. If the accounting data was incomplete, we consulted the annual reports. Daily stock prices were collected from DataStream. We also downloaded the firm return index (adjusted for dividends and stock splits) and the Hang Seng Stock Index from this database. The analyst data was obtained from the Institutional Brokers Estimate System (I/B/E/S).

3.3. Sample Descriptive Statistics

[Insert Table 1 here]

Table 1 presents descriptive statistics for the CSBO firms over the sample period 1989-2009. Panel A reports the number of firms going private through CSBO each year. While the US and UK markets witnessed two LBO waves in the 1980s and 1990s

¹⁴ We recognize the limitations of this ownership measure, since it relies on information disclosed by firms and this disclosure is often voluntary and unmonitored.

respectively, no similar pattern is observed in the Hong Kong market. Panel A shows that over the 21-year sample period, the CSBO firms are roughly evenly distributed in each year, with a surprisingly high number going private in 2005 and 2006. As discussed earlier, the 1992 edition of “Codes on Takeovers and Mergers” (SFC) imposed the most restrictive requirements, while going private transactions were more likely to be approved under the 1998 edition. The current prevalent restrictions on privatization have been effective since 2002. Overall, the distribution of the number of firms going private did not show significant changes when the regulation changed. Panel A also presents the equity value of CSBO transactions in each year. The total market value of the CSBO transactions in year 2006 represents nearly 20% equity value of the whole sample. Moreover, though only two firms went private in the year 2008, the market value of its CSBO transactions is the second largest, mainly because the largest firm in our sample, Citic International Financial Holding, with an equity value of HK\$28 billion, went private in that year.

Similar to previous studies, the Hong Kong controlling shareholder buyout transactions took place across a wide business spectrum, but also have their own characteristics. Panel B of Table 1 shows that the number of CSBO firms in the Financials sector accounts for nearly one-third of all deals that took place in the sample period, followed by Industrials and Consumer Goods. The total market value of CSBOs in the Financials sector represents 42% of the value of the whole sample. Our finding is in line with Renneboog et al. (2007), who find that half of the deals in 1998 and 1999 took place in

the Business Services sector, representing about 25% of the total value in each year.

3.3.1. Ownership Variables

The Hong Kong capital market is often characterized by ownership concentration and family ownership control. Members of controlling families are routinely appointed as chairman or as executive directors to control board decisions (Claessens et al. 2000; La Porta et al. 1999; Jaggi et al. 2009; Ho and Wong 2001). In firms which are widely-held by shareholders, the agency problem mainly concerns corporate managers not acting for shareholders (Type I agency problem). However, in firms with concentrated ownership and family control, the agency problem mainly involves managers acting solely for one shareholder, the family, and neglecting other shareholders (Type II agency problem). Previous ownership literature has documented that when corporate managers own a small amount of firm equity, an increase in their ownership would help align their personal interests with the interests of outside shareholders and the firm (incentive realignment effect). However, when managerial ownership goes beyond a certain point, a further increase in managerial ownership would reduce the efficacy of the corporate governance mechanisms and reduce firm valuation (the entrenchment effect) (Morck et al. 1988; McConnell and Servaes 1990).

[Insert Table 2 here]

As expected, we find high equity ownership in the hands of controlling shareholders

(see the results presented in Panel A of Table 2). The average managerial ownership for PUBLIC firms is 53%, while the equity ownership owned by controlling shareholders is significantly higher, at 68%. The level of insider ownership documented is in line with the levels reported in Maupin et al. (1984) and Weir et al. (2005) in both the US and the UK markets. We also find that the managerial ownership in LBO firms is around 60%. This number is not surprising. As discussed earlier, the common case for LBOs in Hong Kong is that major shareholders tender their shares to a third party (the acquirer) prior to the privatization announcement.

Other than the absolute level of insider ownership, we also adopt several ownership measures from Claessens et al. (2000). We manually searched the annual reports and privatization proposals of firms going private and traced the ultimate owner and pyramid ownership structure of these firms. The first variable we employ is the “ratio of cash-flow to voting rights”, which measures the deviation between the cash-flow rights and control rights of controlling shareholders. The lower the ratio is, the greater the incentive for controlling shareholders to expropriate. The results are presented in Panel B of Table 2. We managed to obtain cash-flow and control data for 69 firms out of 87 CSBO firms and 19 LBO firms. The average ratio of cash-flow to voting rights is 0.767 for CSBO firms and 0.836 for LBO firms. For comparison, Claessens et al. (2000) collect data for a sample of 330 publicly traded corporations (including both financial and non-financial institutions) in Hong Kong at the end of the fiscal year 1996 or the closest possible date. The ratio of cash-flow to voting rights in their sample is 0.882.

CSBO firms have a relatively large deviation between cash-flow rights and control rights compared to the average Hong Kong firm.

In addition, four mechanisms are widely used to separate ownership and control. We follow Claessens et al. (2000) and employ the following four dummy variables: “Pyramids with Ultimate Owners” (when companies are not widely-held) equals one if the controlling owner exercises control through at least one publicly traded company, zero otherwise; “Cross-Holdings” equals one if the company has a controlling shareholder and owns any amount of shares in its controlling shareholder or in another company in that chain of control, zero otherwise; “Controlling Owner Alone” equals one if there is no second owner holding at least 10% of the stock, zero otherwise; “Management” equals one if the CEO, board chairman, or vice-chairman are from the controlling family, zero otherwise. The results are reported in Panel C of Table 2. While Claessens et al. (2000) find that one-fourth of their sample firms have a pyramid structure, we document that more than half of our CSBO firms are controlled through pyramids. As many as 85.5% of CSBO firms have only one controlling owner, compared with 69.1% in Claessens et al.’s sample. The CSBO firms also show that the top management is more likely to come from the controlling family (60.3%).

We also followed Claessens et al. (2000) and traced the ultimate owner of firms. Corporations are classified as those that are widely held and those with controlling owners. A widely held corporation is a corporation that does not have any owners with

significant control rights. Controlling owners are further divided into four categories: families, the state, widely held financial institutions such as banks and insurance companies, and widely held corporations. We employ the 20% (benchmark) level of voting rights as the cutoff in this study. The results are reported in Panel D of Table 2, and show that as many as 71% of CSBO firms are in family hands. This family ownership fits with the lower ratio of cash-flow and control rights among CSBO firms, confirming the findings in Claessens et al. (2000) that firms controlled by families are most likely to have a separation between ownership and control.

3.3.2. Undervaluation Variables

The undervaluation hypothesis is one of the most compelling factors motivating corporate managers to take a firm private. Firms that are undervalued by the market are most likely to be privatized by insider-managers who have a better understanding of their “true value”. The more the firm is undervalued, the more room there is for acquirers to create value, and thus they are more likely to offer higher premiums to ensure the success of the buyout transaction.

The market-to-book (MTB) ratio is a commonly used proxy for a firm’s potential for undervaluation. Firms with low MTB generally earn abnormal returns in subsequent periods (Lakonishok, Shleifer, and Vishny 1994, Ikenberry, Lakonishok, and Vermaelen 1995). The price-to-earnings ratio (P/E) is another frequently used proxy for undervaluation. Travlos and Cornett (1993) introduced the relative P/E ratio (Relative

P/E) to capture the gains from going private, where the relative P/E ratio equals the P/E ratio of the firm divided by the median P/E for its respective industry. In privatization circulars, the firm's net asset value (NAV) and net tangible asset value (NTAV) are usually used to assess the fairness of privatization offer by comparing with the offer price. We also include price-to-NAV ratio and price-to-NTAV ratio for undervaluation measures. More specifically, the calculation of price-to-NTAV ratio is the same as the price-to-book ratio, which serves as an alternative for P/E ratio.

[Insert Table 3 here]

The descriptive statistics are presented in Table 3. The market-to-book ratio of CSBO firms and LBO firms are lower than 1, implying both types of firms going private are discounted by the market. In contrast, the control firms that remain publicly quoted report a market-to-book ratio of 1.228, higher than the MTB of CSBO firms and LBO firms at 10% and 5% significance levels, respectively. However, the relative P/E ratio for CSBO firms to their industry median is 1.221 and statistically higher than 1, indicating that CSBO firms are not undervalued in terms of price-to-earnings ratio. The observed high P/E ratio for CSBO firms is actually not surprising. As MBO managers are generally criticized for deflating reported corporate earnings prior to going private transactions, high P/E ratio could be caused by the distorted earnings that were manipulated downward prior to CSBOs. For comparison, the relative P/E of the control firms is 1.114, suggesting that the control firms that remain publicly listed are valued

qualitatively comparable to the average firm in the market. Moreover, for LBO firms in which there is no negative earnings management incentive, the relative P/E ratio is lower than 1, confirming this type of firm going private is undervalued by the market. We do not therefore use P/E as our main valuation measure in this study. There are two further reasons why the P/E ratio is not a proper measure for undervaluation. First, the P/E ratio is regarded as an inappropriate measure for firms in the real estate industry in the literature. Second, and most importantly, about one-fifth of CSBO firms in our sample have negative earnings in the year prior to CSBO transactions, further casting doubt on the use of the P/E ratio in this study.

Following the methods used in privatization circulars, we compare a firm's stock price with its NAV and NTAV. We find that both the price-to-NAV and price-to-NTAV ratios of the control firms are significantly higher than the two types of firms going private, further suggesting that CSBOs and LBOs were trading at relatively low prices before they chose to revert to a private ownership structure. Moreover, both the price-to-NAV and price-to-NTAV ratios of CSBO firms are lower than those ratios of LBO firms at the 10% significance level.

We also use pre-buyout stock performance as an indication for undervaluation in this study. Following previous literature, pre-buyout stock performance is measured as one-year cumulative abnormal returns over benchmark returns during the 12 months prior to going private announcement dates. For each firm, we measure the monthly

abnormal returns by subtracting its corresponding benchmark returns from its total stock returns. The Hang Seng Index Return is used as the benchmark. The industry median stock return is used as an alternative benchmark to calculate the abnormal return. The results are qualitatively similar and not reported in this study. The results in Table 3 show that, on average, CSBO firms do not earn consistently negative abnormal returns relative to the overall market during the one-year period preceding the buyout announcement. The results are somewhat surprising, given the clear undervaluation of CSBO firms indicated by the market-to-book ratio and poor stock prices relative to firm assets. However, when we compare the stock performance of CSBOs with the market index two years and three years before the privatization announcements, we observe weaker performance in both years, suggesting that CSBO firms are already discounted by the market two or three years before privatization is proposed. Their stock prices stay low during the year before the CSBO announcement dates.

3.3.3. Control Variables

Control variables are drawn from prior literature. Free cash flow, sales growth, dividend ratio, firm size, analyst coverage, leverage ratio, and tax bills are some of the most frequently used variables. We use Jensen's (1986) free cash flow measure (cash flow in excess of that required to fund all projects with positive net present values when discounted at the relevant cost of capital) divided by beginning-of-year total assets. Sales growth is included for two reasons. On the one hand, the sales growth rate, a proxy for profitable investment reinvestment of cash flow, is widely used in the

literature to test the free cash flow hypothesis. The literature predicts that firms with lower sales growth are more likely to go private and will pay higher premiums. On the other hand, insider-managers are criticized for deferring profitable projects until after the privatization. Managers who could successfully conceal favourable investment would be willing to offer higher premiums. Dividend payment is included as another measure for FCF as previous research suggests that firms with low dividend payouts may suffer more severe free cash flow problems. Following Mehran and Peristiani (2010), we use firm size, analyst coverage, and firm age to proxy for a firm's financial visibility. Firm size, measured as a natural logarithm of a firm's total assets, is frequently used as a proxy for information asymmetry in the literature (e.g., Buzby 1975). Bharath and Dittmar (2010) argue that the total assets could proxy for a host of factors that relate to investor recognition and information production in a public market. Larger firms are likely to have better visibility and coverage in the financial press, while smaller firms tend to have greater asymmetric information. Prior research also uses lower analyst coverage as proxy for greater asymmetric information and less monitoring. Analysts collect, digest, and distribute information about a firm's performance. Baker, Nofsinger, and Weaver (2002) claim that analyst reports are the primary source of information for most buy-side investors. Firm age, measured as the number of years the firm stays in the public market before it is privatized, is an important factor affecting a firm's decision to go private in the second LBO wave in the US and UK markets. It is asserted that young firms are more inclined to exit the public market because they have failed to attract an adequate level of investor recognition. Young firms have substantial

difficulties in signalling the value of their firms and face significant adverse selection costs (Mehran and Peristiani 2010; Bharath and Dittmar 2010). The tax deductibility of interest expenses on corporate debt is another important source of wealth gains in going private transactions. We include financial leverage and tax payments to control for the effect.

[Insert Table 4 here]

The descriptive statistics for the control variables are also presented in Table 3. Contrary to previous studies which generally report US and UK firms going private suffering free cash flow problems, we find that Hong Kong CSBO firms do not show higher cash flow than public control firms. The CSBO and LBO samples do not show any difference in free cash flow either. We also find that CSBO firms do not have a lower dividend payout ratio than the control firms or LBO firms. Further, the results show that CSBO firms in Hong Kong are not constrained by investment opportunities. Instead, they have higher sales growth than public control firms and LBO firms. In addition, we document no difference in firm size between CSBO and control firms, which is expected as the public control group is matched by total assets. Compared with public firms of a similar asset base, CSBO firms are covered by fewer analysts, confirming that the latter fail to attract the attention of the market. For comparison, the number of analysts covering LBO firms is almost twice of CSBO firms. LBO firms also have more analyst following than firms that remain publicly quoted. In terms of firm age, on average, the CSBO firms were

public for about eight years before they chose to revert to a private ownership structure. Table 4 gives the distribution of the number of years CSBO firms stayed public before electing to go private. The results show that after five years of their initial public offerings, about 24% of the sample (21 CSBO firms) reverted to a private ownership structure. Additionally, more than half of the CSBO firms reverted to private ownership within 10 years of their initial public offering. Our results are consistent with those in Mehran and Peristiani (2010), who document that a significant proportion of the firms electing to go private in the period 1990-2007 in the US market went public on average about five years before choosing to revert to a private ownership structure.

[Insert Table 5 here]

High correlation among independent variables can indicate the possibility of multicollinearity, which means that those variables should not be included in the same regression. We ran a Pearson correlation test for the key variables used in the study, the results of which are presented in Table 5. We find that market-to-book, price-to-NAV and price-to-NTAC are positively correlated, validating their use as undervaluation measures. As discussed earlier, the corporate earnings of CSBO firms are distorted as insider-managers have strong incentives to manipulate reported earnings downward. Thus the price-to-earnings ratio is not a good measure for CSBO firms' performance. As expected, we find no relation between relative P/E and other undervaluation measures. In addition, we also find that the pre-privatization stock performance is not correlated to

any other valuation measure. The one-year cumulative abnormal returns prior to CSBO deal announcement dates fail to reflect the market valuation of the firm. Stock prices of CSBO firms are already discounted by the market two or three years before the firm is taken private. Moreover, we do not find evidence that firm valuation and free cash flow is related to CSBO firms' managerial ownership level. However, CSBO firms whose cash-flow rights and voting rights are aligned tend to have higher market-to-book and price-to-NAV ratios. Lastly, we do not find any relation between firm size and valuation measures, suggesting that small firms are not bad performers in the market.

In terms of measures for financial visibility, we observe a positive relation between firm size and analyst coverage. Small firms tend to have less analyst coverage, consistent with the argument that firm size is an important factor in determining the extent of analyst coverage (O'Brien and Bhushan 1990). We also observe a positive relation between age and analyst coverage, suggesting that CSBO firms that have only stayed in the public market for a short period fail to attract the attention of analysts. In addition, there is also weak evidence that CSBO firms that stay in the public market for only a short period before reverting to private ownership tend to be small firms.

4. Controlling Shareholder Expropriation in CSBO Transactions

In this section, we examine firms' earnings manipulation behaviour preceding CSBO announcements and related-party transactions to detect controlling shareholders' expropriation involved in CSBO transactions. Previous studies document ample

evidence that owners of family-controlled firms extract private benefits at the cost of minority shareholders (e.g., Morck et al. 1988; DeAngelo and DeAngelo 2000). Concentrated corporate control need not eradicate agency problems, but introduces another type of agency problem where controlling shareholders expropriate minority shareholders (Morck and Yeung 2003). Empirical studies also find that earnings management is more extensive in countries with lower investor protection and poor financial reporting quality (e.g., Jaggi et al. 2009; Fan and Wong 2002). The controlling shareholders try to use earnings management to camouflage the reported earnings and hide expropriation from minority shareholders. In addition, the controlling shareholders may also use other means to expropriate minority shareholders, such as selling assets, goods, or services to other companies under their control (e.g., Cheung et al. 2006).

4.1. Earnings Management Preceding CSBOs

Earnings management occurs when managers use their judgement in financial reporting to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting practices (Healy and Wahlen 1999). Corporate managers have a great deal of discretion over accounting decisions and can use various income-reducing accounting techniques to depress earnings. For example, the management can defer revenue recognition and accelerate expense recognition. They can also report upward-biased expense estimates, take direct write-offs, over-accrue expected losses, or expense items that they would

otherwise capitalize.¹⁵ The difference between revenues recognized and cash received and the difference between expenses recognized and cash expenditures create accruals and deferrals, respectively. Therefore, analyzing accruals provides insight into earnings management practices. DeAngelo (1986) acknowledges that accrual measures can “potentially reveal the subtle income-reducing techniques”. In this section we follow previous research in earnings management preceding MBOs (DeAngelo 1986; Perry and Williams 1994; Wu 1997) and adopt the accounting accruals methodology.

4.1.1. Total Discretionary Accruals

In the earnings management literature, total accruals are measured, with minor variations, as the difference between net income (earnings before extraordinary items and discontinued operations) and cash flow from operations (DeAngelo 1986; Teoh et al. 1998). Jones’ (1991) regression-based model is used to estimate the benchmark or expected level of accruals. Deviations from the expected accruals are asserted to be subject to management discretion and could be attributed to earnings management. The model used to estimate total accruals is shown in Eq. (1). Two explanatory variables are included to control for the economic activities of the firm during the test period: change in revenue and the level of gross property, plant, and equipment (PPE). More specifically, change in revenue adjusts for non-discretionary changes in working capital accounts, while PPE adjusts for non-discretionary depreciation expenses.

¹⁵ Chou et al. (2006) point out that earnings management can also be accomplished through changes in accounting methods and changes in capital structure, such as debt defeasance and debt-equity swaps.

$$\frac{TAC_{j,t}}{TA_{j,t-1}} = \alpha \left(\frac{1}{TA_{j,t-1}} \right) + \beta_1 \left(\frac{\Delta REV_{j,t}}{TA_{j,t-1}} \right) + \beta_2 \left(\frac{PPE_{j,t}}{TA_{j,t-1}} \right) + \varepsilon_{j,t}, \quad (1)$$

where

$TAC_{j,t}$ = total accruals in year t for firm j ,

$TA_{j,t-1}$ = total assets at end of year $t-1$ for firm j ,

$\Delta REV_{j,t}$ = change in revenue for firm j from year t to year $t-1$,

$PPE_{j,t}$ = gross property, plant, and equipment for firm j in year t ,

$\varepsilon_{j,t}$ = error term in year t for firm j .

The coefficient estimates are obtained from a cross-sectional regression using firms in the same industry classified by DataStream.¹⁶ All variables in the regression are scaled by beginning-of-year total assets to reduce heteroscedasticity in the data. The non-discretionary total accruals ($NDTAC$) are computed as:

$$NDTAC_{j,t} = a \left(\frac{1}{TA_{j,t-1}} \right) + b_1 \left(\frac{\Delta REV_{j,t} - \Delta AR_{j,t}}{TA_{j,t-1}} \right) + b_2 \left(\frac{PPE_{j,t}}{TA_{j,t-1}} \right), \quad (2)$$

¹⁶ Though not reported, the results are roughly similar if we adopt the approach in Perry and Williams (1994) and estimate a time series regression firm by firm.

We use the modified Jones model and subtract change in accounts receivables from sales growth to allow for the manipulation of credit sales.¹⁷ The main results are robust to omitting this adjustment in our study. Discretionary accrual is calculated as the difference between total accrual and expected total accrual approximated using the above regression.

$$DTAC_{j,t} = \frac{TAC_{j,t}}{TA_{j,t-1}} - NDTAC_{j,t} \quad (3)$$

The lower the discretionary accruals, the higher the level of earnings reducing activities the management are possibly engaging in, and thus the lower the stock price could be depressed. We use data for the five years prior to the announcement to estimate the non-discretionary total accruals caused by changes in economic conditions during this period.

[Insert Table 6 here]

Table 6 presents the distribution of total discretionary accruals in the five-year period

¹⁷ Following the literature (Dechow, Sloan, and Sweeney 1995; Teoh et al. 1998), change in accounts receivables is not included in estimating the parameters, but is included in estimating non-discretionary accruals. Dechow et al. (1995) assert that the original Jones model implicitly assumes that discretion is not exercised over revenue, while the modified version implicitly assumes that all changes in credit sales in the event period result from earnings management. If this modification is successful, then the estimate of earnings management should no longer be biased towards zero in samples where earnings management has taken place through the management of revenues.

prior to privatization for CSBO firms. Panel A shows that the total discretionary accruals of CSBO firms are significantly negative during the year prior to privatization announcements, suggesting that CSBO firms use accruals to deflate earnings. The findings are consistent with those in Perry and Williams (1994) and Wu (1997). Further, the average levels of total discretionary accruals are also significantly below zero in the second and third year before CSBO announcements in our sample.

In comparison, the average levels of accruals are not significantly different from zero in the second and third year before MBO announcements for the samples in Perry and Williams (1994) and Wu (1997). The CSBO firms in Hong Kong experienced significant negative accruals during three years before the transactions actually took place, suggesting controlling shareholders of CSBO firms may have a long-term agenda for privatizing the firm before they take real actions. The results also confirm our previous conjecture that controlling shareholders of Hong Kong CSBO firms would engage extensively in earnings manipulation activities. They would not worry about the benefits from earnings management being appropriated by another bidding party as their majority ownership in the firm effectively blocks any third-party takeover.

We also include the discretionary accruals of control firms (PUBLIC) and LBO firms for comparison. The results are reported in Table 6. The average level of total discretionary accruals is not significantly different from zero for the matching firms that remain publicly listed in all five years. Interestingly, we observe that the abnormal accruals for

LBO firms in year $t = -1$ and $t = -2$ are slightly positive, implying that managers of LBO firms actually inflate reported earnings before privatization. As it is commonly the case for LBOs in Hong Kong that controlling shareholders are not part of the buyout group, but instead tender their majority share equity to a third party, it is not surprising to find that insider-managers of LBO firms inflate earnings to sell the company at a good price.

4.1.2. Performance-Adjusted Current Discretionary Accruals (PACDA)

Some researchers argue that current discretionary accruals are more susceptible to earnings manipulation than total abnormal accruals (Ashbaugh et al. 2003). Kothari, Leone, and Wasley (2005) posit that firm performance should also be considered in calculating discretionary accruals. The performance measures would help address any potential misspecification of accrual models for sample firms with extreme financial performance. We employ the performance-adjusted current discretionary accruals (PACDA) model in Jaggi et al. (2009) and take both of these factors into consideration. Total current accrual (TCA) is calculated as net income plus depreciation and amortization minus operating cash flows. Following Jaggi et al. (2009), the parameters for calculation of non-discretionary current accruals (otherwise known as expected current accruals) are estimated by using the following equation:

$$\frac{TCA_{j,t}}{TA_{j,t-1}} = \alpha \left(\frac{1}{TA_{j,t-1}} \right) + \beta_1 \left(\frac{\Delta REV_{j,t}}{TA_{j,t-1}} \right) + \beta_2 (ROA_{j,t-1}) + \varepsilon_{j,t}, \quad (4)$$

The non-discretionary current accruals are calculated as follows:

$$NDCA_{j,t} = a \left(\frac{1}{TA_{j,t-1}} \right) + b_1 \left(\frac{\Delta REV_{j,t} - \Delta AR_{j,t}}{TA_{j,t-1}} \right) + b_2 (ROA_{j,t-1}), \quad (5)$$

The performance-adjusted discretionary current accruals are defined as:

$$PACAD_{j,t} = \frac{TCA_{j,t}}{TA_{j,t-1}} - NDCA_{j,t} \quad (6)$$

[Insert Table 7 here]

The results are presented in Table 7. The performance-adjusted discretionary current accruals of CSBO firms are qualitatively similar to the total discretionary accruals documented in the section above. We observe that PACDA of CSBO firms are significantly negative during the first and second year prior to privatization announcements, implying that CSBO firms use accruals to reduce earnings. In comparison, the average levels of performance-adjusted discretionary current accruals for control firms are not significantly different from zero in all five years. We also document that LBO firms have weak positive performance-adjusted discretionary current accruals in the year prior to privatization, confirming our previous conjecture that insider-managers of LBO firms might use accruals to inflate reported earnings to

get a favourable selling price from an outside third party.

4.1.3. Robustness Test: Earnings Management or Deteriorating Firm Performance?

It is usually asserted that the conclusion that managers self-interestedly disclose poor performance is potentially confounded by the firm's actual poor performance (Hafzalla 2007). This concern also echoes an important problem underlying the accruals measure that negative discretionary accruals may be observed due to deteriorating firm performance, even if earnings are not manipulated downward. Thus, it is very important to identify whether the observed negative abnormal accruals reflect management manipulation or simply continuous declining performance. To alleviate the concern that declining earnings may simply reflect deteriorating firm performance, we investigate the following aspects of the financial performance of the CSBO firms.

4.1.3.1. Changes in Earnings, Revenue, and Cash Flows

We use changes in earnings, revenue, and cash flow preceding CSBOs to examine firms' financial performance. Earnings change is measured as the change in earnings from the previous year scaled by beginning-of-year total assets to obtain a standardized measurement.¹⁸ Changes in revenue and cash flows are defined in the same way.

¹⁸ We divide annual change by the beginning-of-year total assets to be consistent with previous analysis. When we follow Wu (1997) and use the beginning-of-year total market value as the deflator, we obtain similar empirical results.

[Insert Table 8 here]

Table 8 reports the mean/median changes in earnings (revenue and cash flows) of the CSBO firms over a five-year period prior to their buyout. The Wilcoxon signed-rank test was adopted to examine the null hypothesis that the median difference in each period is zero. In all five years preceding the CSBO, the median difference in earnings is not different from zero, except in year $t = -2$. The median change in earnings in year $t = -2$ is, surprisingly, positive at the 5% significance level. Moreover, we find that changes in revenue and cash flows are positive and significant in the three years prior to the CSBO, suggesting that CSBO firms do not appear to be financially troubled. Instead, CSBO firms tend to be healthy and solid performers in the market.

Wu (1997) posits that a significant drop of earnings at $t = -1$ together with random earnings movements in other periods would be a straightforward indication of earnings management among MBO firms. It is interesting to find that the changes in revenue of our CSBO firms are positive in the three consecutive years before CSBOs, while the earnings changes are not significantly different from zero. Provided a significant increase in revenues, it is reasonable to hypothesize that the changes in earnings at $t = -1$ would be positive in the absence of earnings management. However, earnings management may reduce high earnings to an insignificant level. In unreported test, we find that it is the significant increases in depreciation and taxes that decrease reported earnings among CSBO firms. This finding is consistent with those in Perry and Williams

(1994), who find that depreciation is used as part of the earnings management strategy to a great degree.

4.1.3.2. Industry-Adjusted Accounting Changes

The pattern of earnings changes may also be affected by the trends of the whole market and of the industry. In this section we employ an industry-adjusted measure following Wu (1997). The industry-adjusted earnings change is calculated as the firm's change in earnings minus the median earnings change for the same industry. The industry-adjusted changes in revenue and cash flows are defined the same way.

[Insert Table 9 here]

The pre-privatization five-year distribution of industry-adjusted accounting changes is presented in Table 9. Similar to earnings changes, the industry-adjusted earnings changes are not significantly different from zero. Moreover, the industry-adjusted changes in revenue and cash flows do not show significant difference from zero either. The performance of the CSBO firms is not worse relative to the rest of the industry.

We conclude that the CSBO firms in our sample do not show deteriorating firm performance prior to the buyout as claimed in their privatization circulars. On the contrary, their earnings changes over a five-year period before CSBOs seem to suggest that managers failed to report declining earnings to facilitate their plan for privatization.

Nonetheless, we cannot rule out the possibility that it is the earnings management that renders earnings changes insignificant, provided significantly positive revenue changes. Actually, the annual change methodology is rather a conservative device for detecting earnings management, as it may “bias the results against finding earnings management” (Wu 1997). On the one hand, managers could adjust earnings in the interim periods between year $t = -1$ and the CSBO announcement date; and on the other, some CSBO firms only have accounting data from year $t = -2$. The annual changes methodology cannot capture the management manipulation in either case.¹⁹

4.2. Tunnelling in CSBO Firms

Cheung et al. (2006) posit that for publicly listed firms with concentrated ownership, expropriation is most likely to occur among transactions between firms and their controlling shareholders. Those who control a corporation, whether they are managers, controlling shareholders, or both, can use their power to divert corporate wealth to themselves without sharing it with the other investors (Djankov, La Porta, Lopez-de-Silanes, and Shleifer 2008). Firms controlled by the same family often obtain goods, services, or financing from each other in the normal course of business. By doing this at artificially high/low prices, the group can transfer profits from one firm to another. Specifically, when a family transfers wealth from firms it controls, but in which its economic interest is slight, to firms in which its economic interest is greater through connected transactions, the problem of self-dealing is exacerbated. Various forms of

¹⁹ To correct the bias, some papers use quarterly change measures (DeAngelo 1986; Hafzalla 2007).

such self-dealing include executive perquisites as excessive compensation, transfer pricing, taking of corporate opportunities, self-serving financial transactions such as directed equity issuance or personal loans to insiders, and outright theft of corporate assets (Shleifer and Vishny 1988). In this section, we collect the connected transaction data between CSBO firms and their controlling shareholders and examine how self-dealing transactions serve as a way for controlling shareholders to misappropriate public shareholders' wealth in family business groups. The connected transactions provide direct evidence of how expropriation is conducted by controlling shareholders in the Hong Kong market.

We obtain our sample of connected transactions from *Hong Kong Listed Companies: Corporate Documents*. This data is published annually by the Stock Exchange of Hong Kong and contains copies of corporate documents filed with the exchange. We require connected transactions taking place within three years prior to CSBO transactions to be included in our sample. Due to data availability, we only managed to collect connected transaction data for CSBO firms that were privatized after 1999. In the period 1999-2009, there were 56 controlling shareholder buyout transactions, among which 46 firms filed a total of 95 connected transactions. We follow Cheung et al. (2006) to classify connected transactions into three categories: 1) transactions that are a priori likely to result in expropriation of the listed firm's minority shareholders; 2) transactions that are likely to benefit the listed firm's minority shareholders; 3) transactions that

could have strategic rationales and perhaps are not expropriation.²⁰

[Insert Table 10 here]

Table 10 reports the descriptive statistics of the connected transactions in our sample. The total value of connected transactions is at least HK\$70.7 billion. The value of the median transaction is HK\$84 million and represents 8.7% of the listed firm's stock market capitalization. For comparison, Cheung et al. (2006) shows that 375 connected transactions were reported during the period 1998-2000, worth at least HK\$122.5 billion. The value of the median transaction is HK\$106 million and represents 19.1% of the listed firm's market capitalization. To further partition the connected transactions into three types, we find that 83 filings out of a total of 95 (43 CSBO firms) are transactions that are likely to result in expropriation of minority shareholders. In addition, we find that two firms filed three connected transactions that are likely to benefit the listed firm's minority shareholders. Nine transactions that could have strategic rationales were filed by the CSBO firms. The CSBO firms who file Type 1 and Type 3 transactions are not mutually exclusive. However, we find that the firms who file Type 2 transactions are

²⁰ The transactions that are a priori likely to result in expropriation involve acquisitions of assets by the listed company from connected parties; asset sales by the listed firm to connected parties; sales of equity stakes in the listed company to connected parties; trading relationships between the listed firm and connected parties, i.e., purchases and sales of goods and services; and direct cash payments or loan guarantees from the listed firm to a connected party. The transactions that are likely to benefit the listed firm's minority shareholders include cash receipts by the listed company and transactions between the listed firm and its subsidiaries. Finally, the transactions that could have strategic rationales and perhaps are not expropriation include takeover offers in which the connected party is another publicly listed or foreign company and formation of joint ventures, acquisitions of joint venture stakes from the remaining partners, and sales of joint venture stakes to the remaining partners (Cheung et al. 2006, 355).

not among those who file Type 1 transactions. Though we could not draw any conclusion, it is reasonable to assume that firms do not file connected transactions that are likely to expropriate minority shareholders and benefit them simultaneously.

4.3. Ownership Structure and Controlling Shareholder Expropriation

In this section we use a simple non-parametric test to examine how the concentrated ownership structure in Hong Kong would affect a firm's engagement in opportunistic activities before CSBO transactions. As discussed earlier, firms with family control ownership and greater information asymmetry would find it easier to misappropriate minority shareholders. Also, a controlling shareholder whose cash-flow rights largely deviate from his voting rights would have more incentives to expropriate. To conduct the investigation, we sort CSBO deals into quartiles based on ownership measures and proxies for asymmetric information. "Low" in Table 11 corresponds to the lowest quartile of firms with these variables, while "High" corresponds to the highest quartile of firms with variables. We then compare the discretionary accruals and connected transactions of CSBO firms in the bottom quartile to those firms in the highest quartile.

[Insert Table 11 here]

The results are presented in Panel A of Table 11. We find that CSBO firms in the low and high end levels of managerial ownership do not exhibit much difference in their engagement in earnings management and connected transactions. The result is actually

not surprising given that the median level of insider ownership for Hong Kong CSBO firms is over 50%. When controlling shareholders own a significantly high percentage of the firm's issued equity, their ability to manage their earnings and connected transactions is not easily constrained. However, they might choose not to, especially when their cash-flow rights are closely aligned to the firm. Indeed, when we rank the CSBO firms according to the ratio of cash-flow to voting rights, we find that firms in the lowest quartile report significantly lower discretionary accruals and a greater number of connected transactions than firms in the highest quartile. The finding is consistent with the argument that when controlling shareholders' cash-flow rights largely deviate from their control rights, they have more incentives to engage in opportunistic activities at the cost of public shareholders.

In firms with concentrated ownership in East Asian markets, four mechanisms are widely used to separate ownership and control: "Pyramids with Ultimate Owners", "Cross-Holdings", "Controlling Owner Alone", and "Management" (Cheung et al. 2006). Compared with the average firm listed in Hong Kong, the CSBO firms in our sample exhibit a higher percentage of pyramid structures, single controlling owners, and family members serving as CEO or board chairman (vice-chairman). Thus we also divide the CSBO sample based on the above four dummy variables. We find that firms tend to have more connected transactions if they are controlled by their owner through another listed company. The two categories of firms both engage intensively in earnings management behaviour. We also find that the amount of discretionary accruals and

connected transactions for firms with a single controlling owner do not differ from those of firms with a second large shareholder. This finding is interesting, suggesting either that the second large shareholder is acting in concert with the largest shareholder, or that the holding of the second large shareholder is not comparable to the majority holding and has a limited effect in monitoring. The “Management” dummy equals one if the CEO, board chairman, or vice-chairman is from the controlling family. We find that CSBO firms whose “Management” dummy equals one have significantly lower discretionary accruals and engage in more connected transactions than firms whose management is not from the controlling family. In addition, a dummy variable “Family” is employed to identify the ultimate controlling owner of the CSBO firm. The results show that if the controlling owner of the corporation is a family, a firm will engage more in earnings manipulation and connected transactions.

The results in Table 11 also show that smaller firms and firms with less analyst coverage have significantly lower PACDA, consistent with the argument that firms with greater information asymmetry are more aggressive in manipulating earnings. Moreover, firms with fewer analysts following tend to have a higher percentage of connected transactions. However, the number of years the CSBO firm stays in the public market from its IPO to privatization has little effect on its opportunistic activities.

5. Wealth Effects: Methods & Results

In this section, we investigate the wealth effects for firms going private in Hong Kong. We first discuss the methodology used in this study and then present the results. Then we run a simple non-parametric test to examine how the hypotheses cited in the literature help explain the wealth effects in CSBO transactions in Hong Kong.

5.1. Methodology

Following previous literature (Kaplan 1989a; Lehn and Poulsen 1989; Halpern et al. 1999; Renneboog et al. 2007), we measured the wealth effect of CSBO transactions using two different methodologies: a premium analysis and an event study. The two methods have their own advantages and by using the two jointly we can increase the power of our econometric tests.

5.1.1. Premium Analysis Methodology

Premium is measured as the difference between offer price and pre-buyout stock price, divided by the pre-buyout price. Several variations on the selection of the “offer price” and the “pre-buyout price” are adopted in previous studies. For the “offer price”, the acquiring party’s final price offered to acquire all disinterested shares and the final traded price are the two most frequently used. In this study we choose the final traded price over the acquirer’s offer price for the following three reasons. First, if the offer includes shares exchange (which could be either share offer or cash plus share offer), the final traded price serves as a more accurate market assessment of the final cancellation

price of the CSBO deal. Second, the final traded price also impounds changes in bid prices (if any) and thus will reflect the value of the final bid. Last but not least, for pure cash offer, the final traded price would not deviate greatly from the offer price, which justifies our use of the last traded share price to calculate offer premiums.²¹ As for the “pre-buyout price”, the difficulty lies in the choice of the date. The stock price right before the buyout announcement would be the most accurate measure if there is no information leakage in the market. However, as there is usually share price run-up in the period preceding the buyout announcement, the stock price several days prior to the announcement date is usually adopted. Previous studies in the US and European markets generally use an anticipation window spanning from approximately 10 days to two months before the buyout announcement day as researchers argue that two calendar months are sufficient to capture any significant price effects of leakage (Kaplan 1989a; Goergen and Renneboog 2004). To solve the inconsistency of the choice of date, in this study we use the 30-day and 60-day average stock prices preceding announcement as a measure for the “pre-buyout” price. In privatization circulars of Hong Kong CSBO transactions, this average stock price is also used to assess the fairness of an offer price. This measure avoids the possibility that the stock price of a certain date is driven by anomaly. Though not tabulated, we also use a CSBO firm’s stock price on the date 30 days and 60 days prior to the announcement day as the “pre-buyout price” for the robustness check and document qualitatively similar results.

²¹ Renneboog et al. (2007) favour the offer price of the acquiring party because in UK buyouts the payment usually contains loan notes, and thus the market value of the offer cannot be inferred from the last traded share price.

5.1.2. Event Study Methodology

The other measure to capture the effects of LBOs on shareholder wealth is the cumulative abnormal returns (CARs) estimated using the standard event study method developed by Brown and Warner (1985). The daily abnormal return was estimated using the market model residual approach following Cheung et al. (2006). Daily stock return was collected from DataStream.²² We used the returns on the Hang Seng Index as the market return and an estimation period of 150 trading days, from day -180 to day -31 relative to the date of the buyout announcement. Identifying the estimation period is important in the event study. Due to information leakage, an estimation period close to the event day is contaminated and serves as a bad measure of the true value of the stock returns. On the flip side, however, setting an estimation period far from the observation period may render the parameter estimates less relevant.

5.2. Valuation Effects of CSBOs

[Insert Table 12 here]

The wealth effects of CSBO transactions measured by offer premiums and cumulative abnormal return are presented in Table 12 and 13, respectively. Panel A of Table 12 lists

²² The Datastream stock return index corrected for dividends and stock splits. The return index (RI) shows a theoretical growth in value of a share holding over a specified period, assuming that dividends are re-invested to purchase additional units of an equity or unit trust at the closing price applicable on the ex-dividend date.

the premiums in CSBOs of various anticipation windows spanning from one day to two months preceding the privatization announcement date. On average, controlling shareholders are willing to pay a premium of more than 50% to buy out all the public shares and take the firm private. Compared with the summary evidence for premiums paid in going private transactions in Appendix B1, we find that the premiums in Hong Kong CSBOs are in line with the US and UK evidence where the premiums range from 33% to 56%. Additionally, if we use the stock price right before the buyout announcement date as the “pre-buyout share price”, we observe a lower offer premium (with a mean of 44.3% and a median of 37.60%), confirming the existence of stock price run-up before the CSBO announcement date due to privatization information leakage. We present the premiums of firms privatized by a third party in Panel B as a comparison. LBO firms generate an average premium of 83.7% and a median of 59.6%, taking the one-month average price as the pre-buyout price. The results are consistent with the findings of Harlow and Howe (1993) that going private premiums paid by third parties are on average higher than the premiums paid by management teams. The competition from other potential purchasers helps “ensure outside stockholders a fair price because it places a lower bound on the premium managers must pay to acquire the publicly held shares” (DeAngelo 1986).²³ The significant lower offer premiums in CSBOs relative to those in LBOs imply that the absence of corporate control in the Hong Kong market

²³ For example, Amihud (1989) finds that of the 15 largest LBO transactions over the period 1983-6, nine firms that received competing bids recorded a premium of 52.2% compared to 30.7% for cases without bidder competition. Lowenstein (1985) documents that the premiums paid in MBO transactions involving three or more competing bidders are on average 19% higher than the premiums paid in cases with a single bidder.

further puts public shareholders at risk of not being fairly compensated. In addition, we find that the average offer premium for LBOs using the stock price one day prior to privatization announcement is almost 30% lower than that using the 30-day average stock price, suggesting there is significant information leakage in privatization transactions led by a third party. Compared with CSBOs, the market gets more news about the privatization before it is actually released and reflects the information in stock prices quickly.

In a further analysis, we compare the privatization offer price with the firm's stock price at the IPO to see how its stock price has been performing throughout its listing period. The results show that the average offer premiums of CSBO firms relative to their IPO price is not significantly different from zero, suggesting that the asserted high privatization offer price is not higher than its original IPO price. Should the public stockholder purchase the firm's shares at its initial public offering, their investment in this company is actually discounted, taking into account the time value of money.

To sum up, the significantly positive premiums paid to pre-buyout shareholders are justified by the fact that controlling shareholders need to offer favourable buyout prices in order to get the required proportion to vote to approve the CSBO deal. However, our overall results show that the privatization offer price only represents an artificial premium due to the low prevailing market price of firms before their CSBOs. In attempting to privatize a firm, the controlling shareholders pay much less than those

outsiders who want to take the firm private, even though they have to pay a premium to smooth the process; their asserted high offer price actually only compensates shareholders' investment at the IPO.

[Insert Table 13 here]

Panel A of Table 13 presents the CARs at the announcement of controlling shareholder buyout. Different event windows are used to calculate the CARs. Over the five-day event window, the CARs amount to 36.5%; over longer windows [-30, 30], the CARs increase to 42.1%. The market reactions to CSBO transactions in Hong Kong are similar to those in the US and the UK (Appendix B2).²⁴ Barger, Schlingemann, Stulz, and Zutter (2007) argue that a three-day window might underestimate the CARs in going private transactions since the targets are smaller and tend to be traded in a less efficient market. Our results show that the difference between CARs over a five-day observation window and CARs over a two-month window is relatively small, suggesting that privatization news is quickly absorbed by the market and reflected in the stock prices of CSBO firms. To examine the possibility of a price run-up prior to the announcement of buyout interest, we calculate the CARs over a one-month window [-30, 0), excluding the announcement date. The results show that the median CSBO firms had a 6.7% abnormal return over the one-month period before the privatization news was released, confirming

²⁴ Due to poor stock price performance preceding privatization, the pre-announcement estimation periods may lead to downward biased estimates of the market model parameters and upward biased abnormal return estimates (Lee 1992).

that there is price run-up due to information leakage or trading on rumours. Panel B of Table 13 presents the CARs at the announcement of a privatization led by non-controlling shareholders. We find that in LBOs public shareholders earn an average CAR of 30.4% and 50.1% over the [-2, 2] and [-30, 30] event windows, respectively. As expected, we also find a price run-up in privatizations led by a third party. In addition, the CARs over [-30, 0] in LBOs is on average 22.1%, with a median of 12.4%, much larger than that documented in CSBO transactions. The result confirms our previous discussion that information leakage is more likely in buyouts led by a third party.

5.3. Firm Characteristics and CSBOs Wealth Effects

As discussed in the review section, some firm-specific characteristics are cited in the literature as contributing to the wealth gains in LBO transactions. Specifically, previous studies find that firms that are undervalued by the market, firms that suffer severe free cash flow problems (higher FCF, lower sales growth, and smaller dividend payouts), and firms with high tax bills and leverage ratio tend to have higher offer premiums and larger cumulative abnormal returns as they are expected to create more value and benefits in the post-buyout period. Before we conducted the regression analysis, we ran a simple nonparametric test to see whether the above mentioned firm-specific characteristics were related to higher offer premiums and larger CARs. To do this, we first sorted CSBO deals into quartiles based on the level of valuation measures, free cash flow measures, and tax payout ratio. We then compared the offer premiums and CARs of firms in the bottom quartile of these variables to those firms in the highest quartile of

the corresponding variable. The results are presented in Table 14.

[Insert Table 14 here]

The results show that CSBO firms that are in the lowest quartile of valuation measures have significant lower offer premiums than firms that are in the highest quartile, supporting the argument that undervalued firms would pay higher premiums in CSBOs. We also find that firms that have a lower price-to-NAV ratio²⁵ tend to have higher market returns. In contrast to previous studies, we find little support for the free cash flow argument. The results show that the market returns of free cash flow, sales growth, and dividend payments for firms in different quartiles do not show any significant difference. Moreover, firms with higher levels of free cash flow do not differ from other firms in offering higher premiums, confirming the argument in Lehn and Poulsen (1989) that the free cash flow hypothesis genuinely loses explanatory power for firms in which managers own a significant portion of the issued equity. In addition, contradicting previous findings, CSBO firms with higher sales growth in our sample actually pay higher premiums. The result once again confirms that firms in Hong Kong are not privatized to reduce the free cash flow problem. Insider-managers are willing to offer a higher cancellation price to take advantage of their firm's growth opportunities.

²⁵ For the sake of brevity, we only report results for price-to-NAV. The results for price-to-NTAV are qualitatively similar.

As discussed earlier, controlling shareholders who could have successfully misappropriated minority shareholders are willing to pay higher offer prices to make sure the privatization process works smoothly. Their expropriation through earnings management is another potential source of the offer premiums. In addition, connected transactions between the firm and its controlling shareholders serve as a direct channel for the controlling shareholders to misappropriate minority shareholders. Furthermore, a decrease in stock prices accompanying tunnelling need not eradicate such connected transactions, but provide controlling shareholders additional incentives to do so if they are planning a buyout. Thus, we relate the magnitude of the CSBO firms' engagement in earnings management and connected transactions to the wealth effects in the non-parametric test. We expect firms that can successfully expropriate minority shareholders through earnings management and connected transactions before CSBOs to have higher premiums. Firms with concentrated ownership and large deviation of cash-flow to voting rights are a priori contexts where insider-managers could easily expropriate other shareholders. So we also included the ownership variables and see their effects on premiums. The results are presented in Table 14. We find that firms with more negative discretionary accruals and PACDA) have higher premiums. Controlling shareholders who have intentionally manipulated earnings downward are more willing to pay higher prices to secure the success of CSBO transactions, suggesting that expropriation from earnings management may be a source of premiums in CSBOs. We also document that firms with more connected transactions tend to pay higher premiums to take the firm private. However, there is no evidence that the market reacts differently

to firms on different levels of connected transactions.

6. Regression Analysis

We conduct regression analysis in this section. Section 6.1 contrasts CSBO firms with a control sample of firms that remain publicly listed using a probit model. We try to determine the prior firm characteristics that influence the odds of a firm engaging in controlling shareholder buyout transaction. Section 6.2 examines what factors are attributable to the significant premiums offered in CSBOs and to the positive market reactions to the announcement of CSBOs.

6.1. Determinants of Engaging in CSBOs

In this section our intent is to discern those firm characteristics that best describe the CSBO firms relative to firms remaining publicly listed. Bharath and Dittmar (2010) find that they could correctly predict which firms will go private more than 80% of the time using only firm data at the time of the IPO. They argue that some inherent factors relating to the firm at the time of its IPO already determine whether it will eventually go private.

To determine the factors that motivate a CSBO, we contrast the firm characteristics of CSBO firms with those of public control firms. The dependent variable equals one for controlling shareholder buyout firms and zero for public firms. Model 1 is the baseline model. We include those previously frequently cited hypotheses, such as incentive realignment, free cash flow, financial visibility, and tax benefits, for examination. The logistic regression results are presented in Table 15.

[Insert Table 15 here]

We include managerial ownership to see how the level of controlling shareholders' ownership in the firm might affect their decision to privatize the firm. We also include the square of ownership level to examine whether a significantly high level of control ownership alters the odds of privatization. The results show that the coefficients for managerial ownership and its square term are both positive and significant, indicating that firms with higher ownership levels are more likely to be privatized by controlling shareholders. The findings contradict the traditional incentive realignment argument. As discussed earlier, managers in Hong Kong CSBO firms already own a significant portion of the firm's issued equity. The necessity to align the interests of managers and shareholders through CSBOs is thus an unlikely motivation for controlling shareholders to privatize the firm. Instead, the fact that a positive correlation between managerial ownership level and the likelihood of CSBO transactions is consistent with the logic that a management buyout can be accomplished easily when the management already owns a significant portion of the firm's equity (Maupin et al. 1984). Our result is consistent with the findings in Halpern et al. (1999) that firms in the higher prior managerial ownership cluster tend to have larger inside ownership than matched public firms. Similar empirical evidence is also documented for the UK market by Weir et al. (2005), who claim that MBO firms have higher inside ownership than firms remaining public because it increases the probability of bid success. We include the price-to-NAV ratio as

a proxy for undervaluation.²⁶ The undervaluation hypothesis argues that undervalued firms are more likely to be privatized because managers expect to buy the firm at “cheap” terms and achieve better performance in the post-buyout period. The results in Table 15 support the undervaluation argument. Controlling shareholders who perceive their firm as undervalued by the market are more inclined to take the firm private.

The free cash flow hypothesis is not supported by our sample. Neither the coefficient for free cash flow nor the coefficient for dividend payouts is significantly different from zero. The findings confirm the argument in Lehn and Poulsen (1989) that the free cash flow hypothesis has little explanatory power for firms whose managers own a large percentage of equity prior to MBO transactions because agency costs in such firms are not as high as in firms with little pre-buyout inside ownership. Controlling shareholders of Hong Kong CSBO firms do not take the firm private to reduce high free cash flow. Instead, we find little evidence that CSBO firms in our sample actually have higher sales growth than control firms, contradicting the traditional view that CSBO firms generally have poor investment opportunities. Our results lend some support to the project deferment argument (DeAngelo 1986; Madden, Marples, and Chugh 1990). Controlling shareholders would choose to conceal favourable information to portray an undesirable picture of the firm. Given their information advantage, controlling shareholders might see an opportunity to increase the value of the firm via operating improvements before a

²⁶ When the market-to-book and price-to-NTAV ratios are included as alternative measures for valuation, the results are qualitatively similar.

buyout. However, they defer implementation of these improvements until after the buyout, thereby reserving most of the gains for themselves and avoiding sharing with outside investors. Controlling shareholders' behaviours to defer profitable projects are expected to be much more severe in Hong Kong than in the US, and should deserve more detailed scrutiny. In the US market, firms facing competition in the product market are constrained in their ability to delay profitable projects because the gains from these projects can be appropriated by competitors. However, Hong Kong firms rarely face a hostile takeover threat. These managers would engage a lot in concealing favourable information and deferring profitable projects.

Interestingly, though we report in the descriptive section that our CSBO firms generally have less analyst following and are on average younger than the matched firms, we find that the coefficients are not significantly different from zero in the regression. Analyst coverage and firm age are not important drivers of a firm's decision to go private. Though they do not support the financial visibility hypothesis, the findings in our sample are consistent with the argument of Rath and Rashid (2012) that information asymmetry per se is not a sufficient condition for firms going private. Lastly, we fail to find evidence supporting the tax benefits hypothesis in our sample. Tax benefits are asserted to be an important source of wealth gains in going private transactions. Firms with high prior tax bills and lower debt will benefit most from the increased leverage accompanying LBOs and are thus more likely to be taken private. However, the coefficients for both variables are not different from zero in our sample.

In Model 2 we include discretionary accruals²⁷ in the probit model. Unlike previous studies investigating firms' going private decisions and the earnings management problem separately, we try to integrate the two strands of literature. More specifically, we examine how a firm's pre-privatization earnings manipulation can affect its odds of going private. The results in Table 15 show that the coefficient for discretionary accruals is negative and significant at the 1% level, suggesting that controlling shareholders who have extensively manipulated reported earnings are more likely to privatize their firm. Those firms with negative discretionary accruals are more likely candidates for CSBOs. Also, controlling shareholders who have a privatization agenda will engage aggressively in earnings manipulation.

As discussed earlier, firms with concentrated ownership and high information asymmetry are a priori likely context for controlling shareholders exploiting minority shareholders. Controlling shareholders in firms with concentrated ownership, lower analyst coverage, smaller firm size, and fewer years in the public market (Age) would find it much easier to manipulate earnings. We hypothesize that the relation between earnings management and the likelihood of a firm being privatized will be more pronounced in such firms. In Model 3 we include four interactions to examine this conjecture. To obtain a consistent sign on coefficients, the "Ownership" dummy equals

²⁷ Only the results for PACDA are reported. When we include DTAC in the models, the results are qualitatively similar and thus are not tabulated.

one if managerial ownership is higher than the median, and zero otherwise. We also define the “Analyst” dummy as equalling one if the analyst coverage is lower than the median, and zero otherwise; the “Size” dummy equals one if the firm size is smaller than the median, and zero otherwise; the “Age” dummy equals one if the number of years the firm is public is smaller than the median, and zero otherwise. The results are reported in the last column of Table 15. We continue to find that managerial ownership level and discretionary accruals are important factors influencing the odds of a firm being privatized by controlling shareholders. The lower the discretionary accruals, the higher the likelihood controlling shareholders will privatize a firm. However, the coefficient for the interaction between PACDA and the “Ownership” dummy is not significantly different from zero. This result echoes the previous finding that firms with lower and higher levels of managerial ownership do not show significant differences in their engagement in earnings manipulation. Moreover, we find that the coefficient for the interaction between PACDA and the “Analyst” dummy is negative and significant at the 5% level, supporting the conjecture that in firms with higher information asymmetry the negative relation between discretionary accruals and privatization likelihood is more pronounced. Our findings once again confirm that though information asymmetry per se is not a sufficient condition for firms going private, firms with very asymmetric information are likely to see controlling shareholders manipulate earnings and ultimately take them private.

6.2. Premiums/CARs Regression Analysis

6.2.1. Determinants of Wealth Gains in CSBOs

In addition to explaining variation in the likelihood of going private, the factor demonstrated to motivate LBO decisions should also explain cross-sectional variation in offer premiums in LBOs as well as the abnormal returns at the privatization announcement (Lehn and Poulsen 1989). We use both the offer premiums (with an anticipation window of 30 days) and CARs (with an event window of [-30, 30]) as dependent variables²⁸ in estimating cross-sectional regressions. By regressing the two variables on various firm characteristics, we attempt to discern how well the wealth effects in CSBO transactions in Hong Kong fit with the different hypotheses presented in the literature. We include incentive realignment, free cash flow, undervaluation, financial visibility, and tax benefits, which are the most frequently cited sources of wealth gains in previous studies, with Model 1 as our baseline model.

Heckman (1979) argues that using non-randomly selected samples to estimate behavioural relationships can lead to self-selection bias. To alleviate this concern, we use Heckman's two-stage procedure, following the approach used by Givoly, Hayn, and Katz (2010) and Katz (2009). In the first stage, we use the parameters estimated from Model 2 in Table 15 and calculate the inverse Mill's ratios (Lambda) for all the firms in the sample. In the second stage, we include the inverse Mill's ratio as a control variable

²⁸ Offer premiums with an anticipation window of 60 days and CARs with an event window of five days are also included as dependent variables for robustness checks and the results are qualitatively similar.

in regressions. The results using offer premiums and CARs as dependent variables are presented in Table 16 and Table 17, respectively.

[Insert Table 16 here]

[Insert Table 17 here]

Consistent with the results in the logistic regression, we find that the coefficients for price-to-NAV in both regressions are negative and significant at the 1% level, supporting the undervaluation argument that insider-managers tend to pay higher premiums for firms with lower valuation. A CSBO firm also gains significant abnormal returns if it is discounted by the market before privatization.

As discussed earlier, the benefits of aligning the interests of management and shareholders through ownership concentration is limited for firms that are already characterized as having high managerial ownership. Thus, we do not expect to observe a negative relation between insider ownership and offer premiums (CARs) in our sample. Instead, the results show that the coefficients for managerial ownership in all models are not different from zero. Halpern et al. (1999) argue that when managers own a large portion of a firm's stock, they might have an incentive to pay higher rather than lower premiums because they want to take cash out of the firm to invest in other opportunities. However, the results show that ownership level per se cannot explain the offer premiums

or market returns in our sample.

In Model 2 and Model 3, we include controlling shareholders' engagement in discretionary accruals and connected transactions to explain offer premiums/CARs. As documented in previous studies, earnings management and connected transactions are two potential channels that controlling shareholders can use to misappropriate public shareholders. Instead of investigating sources of wealth effects and earnings management behaviour in LBOs separately, we argue that controlling shareholders' expropriation is an important source for the offer premiums they are willing to pay. We expect firms with significantly lower discretionary accruals and greater connected transactions to pay larger premiums and have higher abnormal returns. The results reported in Model 2 and 3 in Table 16 and Table 17 confirm our conjecture. The coefficients for discretionary accruals are negative and significant, suggesting firms with more negative discretionary accruals tend to pay higher premiums. Moreover, the coefficients for connected transactions are positive and significant, indicating controlling shareholders who have successfully expropriated through connected transactions are also willing to pay higher premiums. In Model 4, we include both discretionary accruals and connected transactions in one regression. The coefficients for both variables are still significant, indicating that earnings management and connected transactions are not mutually exclusive. Controlling shareholders would choose to use either earnings manipulation or connected transactions, or both, to exploit public shareholders in CSBOs. Lastly, the results show that the coefficients for the inverse

Mill's ratio (Λ) in all models are not significant, suggesting that there is no self-selection bias in our regression. After controlling for potential self-selection bias, undervaluation, discretionary accruals and connected transactions continue to be significant determinants of offer premiums and CARs around buyout announcements.

6.2.2. The Effect of Ownership Structure and Information Asymmetry on CSBO Wealth Gains

As discussed above, in firms with concentrated ownership and large deviation between cash-flow rights from control rights, controlling shareholders are likely to have stronger incentives to misappropriate minority shareholder and be more able to do so. Moreover, in firms with greater information asymmetry and less monitoring, controlling shareholders are likely to be able to disguise their opportunistic behaviour more easily. We thus expect the negative relation between discretionary accruals and premiums/CARs to be stronger in these firms. We also expect the positive relation between connected transactions and premiums/CARs to be stronger in these firms.

Other than the "Ownership" dummy and dummies for information asymmetry, we include more dummy variables to describe ownership structure: the "Deviation" dummy equals one if the ratio of cash-flow to voting rights is lower than the median, and zero otherwise; "Pyramids with Ultimate Owners" (when companies are not widely held) equals one if the controlling owner exercises control through at least one publicly traded company, and zero otherwise; "Controlling Owner Alone" equals one if there is no

second owner holding more than 10% of the stock, zero otherwise; “Management” equals one if the CEO, board chairman, or vice-chairman comes from the controlling family, and zero otherwise. “Family” equals one if the controlling owner of the corporation is a family, and zero otherwise. We then multiply these dummy variables with discretionary accruals and connected transactions to evaluate the impact of ownership concentration and information asymmetry on the association between firms’ opportunistic activities and offer premiums/CARs. The results are presented in Table 18 and Table 19. For brevity, the results for free cash flow, sales growth, dividend, size, analyst, age, tax, and leverage are not tabulated.

[Insert Table 18 here]

[Insert Table 19 here]

Similarly, when we include the inverse Mill’s ratio as a control variable, the coefficients for Lambda in all models are not significant, suggesting a lack of self-selection bias. The inclusion of Lambda does not greatly alter the magnitude or significance of coefficients when using OLS estimates. After including interaction terms and controlling for potential sources cited in the literature, the coefficient for price-to-NAV continues to be negative and significant, providing strong support for the undervaluation argument. In addition, controlling shareholders’ expropriation through earnings manipulation and connected transactions is still an importance source for offer premiums and positive

CARs. As in the logistic regression, we find that the coefficients for the interaction between accruals and the “Ownership” dummy are not significantly different from zero. The managerial ownership level per se does not contribute as a source for offer premiums. The ownership level itself does not affect firms’ opportunistic behaviour either. As discussed above, given their significant equity ownership in the firm, controlling shareholders of Hong Kong CSBO firms are generally able to exploit public shareholders. But some might choose not to expropriate if their interests are closely aligned to the firm. Indeed, when we use the “Deviation” dummy to proxy for controlling shareholders’ incentive to exploit, we find that the coefficient for the interaction term between PACDA and the “Deviation” dummy is negative and statistically significant at the 1% level. Moreover, the coefficient for the interaction between connected transactions and the “Deviation” dummy is positive and significant in all models. The amplified relation between discretionary accruals (connected transactions) and offer premiums among firms with large dispersion between cash-flow rights and control rights are consistent with the argument that controlling shareholders would have more incentives to misappropriate if the costs are on public shareholders.

Lastly, the results show that in firms with a pyramid structure and firms where family members also serve on the board, the negative relation between discretionary accruals and offer premiums is stronger. The positive relation between connected transactions and premiums is also stronger among firms with a pyramid structure, in firms whose ultimate owner is a family, and in firms with higher asymmetric information proxied by

analyst coverage. The findings again support the argument that controlling shareholders in these firms can easily engage in opportunistic activities. Controlling shareholders who have successfully exploited public shareholders would be willing to spare part of the expropriation as offer premiums to secure the success of privatization.

7. Conclusion, Limitations, and Suggestions for Future Research

This chapter concludes the study. Section 7.1 summarizes the findings of this study and Section 7.2 discusses its limitations and sets out suggestions for future research.

7.1. Conclusion

This thesis investigated controlling shareholder buyout (CSBO) transactions in Hong Kong. Going private has always been quite a controversial topic in the US and UK markets and the empirical evidence is inconclusive. Generally, the buyout team for each privatization offer in Hong Kong claims that their offer price greatly exceeds the open market stock price and that privatization provides the investors with an opportunity to realize their investment in their firm which has been suffering weak share performance. However, privatization always receives fierce criticism from public shareholders. Critics argue that the offer price, though higher than the prevailing market price, is nonetheless inadequate. The buyout team, who are usually the ultimate controlling shareholders of the company throughout the firm's listing period, are criticized and held responsible for the firm's poor stock performance; the controlling shareholders themselves also have strong motivation to depress pre-privatization stock prices to minimize the buyout value.

In this study, we tried to relate controlling shareholders' expropriation to going private transactions. More specifically, we tried to examine how controlling shareholders' pre-buyout earnings management can affect the likelihood of a firm being privatized as well as how earnings management and related-party transactions can determine the level

of offer premiums in CSBOs. In doing so, we integrated the two strands of research that used to be isolated in the going private literature. We have documented that the average levels of discretionary accruals are significantly below zero over a three-year period before CSBO transactions take place. The relation between discretionary accruals and the odds of a firm engaging in CSBOs is significantly negative, suggesting that firms with negative discretionary accruals are more likely candidates for CSBOs. Controlling shareholders might opportunistically manipulate earnings downward specifically to prepare for upcoming CSBO transactions. We also found that firms with higher levels of managerial ownership are more likely to be privatized by controlling shareholders, rejecting the incentive realignment hypothesis. Our finding is consistent with the argument in Maupin et al. (1984) that “the greater the percentage of shares held by management and the board of directors, the more easily a management buyout can be accomplished”.

Additionally, we find that lower discretionary accruals and larger connected transactions are associated with higher offer premiums and higher abnormal returns. The results are robust after controlling for a range of hypotheses that are used to explain premiums in previous studies. The results suggest that expropriations through earnings management and connected transactions are potential sources to the wealth gains in CSBOs. Controlling shareholders who have successfully exploited public shareholders (proxied by earnings management and connected transactions) are willing to spare part of their expropriation in order to pay offer premiums to secure the success of privatization.

Lastly, we find that the negative relation between discretionary accruals and offer premiums/CARs is more pronounced among CSBO firms with high information asymmetry and in firms with family ownership concentration, especially among firms with a pyramids structure, firms whose cash-flow rights deviate greatly from their voting rights, and firms with a single controlling owner (i.e., no other large shareholders). Moreover, the positive relation between connected transactions and offer premiums/CARs is also much stronger in these firms. The fact that the relation between wealth gains and controlling shareholders' expropriation is reinforced in firms with family control and information asymmetry confirms the argument made in previous studies that controlling shareholders' expropriation is accomplished in such firms.

The overall results in this study suggest that controlling shareholders are not genuinely acting out of kindness when offering a high privatization price to allow investors to liquidize their investment, they are merely sparing part of their pre-privatization expropriation in order to pay offer premiums to secure the success of privatization. These findings enrich our understanding of controlling shareholder's expropriation in going private transactions. This study also highlights the importance of corporate governance. Aligning the cash-flow rights to voting rights and appointing a non-family member as board chairman would be positive steps towards improving governance.

7.2. Limitations and Suggestions for Future Research

A lack of managerial talents or human capital could be a very plausible explanation of the privatization decision by controlling shareholders. It is rather common in Hong Kong that an influential family controls a number of listed firms. When the family faces a shortage of managerial talent in running some of the firms, typically belonging to a pyramid controlled by the same family, it may consider exit through privatization so that it can shift resources toward or focus on other businesses. However, to formally test this hypothesis, we need data on other firms in the same pyramid, which are often unlisted. The unavailability of the data prevents us from conducting such tests, and we now acknowledged this as a major limitation in this study.

Probably the best way to investigate the wealth effects of going private transactions is to examine long-term post-buyout performance. However, the major obstacle here is that the post-buyout data is generally unobtainable. Some firms in the market opt to list on the stock exchange several years after they have been privatized. A longitudinal study investigating these firms' decision to re-list would provide additional understanding of privatization – whether it is a more efficient organizational form (Jensen 1989) or simply a way to gain short-term benefits (Lowenstein 1985), or even an unethical tool for controlling shareholders expropriating outside shareholders.

Appendix A: Privatization Cases in Hong Kong

The Privatization of PCCW

On 4 November, 2008, the majority shareholders of PCCW, Pacific Century Regional Developments (PCRD, interested in 27.88%) and China Network Communications Group (CNC, interested in 19.84%), announced a proposed privatization of PCCW by way of a scheme of arrangement. The joint offerors proposed a cash payment of HK\$4.20 for each scheme share in exchange for the cancellation of all scheme shares.

In both the “Letter from the Board” and the “Letter from the Independent Financial Advisor”, the offerors posit that PCCW has suffered persistently weak share performance and relatively low trading liquidity. The access to the equity capital markets was not providing PCCW with an attractive fund raising avenue. Moreover, the costs and management resources associated with the maintenance of listing status were not warranted. Thus, the offerors claimed that the privatization proposal provided scheme shareholders with an opportunity to realize their investment in PCCW for cash during sustained uncertain market conditions. Most importantly, the cancellation price (HK\$4.20)²⁹ represented a premium approximately 52.73% higher than the closing price of HK\$2.75 per share on the “Last Trading Date” (being the last full trading day prior to the suspension of trading in the shares pending the issue of the privatization announcement). The independent financial advisor thus concluded that the terms of the

²⁹ Later, on 30 December, 2008, the joint offerors have proposed that the cancellation price be increased from HK\$4.20 to HK\$4.50 per scheme share.

privatization proposal were fair and reasonable and advised the independent shareholders to vote in favour of the proposal.

News of the PCCW privatization attracted massive public attention. The independent shareholders of PCCW fiercely resisted the privatization. Critics argued that the offer price was far less than adequate, comparing it with PCCW's highest price HK\$28.5 (equal to HK\$142.5 after reverse stock split). Moreover, on the basis of 3.54 billion scheme shares (representing approximately 52.28% of the issued share capital of PCCW) being cancelled, the amount of cash consideration required to effect the scheme would be approximately HK\$14.871 billion. While, as stated in the privatization proposal, PCCW would declare a special dividend in cash to the post-scheme shareholders of an aggregate amount of between HK\$16.964 billion and HK\$17.565 billion after privatization, which literally enabled the offerors to buy out the firm for free.

On 4 February, 2009, disinterested shareholders approved the privatization plan at the Extraordinary General Meeting, and the High Court approved the plan amidst allegations of vote buying on 6 April, 2009. On 22 April, 2009, the Appeals Court unanimously overturned the ruling.

The Case of China Property

On 23 February, 2007, China Properties Group (CPG), approximately 75% of which was beneficially owned by Mr Wong Sai Chung, was listed on the Hong Kong Stock Exchange. Before its IPO, market analysts disclosed that substantially all of the members of CPG were subsidiaries of Pacific Concord Holding (PCH), which was listed on the Stock Exchange in 1987 and later privatized in 2003. Concord Land Development Company (CLD), a subsidiary of PCH, was listed on the Stock Exchange in 1996 and later privatized in 2001. Mr Wong was the ultimate controlling shareholder of both PCH and CLD throughout the periods during which they were listed on the Stock Exchange. Market analysts reminded investors to be cautious about the IPO of CPG as Wong's family had a history of taking firms private. Most intriguingly, they privatized PCH and CLD at substantial discounts, both over 50% of the firm's net asset value. The independent financial advisor advised that the terms of both privatization offers were not fair and reasonable – the only two cases in Hong Kong where the independent financial advisor was of this view.

On February 6, 2001, Pacific Concord Holding (PCH) offered to acquire all of the shares in Concord Land Development Company (CLD) from its independent shareholders on the basis of a share exchange ratio of 2.1538 PCH shares for each CLD share (a voluntary conditional share exchange offer). Based on the closing price of PCH shares quoted on the Stock Exchange on Jan 31, 2001, and the above share exchange ratio, the value ascribed to each CLD share was HK\$1.40, representing a premium of

approximate 66.67% over CLD's closing price of HK\$0.84 on the "Last Trading Date". However, the unaudited pro forma adjusted consolidated net tangible asset (NTA) value of the CLD is approximately HK\$6.33 per share. Thus, the offer value actually represents a 77.88% discount to NTA. Moreover, based on the offer document, the CLD offer was valued at approximately HK\$439.6 million. When compared with the pro forma adjusted consolidated asset value of CLD's independent shareholders (being approximately HK\$1,987.6 million), the offeror makes a net profit of HK\$1,548 million. The independent financial advisor, Asia Financial Capital Limited, advised CLD's independent shareholders that the terms of the offer were not fair or reasonable, and recommended they consider not accepting it.

On May 26, 2003, Mr Wong and his associates announced that they were proposing to privatize PCH by way of a scheme of arrangement in accordance with the Companies Ordinance. The offerors claimed that the price performance of the PCH shares had been recording a general downward trend for 2000, 2001, 2002, and 2003, during which period the share price declined from HK\$1.181 per share to HK\$0.345 per share, a drop of 63%. In addition, the cancellation price of HK\$0.65 represented a premium of approximately 51.16% over PCH's closing price of HK\$0.43 on the "Last Trading Date".

The independent financial advisor, Asia Financial Capital Limited, concluded that the offer price actually represented a discount of approximately 55.39% of the pro forma adjusted consolidated net asset value (NAV) of PCH (HK\$1.457 per share). Moreover,

based on the cancellation price of HK\$0.65 per PCH share, the total consideration paid to PCH scheme shareholders was HK\$907 million, while the pro forma adjusted consolidated net asset value for the scheme shares held by independent shareholders (other than Mr Wong and his associates) amounted HK\$2,033 million. Asia Financial Capital further concluded that rather than putting forward the privatization proposal, if the group were to adopt an asset realization programme for the disposal of its major assets within a short time span, the realization value might be more than the value offered under the proposal. Even in a forced sale scenario, the adjusted NTAV was estimated at approximately HK\$1.029 per share, 58.31% higher than the cancellation price of HK\$0.65 per share. The independent financial advisor thus concluded that, taking into account that the analysis of net asset value is the prime valuation benchmark for PCH as a property concern, the terms of the scheme were, on balance, not fair or reasonable to the independent shareholders of PCH. They advised such shareholders to consider voting against the scheme.

In the Extraordinary General Meeting held on 26 September, 2003, approximately 51.3% of the total number of PCH shares subject to the scheme voted in person or by proxy on a poll. The results were: 45.6% of the total number of PCH scheme shares voted in favour of the scheme, representing 88.8% of the scheme shares; 5.7% of the total number of independent PCH shareholders voted against the scheme. The scheme was approved under the “Codes on Takeovers and Mergers” (SFC) as a majority of not less than three-fourths in value of the shares of the independent shareholders approved

the scheme, and the number of votes cast against the resolution was not more than 10% of the votes attaching to all shares held by all independent shareholders.

Appendix B1 International evidence of premiums paid in going private transactions

Study	Sample period	Country	Type of deal	Anticipation window	N	Average premium offered
DeAngelo, DeAngelo and Rice (1984)	1973–1980	US	ALL	40 days	72	56.30%
Lowenstein (1985)	1979–1984	US	MBO	30 days	28	56.00%
Lehn and Poulsen (1989)	1980–1987	US	ALL	20 days	257	36.10%
Amihud (1989)	1983–1986	US	MBO	20 days	15	42.90%
Kaplan (1989a,b)	1980–1985	US	MBO	2 months	76	42.30%
Asquith and Wizman (1990)	1980–1988	US	ALL	1 day	47	37.90%
Harlow and Howe (1993)	1980–1989	US	ALL	20 days	121	44.90%
Travlos and Cornett (1993)	1975–1983	US	ALL	1 month	56	41.90%
Easterwood et al. (1994)	1978–1988	US	MBO	20 days	184	32.90%
Weir et al. (2005)	1998–2000	UK	ALL	1 month	95	44.90%
Renneboog et al. (2007)	1997–2003	UK	ALL	20/40 days	177	41.00%

This table shows papers that estimate shareholder wealth effects using premium analysis. ALL = all going private deals; MBO = management buyout deals only; N is the number of sample firms (see also Renneboog and Simons 2005; Renneboog et al. 2007).

Appendix B2 International evidence of CARs in going private transactions

Study	Sample period	country	Type of deal	Event window	N	CARs
DeAngelo, DeAngelo, and Rice (1984)	1973–1980	US	ALL	[-1, 0] days	72	22.27%
Torabzadeh and Bertin (1987)	1982–1985	US	ALL	[-10, 10] days	72	28.05%
Lehn and Poulsen (1989)	1980–1987	US	ALL	[-1, 0] months	48	18.64%
				[-1, 1] months	48	20.57%
				[-1, 1] days	244	16.30%
				[-10, 10] days	244	19.90%
Amihud (1989)	1983–1986	US	MBO	[-20, 0] days	15	19.60%
Kaplan (1989a,b)	1980–1985	US	MBO	[-40, 60] days	76	26.00%
Marais et al. (1989)	1974–1985	US	ALL	[0, 1] days	80	13.00%
				[-69, 1] days	80	22.00%
Slovin et al. (1991)	1980–1988	US	ALL	[-1, 0] days	128	17.35%
				[-15, 15] days	128	24.86%
Lee (1992)	1973–1989	US	MBO	[-1, 0] days	114	14.90%
				[-69, 0] days	114	22.40%
Frankfurter and Gunay (1992)	1979–1984	US	MBO	[-50, 50] days	110	27.32%
				[-1, 0] days	110	17.24%
Travlos and Cornett (1993)	1975–1983	US	ALL	[-1, 0] days	56	16.20%
				[-10, 10] days	56	19.24%
Lee et al. (1992)	1983–1989	US	MBO	[-1, 0] days	50	17.84%
				[-5, 0] days	50	20.96%
Van de Gucht and Moore (1998)	1980–1992	US	ALL	[-1, 1] days	187	15.60%
				[-10, 10] days	187	20.20%
Goh et al. (2002)	1980–1996	US	ALL	[-20, 1] days	323	21.31%
				[0, 1] days	323	12.68%
Renneboog et al. (2007)	1997–2003	UK	ALL	[-1, 0] days	177	22.68%
				[-5, 5] days	177	25.53%
				[-40, 40] days	177	29.28%

This table shows papers that estimate shareholder wealth effects using event study analysis. ALL = all going private deals; MBO = management buyout deals only; N is the number of sample firms (see also Renneboog and Simons 2005; Renneboog et al. 2007).

Appendix C1: Firms privatized by controlling shareholders (CSBOs) in Hong Kong, 1989-2009

	Company	Announcement date	Delist date
1	Li & Fung Ltd	19881012	19890103
2	Green Island Cement (Holdings) Ltd	19881031	19890131
3	New Town (N.T.) Properties Ltd	19881130	19890214
4	Scilla Holdings Ltd	19890120	19890601
5	Nan Fung Textiles Consolidated Ltd	19890608	19890808
6	Shui On Group Ltd	19890809	19891107
7	Hip Shing Hong (Holdings) Company Ltd	19890915	19891212
8	Shun Ho Investments (Holdings) Ltd	19890830	19900116
9	Unitex	19890920	19900213
10	Kailey Enterprises Ltd	19900305	19900508
11	New World Hotels (Holdings) Ltd	19900424	19900626
12	The Sun Co. Ltd	19900301	19900710
13	Harriman Holdings Ltd	19900725	19901016
14	Industrial Equity (Pacific) Ltd	19910215	19910507
15	Park Enterprises Ltd	19910219	19910507
16	Hsin Chong International Holdings Ltd	19920120	19920506
17	Cavendish International Holdings Ltd	19920527	19920804
18	China Entertainment and Land Investments Hold	19920707	19920930
19	Evergo International Holdings Co Ltd	19930818	19931207
20	Novel Enterprises Ltd	19941121	19950125
21	B+B Asia Ltd	19950320	19950522
22	Lafe Int'l Holdings Ltd	19950718	19951130
23	General Electronic Ltd	19950929	19951208
24	Noble Group Ltd	19951218	19960523
25	Eu Yan Sang (HK) Ltd	19960801	19961227
26	CDW International Ltd	19970212	19970430
27	M C Packaging (HK) Ltd	19961107	19970613
28	East Asiatic Co (HK) Ltd	19970403	19970617
29	Manhattan Card Co Ltd	19971114	19980127
30	Orient Telecom & Technology Holdings Ltd	19980212	19980511
31	Laws International Holdings Ltd	19980317	19980629
32	Lane Crawford International Limited	19990525	19990730
33	AXA China Region Limited	19991010	19991207
34	Chevalier Development International Limited	19990918	19991214
35	Wing On International Holdings Limited	20000131	20000331
36	Wah Kwong Shipping Holdings Limited	20000605	20000727
37	Jardine International Motor Holdings Limited	20000627	20001004
38	NG Fung Hong Limited	20001120	20010111
39	Mingly Corporation Limited	20010111	20010322
40	Concord Land Development Company Limited	20010206	20010503
41	Sime Darby Hong Kong Limited	20001128	20010518
42	Evergo China Holdings Limited	20010807	20011119
43	IMC Holdings Limited	20020205	20020507
44	Lam Soon Food Industries Limited	20020404	20020620

	Company	Announcement date	Delist date
45	Ryoden Development Limited	20020910	20021120
46	Grand Hotel Holdings Limited	20020828	20030226
47	Realty Development Corporation Limited	20021217	20030320
48	Winton Holdings (Bermuda) Limited	20021203	20030327
49	Top Glory International Holdings Limited	20030503	20030814
50	SIIC Medical Science and Technology (Group) L	20030521	20030917
51	Pacific Concord Holding Limited	20030526	20031023
52	iLink Holdings Limited	20030820	20031203
53	Chevalier Construction Holdings Limited	20031031	20040223
54	Oxford Properties & Finance Limited	20030521	20040623
55	Alpha General (Holdings) Limited	20041013	20050110
56	Kwong Sang Hong International Limited	20041104	20050203
57	Elec & Eltek International Holdings Limited	20041012	20050321
58	Sinopec Beijing Yanhua Petrochemical Company	20041229	20050511
59	Hutchison Global Communications Holdings Ltd	20050503	20050718
60	Henderson China Holdings Limited	20050603	20050815
61	MediaNation Inc.	20050324	20050930
62	Lai Fai International Holdings Limited	20050407	20051014
63	Far Eastern Polychem Industries Limited	20050830	20051121
64	Henderson Cyber Limited	20050816	20051212
65	Jilin Chemical Industrial Company Limited	20051028	20060123
66	New World TMT Limited	20051102	20060221
67	Sinopec Zhenhai Refining & Chemical Company L	20051112	20060324
68	Media Partners International Holdings Incorpo	20050913	20060406
69	Superdata Software Holdings Limited	20051110	20060518
70	ASIA ALUMINUM HOLDINGS LIMITED	20060316	20060524
71	China Resources Cement Holdings Limited	20060331	20060726
72	SNP Leefung Holdings Limited	20060628	20060927
73	Egana Jewellery & Pearls Limited	20060710	20061024
74	Sino Stride Technology (Holdings) Limited	20060824	20061107
75	Sunday Communications Limited	20061003	20061218
76	Winsor Industrial Corporation Limited	20060904	20061221
77	China National Aviation Company Limited	20060621	20070125
78	Shimao International Holdings Limited	20070419	20070727
79	Tom Online Inc	20070309	20070903
80	Lei Shing Hong Limited	20071207	20080317
81	Citic International Financial Holdings Ltd	20080610	20081105
82	Shaw Brothers (Hong Kong) Ltd	20081222	20090319
83	Delta Networks, Inc.	20090602	20090928
84	Ming An (Holdings) Co. Ltd	20090522	20091103
85	Stone Group Holdings Ltd	20090525	20091109
86	Nam Tai Electronic & Electrical Products Ltd.	20090519	20091113
87	GST Holdings Limited	20081202	20091218

Appendix C2: Firms privatized by a third party (LBOs) in Hong Kong, 1989-2009

	Company	Announcement date	Delist date
1	TVE (Holdings) Ltd	19960321	19960909
2	Kong Wah Holdings Ltd	19950629	19961202
3	Consolidated Electric Power Asia Ltd	19961010	19970130
4	Furama Hotel Enterprises Ltd	19970619	19980407
5	DBS Kwong On Limited	19981216	19990716
6	Citybus group Ltd	19990121	19990729
7	FPB Bank Holdings Company Limited	20001120	20010319
8	Dao Heng Bank Group Limited	20010411	20010904
9	Harbin Brewery Group Limited	20040601	20041122
10	China Mobile Hong Kong Company Limited	20051020	20060329
11	China Paradise Electronics Retail Limited	20060725	20070131
12	Saint Honore Holdings Limited	20061117	20070223
13	Fortis Asia Holdings Limited (Pacific Century	20070301	20070815
14	Chia Hsin Cement Greater China Holding Corpor	20070614	20080108
15	BALtrans Holdings Limited	20071219	20080409
16	Mirabell International Holdings Limited	20080228	20080922
17	China Netcom Group Corporation (Hong Kong) Li	20080602	20081015
18	Wing Lung Bank, Limited	20080530	20090116
19	A-S China Plumbing Products Limited	20090622	20091215

References

- Ali, A., T. Chen, and S. Radhakrishnan. 2007. "Corporate disclosures by family firms." *Journal of Accounting and Economics* 44:238-86.
- Amihud, Y. 1989. *Leveraged management buy-outs*. New York: Dow-Jones Irwin.
- Anderson, R., and D. Reeb. 2003. "Founding-family ownership and firm performance. Evidence from the S&P 500." *The Journal of Finance* 58.3:1301-28.
- Ashbaugh, H., R. LaFond, and B. Mayhew. 2003. "Do nonaudit services compromise auditor independence? Further evidence." *The Accounting Review* 78.3:611-39.
- Asquith, P., and T. A. Wizmann. 1990. "Event risk, covenants and bondholder returns in leveraged buyouts." *Journal of Financial Economics* 27:195-213.
- Baker, G., and K. Wruck. 1989. "Organizational changes and value creation in leveraged buyouts: The case of the O. M. Scott & Sons company." *Journal of Financial Economics* 25:163-90.
- Baker, K., J. Nofsinger, and D. Weaver. 2002. "International cross-listing and visibility." *Journal of Financial and Quantitative Analysis* 37:495-521.
- Bargeron, L., F. Schlingemann, R. Stulz, and C. Zutter. 2007. "Why do private acquirers pay so little compared to public acquirers?" Working paper.
- Baron, D. 1983. "Tender offers and management resistance." *Journal of Finance* 38:331-42.
- Benoit, B. 1999. "Companies and Finance: UK: Professional expenses prove a deterrent to maintaining stock market exposure: but costs of public-to-private deals can also be considerable." *The Financial Times*, 31 August.
- Bharath, S. T., and A. K. Dittmar. 2010. "Why do firms use private equity to opt out of public markets?" *Review of Financial Studies* 23:1771-1818.
- Boot, A. W. A., R. Gopalan, and A. V. Thakor. 2008. "Market liquidity, investor participation and managerial autonomy: Why do firms go private?" *Journal of Finance* 63:2013-59.
- Brown, S. J., and J. B. Warner. 1985. "Using daily stock returns, the case of event studies." *Journal of Financial Economics* 14:3-31.
- Brudney, V., and M. Chirelstein. 1978. "Corporate freezeouts." *The Yale Law Journal* 87:1354-76.

- Buzby, S. L. 1975. "Company size, listed versus unlisted stocks and the extent of financial disclosure." *Journal of Accounting Research* 13.1:16-27.
- Cheung, Y. L., P. R. Rau, and A. Stouraitis. 2006. "Tunneling, propping, and expropriation: Evidence from connected party transactions in Hong Kong." *Journal of Financial Economics* 82:343-86.
- Chou D., M. Gombola, and F. Y. Liu. 2006. "Earnings management and stock performance of reverse leveraged buyouts." *Journal of Financial and Quantitative Analysis* 41:407-38.
- Claessens, S., S. Djankov, and L. H. P. Lang. 2000. "The separation of ownership and control in East Asian corporations." *Journal of Financial Economics* 58:81-112.
- Cumming, D., G. Fleming, S. Johan, and M. Takeuchi. 2010. "Legal protection, corruption and private equity returns in Asia." *Journal of Business Ethics* 95.2:173-93.
- DeAngelo, H., and L. DeAngelo. 2000. "Controlling stockholders and the disciplinary role of corporate payout policy: A study of the time mirror company." *Journal of Financial Economics* 56.2:153-207.
- DeAngelo, H., L. DeAngelo, and E. M. Rice. 1984. "Going private: Minority freezeouts and stockholder wealth." *Journal of Law and Economics* 27:367-401.
- DeAngelo, L. 1986. "Accounting numbers as market valuation substitutes: A study of management buyouts of public stockholders." *The Accounting Review* 61:400-20.
- Dechow, P., R. Sloan, and A. Sweeney. 1995. "Detecting earnings management." *The Accounting Review* 70.2:193-225.
- Demsetz, H., and B. Villalonga. 2001. "Ownership structure and corporate performance." *Journal of Corporate Finance* 7:209-33.
- Dicker, A. 1990. "Tax issues." In *Corporate restructuring*, edited by B. De Caires. London: Euromoney Publications.
- Dittmar, A. K. 2000. "Why do firms repurchase stock?" *The Journal of Business* 73.3:331-55.
- Djankov, S., R. La Porta, F. Lopez-de-Silanes, and A. Shleifer. 2008. "The law and economics of self-dealing." *Journal of Financial Economics* 88.3:430-65.
- Easterwood, J., R. Singer, A. Seth, and D. Lang. 1994. "Controlling the conflict of interest in management buyouts." *Review of Economics and Statistics* 76:512-22.

- Fama, E., and M. Jensen. 1983. "Separation of ownership and control." *Journal of Law and Economics* 26:301-25.
- Fan, J. P. H., and T. J. Wong. 2002. "Corporate ownership structure and the informativeness of accounting earnings in East Asia." *Journal of Accounting and Economics* 33.3:401-25.
- Fischer, P. E., and H. Louis. 2008. "Financial reporting and conflicting managerial incentives: The case of management buyouts." *Management Science* 54:1700-14.
- Frankfurter, G. M., and A. Kosedag. 1996. "Management's perception of leveraged buyouts." *International Review of Financial Analysis* 5:197-221.
- Franks, J., and C. Mayer. 1996. "Hostile takeovers in the UK and the correction of managerial failure." *Journal of Financial Economics* 40:163-81.
- Garvey, G. T. 1992. "Leveraging the underinvestment problem: How high debt and management shareholding solve the agency costs of free cash flow." *Journal of Financial Research* 40:149-66.
- Givoly, D., C. K. Hayn, and S. P. Katz. 2010. "Does public ownership of equity improve earnings quality?" *The Accounting Review* 85:195-225.
- Goergen, M. and L. Renneboog. 2004. "Shareholder wealth effects of European domestic and cross-border takeover bids." *European Financial Management Journal* 10:9-45.
- Gong, G., H. Louis, and A. Sun. 2008. "Earnings management and firm performance following open-market repurchases." *Journal of Finance* 62:947-86.
- Guo, S., E. Hotchkiss, and W. Song. 2011. "Do buyouts (still) create value?" *Journal of Finance* 66:479-517.
- Hafzalla, N. 2007. "Managerial incentives for discretionary disclosure: Evidence from management leveraged buyouts." *Review of Accounting Studies* 14.4:507-33.
- Halpern, P., R. Kieschnick, and W. Rotenberg. 1999. "On the heterogeneity of leveraged going private transactions." *Review of Financial Studies* 12:281-309.
- Harlow, W. V., and J. S. Howe. 1993. "Leveraged buyouts and insider nontrading." *Financial Management* 22:109-18.
- Healy, P. M., and J. M. Wahlen. 1999. "A review of the earnings management literature and its implications for standard setting." *Accounting Horizons*: 365-83.

- Heckman, J. J. 1979. "Sample selection bias as a specification error." *Econometrica* 47 1:153-61.
- Ho, S. S. M., and K. S. Wong. 2001. "A study of the relationship between corporate governance structures and the extent of voluntary disclosure." *Journal of International Accounting, Auditing and Taxation* 10: 115-39.
- Ikenberry, D., J. Lakonishok, and T. Vermaelen. 1995. "Market underreaction to open market share repurchases." *Journal of Financial Economics* 39:181-208.
- Jaggi, B., S. Leung, and F. Gul. 2009. "Family control, board independence and earnings management: Evidence based on Hong Kong firms." *Journal of Accounting and Public Policy* 28:281-300.
- Jensen, M. 1986. "Agency costs of free cash flow, corporate finance and takeovers." *American Economic Review* 76:323-9.
- Jensen, M. 1989. "The eclipse of the public corporation." *Harvard Business Review* 65:61-74.
- Jensen, M., and W. Meckling. 1976. "Theory of the firm: Managerial behavior, agency costs and ownership structure." *Journal of Financial Economics* 3:305-60.
- Jensen, M., and R. S. Ruback. 1983. "The market for corporate control: The scientific evidence." *Journal of Financial Economics* 11:5-50.
- Jensen, M., S. Kaplan, and L. Stiglin. 1989. "Effects of LBOs on tax revenues of the U.S. Treasury." *Tax Notes* 42:727-33.
- Jones, J. J. 1991. "Earnings management during import relief investigations." *Journal of Accounting Research* 29:193-228.
- Kaestner, R. and F. Y. Liu. 1996. "Going private restructuring: The role of insider trading." *Journal of Business Finance & Accounting* 23:779-806.
- Kaplan, S. 1989a. "The effects of management buyouts on operations and value." *Journal of Financial Economics* 24:217-54.
- Kaplan, S. 1989b. "Management buyouts: Evidence on taxes as a source of value." *Journal of Finance* 44:611-32.
- Kaplan, S., and P. Strömberg. 2009. "Leveraged buyouts and private equity." *Journal of Economic Perspectives* 23.1:121-46.
- Katz, S. P. 2009. "Earnings quality and ownership structure: The role of private equity sponsors." *The Accounting Review* 84.3:623-58.

- Kieschnick, R. L. 1998. "Free cash flow and stockholder gains in going private transactions revisited." *Journal of Business Finance & Accounting* 25:187-202.
- Kim, W. S., and E. O. Lyn. 1991. "Going private: Corporate restructuring under information asymmetry and agency problems." *Journal of Business Finance & Accounting* 18.5:637-48.
- Kosedag, A., and W. Lane. 2002. "Is it free cash flow, tax savings or neither? An empirical confirmation of two leading going private explanations." *Journal of Business Finance & Accounting* 29:257-74.
- Kothari, S. P., A. J. Leone, and C. Wasley. 2005. "Performance matched discretionary accrual measures." *Journal of Accounting and Economics* 39:163-97.
- Lakonishok, J., A. Shleifer, and R. Vishny. 1994. "Contrarian investment, extrapolation, and risk." *Journal of Finance* 49:1541-78.
- Lang, L. H. P., R. M. Stulz, and A. W. Ralph. 1989. "Managerial performance, Tobin's Q, and the gains from successful tender offers." *Journal of Financial Economics* 24:137-54.
- La Porta, R., F. Lopez-de-Silanes, and A. Shleifer. 1999. "Corporate ownership around the world." *Journal of Finance* 54:471-518.
- Lee, C. I., S. Rosenstein, N. Rangan, and W. N. Davidson III. 1992. "Board composition and shareholder wealth: The case of management buyouts." *Financial Management* 21:58-72.
- Lee, D. S. 1992. "Management buyout proposals and inside information." *Journal of Finance* 47:1061-79.
- Lehn, K., J. Netter, and A. Poulsen. 1990. "Consolidating corporate control." *Journal of Financial Economics* 27:557-80.
- Lehn, K., and A. Poulsen. 1989. "Free cash flow and stockholder gains in going private transactions." *Journal of Finance* 44:771-87.
- Li, X., J. Qian, and J. L. Zhu. 2012. "Do Investors understand 'financial and operating engineering' before management buyouts?" Working Paper.
- Lowenstein, L. 1985. "Management buyouts." *Columbia Law Review* 85:730-84.
- Maupin, R. J., C. M. Bidwell, and A. K. Ortegren. 1984. "An empirical investigation of the characteristics of publicly quoted corporations that change to closely held ownership through management buyouts." *Journal of Business Finance & Accounting* 11:435-50.

- Madden, G., L. W. Marples, and L. Chugh. 1990. "A stock market evaluation of management buyouts." *Journal of Business Finance & Accounting* 17:351-58.
- Marais, L., K. Schipper, and A. Smith. 1989. "Wealth effects of going private for senior securities." *Journal of Financial Economics* 23:155-91.
- McConnell, J., and H. Servaes. 1990. "Additional evidence on equity ownership and corporate value." *Journal of Financial Economics* 27:595-612.
- Mehran H., and S. Peristiani. 2010. "Financial visibility and the decision to go private." *Review of Financial Studies* 23.2:519-47.
- Morck, R., A. Shleifer, and R. Vishny. 1988. "Management ownership and market valuation: An empirical analysis." *Journal of Financial Economics* 20:293-315.
- Morck, R., and B. Yeung. 2003. "Agency problems in large family business groups." *Entrepreneurship Theory and Practice* 27.4:367-82.
- Muscarella, C., and M. Vetsuypens. 1990. "Efficiency and organizational structure: A study of reverse LBOs." *Journal of Finance* 45:1389-1413.
- Opler, T., and S. Titman. 1993. "The determinants of leveraged buyout activity: Free cash flow versus financial distress costs." *Journal of Finance* 48: 1985-99.
- O'Brien, P., and R. Bhushan. 1990. "Analyst following and institutional ownership." *Journal of Accounting Research* 28:55-76.
- Palepu, K. G. 1990. "Consequence of leveraged buyouts." *Journal of Financial Economics* 27:247-62.
- Perry, S., and T. Williams. 1994. "Earnings Management preceding management buyout offers." *Journal of Accounting and Economics* 18:157-79.
- Rappaport, A. 1990. "The staying power of the public corporation." *Harvard Business Review* 68:96-104.
- Rath, M., and S. Rashid. 2012. "Incentive alignment, monitoring mechanism and going private in Australia." Working Paper.
- Renneboog, L., and T. Simons. 2005. "Public to private transactions: LBOs, MBOs, MBIs and IBOs." Working paper, European Corporate Governance Institute and Tilburg University.
- Renneboog, L., T. Simons, and M. Wright. 2007. "Why do public firms go private in the UK? The impact of private equity investors, incentive realignment, and undervaluation." *Journal of Corporate Finance* 13:591-628.

- Schadler, F. P., and J. E. Karns. 1990. "The unethical exploitation of shareholders in management buyout transactions." *Journal of Business Ethics* 9:595-602.
- Shleifer, A., and R. Vishny. 1988. "Management buyouts as a response to market pressure." In *Mergers and acquisitions*, edited by A. J. Auerbach. 87-102. Chicago: University of Chicago Press.
- Shleifer, A., and R. Vishny. 1990. "The takeover wave of the 1980s." *Science* 249:745-9.
- Singh, H. 1990. "Management buyouts: Distinguishing characteristics and operating changes prior to public offering." *Strategic Management Journal* 11:111-29.
- Smith, A. 1990. "Corporate ownership structure and performance: The case of management buyouts." *Journal of Financial Economics* 27:704-39.
- Sommer, A. A., Jr. 1974. "Going private: A lesson in corporate responsibility." Law Advisory Council Lecture, Notre Dame Law School, reprinted in Federal Securities Law Reports (Commerce Clearing House, Inc., 1974) 84:692-700.
- Stein, B. J. 1985. "Going Private is unethical." *Fortune*, November 11: 169-70.
- Stoughton, N. M. 1988. "The information content of corporate merger and acquisition offers." *Journal of Financial and Quantitative Analysis* 23:175-97.
- Stulz, M. R. 1988. "Managerial control of voting rights, financing policies, and the market for corporate control." *Journal of Financial Economics* 20:25-54.
- Stulz, M. R. 1990. "Managerial discretion and optimal financing policies." *Journal of Financial Economics* 26:3-27.
- Travlos, N. G., and M. M. Cornett. 1993. "Going private buyouts and determinants of shareholders' returns." *Journal of Accounting, Auditing and Finance* 8:1-25.
- Teoh S. H., I. Welch, and T. J. Wong. 1998. "Earnings management and the underperformance of seasoned equity offerings." *Journal of Financial Economics* 50:63-99.
- Weir C., D. Laing, and M. Wright. 2005. "Incentive effect, monitoring mechanisms and the market for corporate control: An analysis of the factors affecting public to private transactions in the UK." *Journal of Business Finance & Accounting* 32:0306-686X.
- Wright, M., S. Thompson, K. Robbie, and P. Wong. 1995. "Management buy-outs in the short and long term." *Journal of Business Finance & Accounting* 22:461-83.

Wright, M., R. Hoskisson, L. Busenitz, and J. Dial. 2000. "Entrepreneurial growth through privatization: the upside of management buyouts." *Academy of Management Review* 25: 591-601.

Wu, Y. W. 1997. "Management buyouts and earnings management." *Journal of Accounting, Auditing & Finance* 12:373-89.

Table 1 Descriptive statistics for a sample of 87 controlling shareholder buyouts, 1989-2009

	# of CSBOs	Percentage of total CSBOs (%)	Mean MV (HK\$ million)	Total MV (HK\$ million)	Percentage of total MV (%)
Panel A: Yearly distribution of CSBO firms					
1989	7	8.05	2,025	14,172	7.13
1990	6	6.90	830	4,980	2.51
1991	2	2.30	2,321	4,643	2.34
1992	3	3.45	4,220	12,660	6.37
1993	1	1.15	2,737	2,737	1.38
1995	4	4.60	989	3,955	1.99
1996	2	2.30	290	581	0.29
1997	3	3.45	728	2,183	1.10
1998	3	3.45	2,301	6,902	3.47
1999	3	3.45	4,753	14,258	7.18
2000	3	3.45	1,115	3,345	1.68
2001	5	5.75	1,778	8,889	4.47
2002	3	3.45	313	938	0.47
2003	7	8.05	1,239	8,673	4.36
2004	2	2.30	491	981	0.49
2005	10	11.49	1,357	13,571	6.83
2006	12	13.79	3,281	39,370	19.81
2007	3	3.45	4,055	12,166	6.12
2008	2	2.30	15,769	31,538	15.87
2009	6	6.90	2,025	12,152	6.12
Full sample	87	100	2,284	198,695	100
Panel B: Industry composition					
Oil & Gas	1	1.15	9,971	9,971	5.02
Basic Materials	4	4.60	6,706	26,824	13.50
Industrials	18	20.69	1,367	24,598	12.38
Consumer Goods	15	17.24	1,054	15,812	7.96
Health Care	2	2.30	482	964	0.48
Consumer Services	12	13.79	1,704	20,453	10.29
Telecommunications	2	2.30	1,095	2,190	1.10
Financials	26	29.89	3,254	84,592	42.57
Technology	7	8.05	1,899	13,292	6.69
Full sample	87	100	2,284	198,695	100

This table presents the yearly distribution of our CSBO sample over 1989-2009 as well as industry composition. We use the industry classification defined in the DataStream database.

Table 2 Descriptive statistics of ownership structure

Panel A: Managerial ownership			
	Mean	Std. Dev.	N
CSBOs	68.422	14.698	87
LBOs	60.109	12.493	19
PUBLIC	53.116	20.521	87
Panel B: Ratio of cash flow to voting rights			
	Mean	Std. Dev.	N
CSBOs	0.767	0.228	69
LBOs	0.836	0.213	19
Claessens et al. sample	0.882	0.214	330
Panel C: Mechanisms separating ownership and control			
	Pyramids with ultimate owners	Cross-holdings	Controlling owner alone
CSBOs	56.5	2.9	85.5
LBOs	36.8	5.3	68.4
Claessens et al. sample	25.1	9.3	69.1
	Management	State	Widely held financial
CSBOs	60.3	2.9	7.3
LBOs	72.2	5.3	10.5
Claessens et al. sample	53.4	5.2	19.8
Panel D: Ultimate control of the companies (20% cutoff)			
	Widely held	Family	State
CSBOs	2.9	71	15.9
LBOs	0	73.7	10.5
Claessens et al. sample	7	66.7	1.4

This table reports the ownership structure of our CSBO and LBO sample. In all cases, the ownership structure data is collected at the end of fiscal year before the privatization announcement. "Pyramids with Ultimate Owners" (when companies are not widely held) equals one if the controlling owner exercises control through at least one publicly traded company, zero otherwise; "Cross-Holdings" equals one if the company has a controlling shareholder and owns any amount of shares in

its controlling shareholder or in another company in that chain of control, zero otherwise; “Controlling Owner Alone” equals one if there is no second owner holding more than 10% of the stock, zero otherwise; “Management” equals one if the CEO, board chairman, or vice-chairman comes from the controlling family, zero otherwise. In Panel D, corporations are classified according to the ultimate owner of the firm (Claessens et al., 2000). “Widely held” equals one if a corporation does not have any owners with significant control rights, zero otherwise. Corporations with controlling owners are further divided into four categories: “Family” equals one if the controlling owner of the corporation is a family, zero otherwise; “State” equals one if the controlling owner of the corporation is government, zero otherwise; “Widely held financial” equals one if the controlling owner is a widely held financial institution such as a bank or insurance company, zero otherwise; “Widely held corporation” equals one if the controlling owner is a widely held company, zero otherwise. N is the number of sample firms. The sample in Claessens et al. (2000) contains 330 publicly traded corporations (including both financial and non-financial institutions) in Hong Kong at the end of fiscal year 1996 or the closest possible date.

Table 3 Comparison of firm characteristics - CSBOs vs. PUBLIC, CSBOs vs. LBOs

Variables	CSBOs			PUBLIC			CSBOs vs. PUBLIC			CSBOs vs. LBOs		
	Mean	Std. Dev.	T-stats	Mean	Std. Dev.	T-stats	Mean	Std. Dev.	T-stats	Mean	Std. Dev.	T-stats
Market-to-book	0.974	0.697	1.76*	1.228	1.236	1.76*	0.903	0.308	2.31**	0.903	0.308	2.31**
Relative P/E	1.221	0.568	0.84	1.114	0.867	0.84	0.989	0.853	2.16**	0.989	0.853	2.16**
Price-to-NAV	0.490	0.364	2.17**	0.863	0.528	2.17**	0.772	0.257	1.79*	0.772	0.257	1.79*
Price-to-NTAV	0.862	0.374	2.88**	1.369	0.627	2.88**	1.092	0.413	1.68*	1.092	0.413	1.68*
Pre-buyout stock performance	-4.45	1.792	0.83	-1.76	0.956	0.83	-3.29	0.843	0.74	-3.29	0.843	0.74
Free cash flow	0.058	0.110	0.41	0.065	0.128	0.41	0.090	0.125	1.14	0.090	0.125	1.14
Sales growth	0.370	1.010	2.31**	0.160	1.270	2.31**	0.117	0.175	-2.20**	0.117	0.175	-2.20**
Dividend	0.029	0.082	0.75	0.041	0.118	0.75	0.014	0.018	-0.82	0.014	0.018	-0.82
Size	14.589	1.422	-0.08	14.572	1.432	-0.08	15.694	1.774	2.93***	15.694	1.774	2.93***
Analyst coverage	3.287	6.113	2.11**	4.379	6.844	2.11**	8.579	9.185	3.10***	8.579	9.185	3.10***
Age	8.161	6.548	2.12**	13.276	5.557	2.12**	6.579	6.543	-0.95	6.579	6.543	-0.95
Tax	0.008	0.014	0.79	0.010	0.018	0.79	0.008	0.009	0.03	0.008	0.009	0.03
Leverage	0.610	1.380	-1.56	0.418	1.080	-1.56	0.499	0.521	-0.66	0.499	0.521	-0.66

This table compares firm characteristics of CSBO firms with firms that remain publicly quoted (PUBLIC). It also compares the firm characteristics of CSBO firms with firms that are privatized by a third party (LBOs). The variables are defined in the main text. The accounting data is taken from the year immediately prior to going private. Difference T-stat reports the results of a test of difference in means between two samples. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 4 Distribution of years of CSBO firms staying in public markets

Years staying public (age)	# of CSBO firms	Percent (%)
3	8	9.20
4	8	9.20
5	5	5.75
6	9	10.34
7	3	3.45
8	1	1.15
9	10	11.49
10	3	3.45
11-19	26	29.89
20-29	5	5.75
30-39	7	8.05
> = 40	2	2.30
Total	87	100

This table presents the distribution of the number of years CSBO firms were in public markets. The first column presents the number of years the firm was public from its IPO to going private.

Table 5 Pearson correlations

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
(a) Size	1														
(b) Analyst Coverage	0.693 (<.0001)	1													
(c) Age	0.318 (0.067)	0.573 (<.0001)	1												
(d) Market-to-book	0.394 (0.101)	0.381 (0.492)	0.324 (0.635)	1											
(e) Relative P/E	0.673 (0.180)	0.237 (0.378)	0.183 (0.872)	0.583 (0.231)	1										
(f) Price-to-NAV	0.293 (0.187)	0.359 (0.171)	0.189 (0.368)	0.387 (0.075)	0.274 (0.898)	1									
(g) Price-to-NTAV	0.267 (0.176)	0.469 (0.167)	0.375 (0.237)	0.286 (0.068)	0.546 (0.756)	0.762 (0.034)	1								
(h) Pre-buyout stock performance	0.064 (0.351)	0.037 (0.762)	0.094 (0.867)	0.075 (0.374)	0.134 (0.899)	0.141 (0.317)	0.354 (0.311)	1							
(i) Free cash flow	0.438 (0.472)	0.376 (0.396)	0.341 (0.688)	-0.137 (0.871)	-0.138 (0.523)	-0.397 (0.357)	-0.377 (0.647)	-0.210 (0.324)	1						
(j) Sales growth	0.083 (0.432)	0.073 (0.899)	-0.367 (0.103)	0.567 (0.106)	0.069 (0.237)	0.237 (0.089)	0.135 (0.888)	0.641 (0.377)	-0.355 (0.866)	1					
(k) Dividend	0.024 (0.387)	0.076 (0.986)	0.028 (0.899)	0.038 (0.755)	0.103 (0.618)	0.079 (0.677)	0.041 (0.664)	0.081 (0.733)	0.388 (0.203)	-0.364 (0.106)	1				
(l) Tax	0.067 (0.843)	0.072 (0.996)	0.039 (0.374)	0.078 (0.536)	0.063 (0.348)	0.071 (0.544)	0.031 (0.733)	0.037 (0.710)	0.067 (0.377)	0.099 (0.624)	0.311 (0.399)	1			
(m) Leverage	0.438 (0.679)	0.381 (0.429)	0.291 (0.563)	0.189 (0.877)	-0.233 (0.655)	0.311 (0.944)	0.410 (0.467)	0.132 (0.317)	0.198 (0.741)	0.198 (0.822)	-0.421 (0.911)	-0.698 (0.236)	1		
(n) Managerial ownership	-0.348 (0.423)	0.462 (0.671)	-0.343 (0.109)	-0.461 (0.213)	0.341 (0.844)	-0.303 (0.267)	0.318 (0.681)	-0.547 (0.317)	0.388 (0.312)	0.134 (0.677)	0.399 (0.105)	0.153 (0.974)	-0.721 (0.822)	1	
(o) Ratio of cash flow to voting	-0.137 (0.872)	0.267 (0.438)	-0.389 (0.118)	0.377 (0.046)	0.482 (0.627)	0.266 (0.038)	0.139 (0.031)	0.372 (0.109)	-0.311 (0.206)	0.344 (0.752)	0.136 (0.577)	0.031 (0.677)	-0.377 (0.355)	-0.455 (0.677)	1

This table presents pooled Pearson correlations for the key variables based on 87 CSBO firms over the period 1989 to 2009. The variables are defined in the main text. The p-values are reported in parentheses.

Table 6 Total discretionary accruals (DTAC) for CSBOs, LBOs, and PUBLIC

Year	mean	t-value	Median	Wilcoxon Z	N
Panel A: DTAC of CSBOs					
t = -1	-0.023	-2.38**	-0.017	-2.19**	87
t = -2	-0.037	-2.06**	-0.021	-1.90*	87
t = -3	-0.029	-1.86*	-0.008	-1.77*	84
t = -4	-0.013	-0.83	-0.001	-0.56	73
t = -5	0.003	-0.16	0.002	-0.10	59
Panel B: DTAC of LBOs					
t = -1	0.016	1.83*	0.003	1.71*	19
t = -2	0.007	1.78*	0.006	1.43	19
t = -3	-0.009	-0.86	0.001	-0.55	19
t = -4	-0.012	-0.93	0.001	-0.39	17
t = -5	0.007	-0.31	0.000	-0.17	13
Panel C: DTAC of PUBLIC					
t = -1	0.013	0.78	0.001	0.33	87
t = -2	0.007	0.06	0.002	0.13	87
t = -3	0.002	-0.27	0.000	-0.07	87
t = -4	-0.010	-0.32	-0.003	-0.19	83
t = -5	0.010	-0.29	0.000	0.08	82

This table presents the total discretionary accruals (DTAC) for CSBOs, LBOs, and PUBLIC firms over the five-year period before privatization. Here t = 0 is the going private year. Total discretionary accruals are defined as the difference between total accruals and expected total accruals. T-tests and the Wilcoxon signed-rank test are used to test whether the mean and median are different from zero, respectively. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 7 Performance-adjusted current discretionary accruals (PACDA) for CSBOs, LBOs, and PUBLIC

Year	Mean	t-value	Median	Wilcoxon Z	N
Panel A: PACDA of CSBOs					
t = -1	-0.038	-2.87***	-0.026	-2.67***	87
t = -2	-0.032	-2.33**	-0.019	-2.01**	87
t = -3	-0.027	-1.47	-0.004	-1.50	84
t = -4	-0.029	-0.98	0.002	-0.77	73
t = -5	-0.017	-1.23	-0.003	-0.92	59
Panel B: PACDA of LBOs					
t = -1	0.018	1.77*	0.007	1.71*	19
t = -2	0.002	-0.33	0.000	0.09	19
t = -3	0.016	-0.68	0.002	-0.39	19
t = -4	-0.007	-0.92	0.000	-0.67	17
t = -5	0.013	-0.43	-0.001	0.21	13
Panel C: PACDA of PUBLIC					
t = -1	0.021	1.37	0.001	0.79	87
t = -2	0.012	1.33	0.002	1.04	87
t = -3	0.027	0.61	0.001	0.38	87
t = -4	-0.024	-1.58	-0.002	-0.99	83
t = -5	0.008	1.51	0.000	0.59	82

This table presents the performance-adjusted current discretionary accruals (PACDA) for CSBOs, LBOs, and PUBLIC firms over the five-year period before privatization. Here t = 0 is the going private year. Performance-adjusted current discretionary accruals (PACDA) are defined as the difference between total current accruals and expected current accruals. T-tests and the Wilcoxon signed-rank test are used to test whether the mean and median are different from zero, respectively. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 8 Changes in earnings, revenue, and cash flows

	t=-1	t=-2	t=-3	t=-4	t=-5
changes in earnings					
Mean	0.03	0.03**	0.02	0.02	0.00
t-stat.	1.89	1.60	1.47	1.24	-0.04
Median	0.01	0.01	0.00	0.00	0.00
Neg./Pos.	48/39	53/34	47/37	39/34	31/28
Significance for Wilcoxon (P>S)	0.1464	0.0321	0.2238	0.5044	0.8057
changes in revenue					
Mean	0.17***	0.20***	0.08**	0.34	0.40***
t-stat.	2.57	2.64	2.32	0.95	2.17
Median	0.05	0.06	0.02	0.01	0.06
Neg./Pos.	56/31	58/28	50/33	40/33	36/23
Significance for Wilcoxon (P>S)	<.0001	0.0001	0.0104	0.3059	0.0015
changes in cash flows					
Mean	0.02*	0.04**	0.03*	0.02	0.00
t-stat.	1.21	1.91	2.17	0.80	0.00
Median	0.01	0.01	0.01	0.00	0.00
Neg./Pos.	50/37	51/36	48/36	37/36	34/25
Significance for Wilcoxon (P>S)	0.0922	0.0318	0.0513	0.9631	0.7542

Here $t = 0$ is the going private year. The change in earnings is defined as the difference between earnings of CSBO firm at year t and $t-1$, standardized by the total assets at the beginning of the year t . The changes in other variables are defined the same way. Significance for Wilcoxon ($P>S$) is the significance level of a Wilcoxon test where the median difference is less than zero. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 9 Industry-adjusted changes in earnings, revenue, and cash flows

	t=-1	t=-2	t=-3	t=-4	t=-5
Industry-adjusted changes in earnings					
Mean	0.02	0.02	0.01	0.01	-0.01
t-stat.	1.31	1.02	0.95	0.88	-0.23
Median	0.00	0.00	0.00	0.00	0.00
Neg./Pos.	42/45	47/40	38/46	34/39	27/32
Significance for Wilcoxon (P>S)	0.6404	0.6127	0.9609	0.9248	0.4153
Industry-adjusted changes in revenue					
Mean	0.11	0.14	0.04	0.29	0.34
t-stat.	1.68	1.82	1.11	0.82	1.88
Median	0.01	0.01	-0.01	-0.01	0.00
Neg./Pos.	46/41	49/37	37/46	31/42	29/30
Significance for Wilcoxon (P>S)	0.1063	0.1287	0.8708	0.4216	0.1788
Industry-adjusted changes in cash flows					
Mean	0.01	0.03	0.02	0.01	-0.01
t-stat.	0.67	1.54	1.61	0.50	-0.24
Median	0.00	0.01	0.00	-0.01	0.00
Neg./Pos.	47/40	48/39	41/43	35/38	29/30
Significance for Wilcoxon (P>S)	0.4172	0.2573	0.2617	0.5545	0.5757

Here $t = 0$ is the going private year. The industry-adjusted change in earnings is defined as the difference between the change in earnings and the median value of the same variable for all firms in the same industry. The industry-adjusted changes for other variables are defined the same way. Significance for Wilcoxon (P>S) is the significance level of a Wilcoxon test where the median difference is less than zero. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 10 Connected transactions of CSBO firms

Characteristics	All connected transactions	Transactions likely to expropriate minority shareholders	Transactions likely to benefit minority shareholders	Transactions that have strategic rationales
Number of transactions	95	83	3	9
Value of transactions (HK\$ million)				
Total	70,724	63,055	3,402	4,266
Mean	744	760	1,134	474
Median	84	80	814	152
Ratio of transaction value to market value of firm (%)				
Mean	76.5	77.2	42.7	81.9
Median	8.7	7.1	31.4	24.9

This table reports the characteristics of connected transactions for a sample of 95 filings by CSBO firms during the period 1999-2009. Following Cheung et al. (2006), connected transactions are categorized into three types: 1) transactions that are a priori likely to result in expropriation of the listed firm's minority shareholders; 2) transactions that are likely to benefit the listed firm's minority shareholders; 3) transactions that could have strategic rationales and perhaps are not expropriation.

Table 11 The effect of ownership structure on firm's opportunistic behaviour: The non-parametric tests

	PACDA				Connected transactions (%)			
	low	high	T-stats		low	high	T-stats	
Panel A								
Managerial ownership	-0.019	-0.034	1.37		16.7	82.3	1.53	
Ratio of cash flow to voting rights	-0.047	0.009	3.61***		88.7	26.7	5.79***	
Size	-0.041	-0.023	1.83*		42.3	37.6	1.55	
Analyst	-0.056	-0.017	2.06**		59.1	15.9	2.55**	
Age	-0.029	-0.034	1.33		33.7	43.1	1.46	
Panel B								
	Dummy = 0	Dummy = 1	T-stats		Dummy = 0	Dummy = 1	T-stats	
Pyramids with ultimate owners	-0.031	-0.043	1.13		33.9	87.1	3.11***	
Cross-holdings	-0.037	-0.001	0.18		55.3	78.1	1.33	
Controlling owner alone	-0.034	-0.049	1.28		50.7	83.8	1.14	
Management	-0.005	-0.043	2.01**		27.1	76.7	2.34**	
Family	0.003	-0.051	2.66***		31.6	83.4	2.92***	

This table reports the effects of ownership structure and information asymmetry on CSBO firms' earnings management activity and connected transactions. We sort CSBO deals into quartiles based on the magnitude of the following variables: Managerial ownership, Ratio of cash-flow to voting rights, Firm size, Analyst coverage, and Age. Low (High) corresponds to the quartile of firms with the lowest (highest) of these variables. We use t-statistics to compare PACDA and "connected transactions" of CSBO firms in the bottom quartile of each variable to those firms in the highest quartile of that variable. "Pyramids with Ultimate Owners" (when companies are not widely held) equals one if the controlling owner exercises control through at least one publicly traded company, zero otherwise; "Cross-Holdings" equal one if the company has a controlling shareholder and owns any amount of shares in its controlling shareholder or in another company in that chain of control, zero otherwise; "Controlling Owner Alone" equals one if there is no second owner holding at least 10% of the stock, zero otherwise; "Management" equals one if the CEO, board chairman, or vice-chairman comes from the controlling family, zero otherwise. "Family" equals one if the controlling owner of the corporation is a family, zero otherwise. We use t-statistics to compare PACDA and "connected transactions" of CSBO firms whose dummy variable equals zero to those firms whose dummy variable equals one. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 12 Offer premiums in firms going private

Anticipation window	Mean	t-value	Median	Wilcoxon Z	<i>N</i>
Panel A: CSBOs					
1 day	44.3	11.55 ^{***}	37.6	9.77 ^{***}	87
30-day average	55.8	37.52 ^{***}	50.0	30.10 ^{***}	87
60-day average	56.5	38.89 ^{***}	53.3	33.41 ^{***}	87
IPO date	21.8	1.62	8.7	1.33	87
Panel B: LBOs					
1 day	50.7	3.34 ^{***}	42.2	2.79 ^{***}	19
30-day average	83.7	3.27 ^{***}	59.6	2.88 ^{***}	19
60-day average	88.1	3.50 ^{***}	57.2	3.01 ^{***}	19
IPO date	37.6	1.96 [*]	27.8	1.71 [*]	19

This table presents the premiums paid to pre-buyout shareholders in going private transactions. The premiums (%) are calculated as described in “Methodology.” The anticipation window is the number of days prior to the announcement date of the going private transaction. *N* is the number of sample firms. T-tests and the Wilcoxon signed-rank test are used to test whether the mean and median are different from zero, respectively. ^{***}, ^{**}, and ^{*} indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 13 Cumulative abnormal returns (CARs) for firms going private

Window	Mean	t-value	Median	Wilcoxon Z	N
Panel A: CSBOs					
[-30, 0)	8.7	4.98 ^{***}	6.7	3.77 ^{***}	87
[-2, 2]	36.5	11.41 ^{***}	30.4	8.51 ^{***}	87
[-30, 30]	42.1	9.02 ^{***}	35.5	6.88 ^{***}	87
Panel B: LBOs					
[-30, 0)	21.8	3.66 ^{***}	16.9	3.16 ^{***}	19
[-2, 2]	30.4	3.48 ^{***}	15.4	2.98 ^{***}	19
[-30, 30]	50.1	3.79 ^{***}	50.6	3.37 ^{***}	19

This table presents the cumulative abnormal return (CAR) of firms going private in Hong Kong over the period 1989-2009 for different event windows. CAR is calculated as described in “Methodology.” CAR [-30, 0) is the percentage market-adjusted return from 30 day before privatization announcement to the privatization announcement date, announcement date not included. CAR [-2, 2] is the percentage market-adjusted return over the five days centred on the privatization announcement date. CAR [-30, 30] is the percentage market-adjusted return over the two months centred on the privatization announcement date. The estimation window spans transaction days -180 to -30 whereby 0 stands for the privatization announcement day. T-tests and the Wilcoxon signed-rank test are used to test whether the mean and median are different from zero, respectively. ^{***}, ^{**}, and ^{*} indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 14 Firm-specific characteristics and wealth effect of CSBOs: The non-parametric tests

	Offer Premiums				CARs	
	Low	High	T-stats	low	High	T-stats
Panel A						
Market-to-book	62.58	49.21	1.68*	44.10	40.18	0.42
Price-to-NAV	60.12	46.27	1.87*	47.27	38.16	2.17**
Free cash flow	53.11	56.43	0.39	39.41	44.18	0.71
Sales growth	47.45	64.00	2.11**	48.39	42.12	1.39
Dividend	39.77	59.72	0.47	49.11	37.73	1.08
Size	48.73	59.43	0.94	39.43	45.28	0.76
Tax	57.61	51.33	1.06	37.11	45.81	1.09
Leverage	55.10	57.43	0.76	46.17	37.08	0.89
Total discretionary accruals (DTAC)	64.07	47.75	2.07**	45.73	38.42	1.67*
Performance-adjusted current discretionary accruals (PACDA)	63.94	45.42	2.89***	49.60	31.18	1.89*
Connected transactions	48.79	64.70	2.52**	41.75	45.38	0.42
Managerial ownership	49.97	63.02	1.56	31.36	55.36	2.66***
Ratio of cash flow to voting rights	53.03	59.96	0.84	37.29	49.28	1.26
Panel B						
	Dummy = 0	Dummy = 1	T-stats	Dummy = 0	Dummy = 1	T-stats
Pyramids with ultimate owners	50.17	58.77	1.31	53.74	48.11	0.39
Cross-holdings	55.70	68.41	0.67	51.08	47.27	1.37
Controlling owner alone	66.41	51.34	1.73*	47.98	54.73	1.43
Management	57.99	51.43	0.87	43.71	55.29	0.98
Family	48.77	59.66	1.55	47.31	59.77	2.24**

This table reports CSBO firms' offer premiums and cumulative abnormal returns (CARs) by the levels of firm-specific characteristics. We sort CSBO deals into quartiles based on the magnitude of the following variables: Market-to-book, Price-to-NAV, Price-to-NTAV, Free cash flow, Sales growth, Dividends, Size, Tax,

Leverage, Total discretionary accruals (DTAC), Performance-adjusted current discretionary accruals (PACDA), Connected transactions, Managerial ownership, and Ratio of cash flow to voting rights. Low (High) corresponds to the quartile of firms with the lowest (highest) of these variables. We use t-statistics to compare average offer premiums and CARs in the bottom quartile of each variable to those firms in the highest quartile of that variable. "Pyramids with Ultimate Owners" (when companies are not widely held) equals one if the controlling owner exercises control through at least one publicly traded company, zero otherwise; "Cross-Holdings" equal one if the company has a controlling shareholder and owns any amount of shares in its controlling shareholder or in another company in that chain of control, zero otherwise; "Controlling Owner Alone" equals one if there is no second owner holding at least 10% of the stock, zero otherwise; "Management" equals one if the CEO, board chairman, or vice-chairman comes from the controlling family, zero otherwise. "Family" equals one if the controlling owner of the corporation is a family, zero otherwise. We use t-statistics to compare average offer premiums and CARs of CSBO firms whose dummy variable equals zero to those firms whose dummy variable equals one. ^{***}, ^{**}, and ^{*} indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 15 Analysis of the prior characteristics that significantly influence the odds of a corporation engaging in CSBO

	Model 1	Model 2	Model 3
Intercept	-2.470 (0.06)	-0.232 (0.12)	-3.071 (1.56)
Managerial ownership	0.037 (2.41)**	0.023 (1.71)*	0.029 (1.78)*
(Managerial ownership) ²	0.046 (2.88)***	0.027 (2.21)**	0.017 (1.99)**
PACDA		-1.177 (3.49)***	-1.011 (2.67)**
PACDA*Ownership dummy			-0.076 (1.31)
PACDA*Analyst dummy			-0.073 (2.07)**
PACDA*Size dummy			-0.019 (0.39)
PACDA*Age dummy			-0.017 (1.07)
Price-to-NAV	-0.542 (4.12)***	-0.129 (2.01)**	-0.091 (1.74)*
Size	0.040 (0.06)	0.023 (0.04)	0.010 (0.00)
Analyst	-0.031 (0.78)	-0.021 (0.32)	-0.014 (0.18)
Age	-0.141 (0.98)	-0.179 (0.31)	-0.131 (0.95)
Free cash flow	0.811 (0.21)	0.350 (0.46)	0.041 (0.00)
Sales growth	0.161 (1.74)*	0.064 (1.77)*	0.034 (1.71)*
Dividend	-0.960 (0.26)	-0.371 (0.31)	-0.268 (0.01)
Tax	-4.453 (0.12)	-4.940 (0.14)	-5.042 (0.14)
Leverage	0.215 (1.55)	0.171 (1.27)	0.146 (0.87)
Model Chi-square	36.93***	33.32***	38.27***

This table presents the logistic regression of factors affecting the decision to go private. The dependent variable is one if the firm engages in CSBO and zero if the firm remains publicly quoted. The Ownership dummy equals one if managerial ownership is higher than the median and zero otherwise; the Analyst dummy equals one if the analyst coverage is lower than the median and zero otherwise; the Size dummy equals one if the firm size is smaller than the median and zero otherwise; the Age dummy equals one if the number of years the firms staying public is smaller than the median and zero otherwise. Other variables are defined in the paper. Z-statistics reported in parentheses under coefficient estimates. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 16 Determinants of premiums in CSBOs

	Model 1	Model 2	Model 3	Model 4
Intercept	2.483 (1.05)	-0.251 (-0.25)	1.337 (0.33)	-2.491 (0.59)
Managerial ownership	1.937 (1.06)	0.971 (0.39)	1.371 (1.37)	1.137 (0.75)
(Managerial ownership) ²	1.642 (0.77)	1.079 (1.06)	2.063 (0.67)	1.931 (0.88)
Ratio of cash flow to voting rights		0.723 (0.67)	0.637 (0.87)	0.571 (1.00)
Pyramids with ultimate owners		0.371 (1.37)	0.712 (0.79)	0.831 (1.07)
Controlling owner alone		-0.673 (1.39)	-0.377 (1.21)	-0.093 (0.97)
Management		-0.179 (0.08)	-0.073 (1.00)	-0.381 (0.73)
Family		0.738 (0.73)	0.937 (0.99)	0.833 (1.06)
PACDA		-0.466 (2.77)**		-0.262 (2.15)**
Connected transactions			0.737 (3.81)***	0.521 (2.84)***
Price-to-NAV	-1.971 (2.88)***	-0.833 (2.04)**	-0.711 (2.73)***	-0.125 (2.38)**
Free cash flow	3.016 (-1.36)	2.014 (-0.97)	3.301 (-1.04)	0.587 (-1.24)
Sales growth	0.282 (-1.39)	0.051 (-1.74)*	0.236 (1.81)*	0.311 (1.73)*
Dividend	2.671 (0.65)	2.125 (0.66)	1.711 (0.12)	1.214 (0.25)
Size	-2.069 (1.24)	1.712 (0.75)	2.231 (0.78)	1.531 (1.10)
Analyst	-1.331 (-1.06)	-1.019 (1.12)	1.07 (-1.20)	-0.781 (-1.00)
Age	-0.381 (-1.23)	-1.002 (-0.39)	0.180 (-0.69)	-0.717 (-0.32)
Tax	1.671 (1.42)	-1.871 (-0.64)	-1.113 (-0.60)	1.117 (0.41)
Leverage	-0.660 (-0.73)	-0.349 (-0.30)	-0.617 (0.69)	-0.314 (-0.31)
Lambda	0.034 (0.67)	0.069 (0.17)	0.044 (0.29)	0.057 (0.38)
Industry Dummies	Yes	Yes	Yes	Yes
F-value	4.78***	5.32***	5.52***	4.24***
Adjusted R-squared	21.02	24.13	25.69	27.74
Number of firms	87	69	56	56

This table shows the cross-sectional regressions estimating the determinants of the premiums in CSBOs. The anticipation window for the premiums is 30 days. “Pyramids with Ultimate Owners” (when companies are not widely held) equals one if the controlling owner exercises control through at least one publicly traded company, zero otherwise; “Controlling Owner Alone” equals one if there is no second owner holding at least 10% of the stock, zero otherwise; “Management” equals one if the

CEO, board chairman, or vice-chairman comes from the controlling family, zero otherwise. "Family" equals one if the controlling owner of the corporation is a family, zero otherwise. Lambda: following the Heckman (1979) procedure, a PROBIT model is estimated with, as predictors, Managerial ownership, Square of managerial ownership, Performance-adjusted current discretionary accruals, Price-to-NAV, Size, Analyst, Age, Free cash flow, Sales growth, Dividend, and Tax. Estimates of the PROBIT model are used to compute the inverse Mill's ratio (Lambda) for each firm. ***, **, and * stand for statistical significance at the 1%, 5%, and 10% level, respectively.

Table 17 Determinants of CARs in CSBOs

	Model 1	Model 2	Model 3	Model 4
Intercept	0.987 (1.09)	-0.377 (1.31)	1.307 (0.69)	1.677 (0.36)
Managerial ownership	0.317 (0.97)	0.633 (1.37)	1.001 (1.49)	1.987 (0.02)
(Managerial ownership) ²	2.069 (1.08)	1.013 (0.88)	1.827 (0.37)	0.971 (1.38)
Ratio of cash-flow to voting rights		0.611 (0.47)	0.723 (1.09)	0.488 (0.37)
Pyramids with ultimate owners		0.319 (0.27)	0.672 (0.66)	0.677 (1.16)
Controlling owner alone		-0.107 (0.33)	-0.287 (1.36)	0.722 (0.93)
Management		0.129 (0.18)	-0.117 (1.04)	0.771 (0.33)
Family		0.733 (1.22)	0.637 (0.67)	0.137 (1.34)
PACDA		-0.537 (4.97) ^{***}		-0.399 (2.73) ^{**}
Connected transactions			0.688 (2.68) ^{**}	0.407 (2.08) ^{**}
Price-to-NAV	-2.081 (3.07) ^{***}	-0.399 (2.97) ^{***}	-0.312 (2.43) ^{**}	-0.531 (1.78) [*]
Free cash flow	1.883 (-0.38)	1.214 (-0.63)	2.810 (-1.34)	0.361 (-1.04)
Sales growth	1.036 (-1.17)	0.831 (-1.90) [*]	0.326 (0.91)	0.321 (1.32)
Dividend	1.099 (0.73)	2.006 (0.16)	1.381 (0.32)	0.379 (0.96)
Size	-2.117 (1.09)	1.335 (0.17)	2.291 (0.34)	0.674 (0.77)
Analyst	-1.003 (-1.59)	-0.997 (1.29)	-1.811 (-0.27)	-0.691 (-0.97)
Age	0.377 (-0.97)	-0.722 (-0.30)	-0.221 (-0.78)	-0.622 (-0.77)
Tax	-0.971 (1.28)	-1.331 (-0.44)	-1.399 (-0.86)	0.971 (0.61)
Leverage	-0.441 (-0.53)	0.304 (-0.66)	-0.396 (0.22)	-0.439 (-0.70)
Lambda	0.108 (0.38)	0.033 (0.27)	-0.011 (0.66)	-0.073 (0.19)
Industry Dummies	Yes	Yes	Yes	Yes
F-value	3.72 ^{***}	6.07 ^{***}	5.09 ^{***}	6.77 ^{***}
Adjusted R-squared	19.80	22.71	23.11	29.17
Number of firms	87	69	56	56

This table shows the cross-sectional regressions estimating the determinants of the CARs in CSBOs. CARs are calculated over a 71-day window centred around the buyout announcement day. “Pyramids with Ultimate Owners” (when companies are not widely held) equals one if the controlling owner exercises control through at least one publicly traded company, zero otherwise; “Controlling Owner Alone” equals one if there is no second owner holding at least 10% of the stock, zero otherwise;

“Management” equals one if the CEO, board chairman, or vice-chairman comes from the controlling family, zero otherwise. “Family” equals one if the controlling owner of the corporation is a family, zero otherwise. Lambda: following the Heckman (1979) procedure, a PROBIT model is estimated with, as predictors, Managerial ownership, Square of managerial ownership, Performance-adjusted current discretionary accruals, Price-to-NAV, Size, Analyst, Age, Free cash flow, Sales growth, Dividend, and Tax. Estimates of the PROBIT model are used to compute the inverse Mill’s ratio (Lambda) for each firm. ***, **, and * stand for statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 18 Determinants of premiums in CSBOs (with interactions)

	Model 1	Model 2	Model 3
Intercept	1.023 (0.11)	-2.108 (1.05)	2.823 (-0.25)
PACDA	-3.571 (4.33) ^{***}		-2.977 (2.73) ^{***}
Connected transactions		1.597 (3.14) ^{***}	1.067 (2.67) ^{**}
Price-to-NAV	-0.671 (2.82) ^{***}	-0.833 (2.07) ^{**}	-0.751 (-1.88) [*]
PACDA*Ownership dummy	-1.413 (-0.84)		-0.755 (-0.67)
PACDA*Deviation dummy	-0.318 (-3.72) ^{***}		-0.237 (-2.14) ^{**}
PACDA*Pyramids with ultimate owners	-0.292 (2.52) ^{**}		-0.371 (2.07) ^{**}
PACDA*Controlling owner alone	-0.361 (-1.91) [*]		-0.322 (1.37)
PACDA*Management	-0.487 (-1.78) [*]		-0.372 (-2.37) ^{**}
PACDA*Family	-0.138 (-2.73) ^{**}		-0.099 (1.06)
PACDA*Analyst dummy	-0.747 (-2.33) ^{**}		-0.121 (1.68) [*]
PACDA*Size dummy	0.436 (0.99)		-0.137 (0.75)
PACDA*Age dummy	-0.723 (1.29)		-1.016 (1.12)
Connected transactions*Ownership dummy		-0.317 (0.65)	1.023 (0.39)
Connected transactions*Deviation dummy		1.060 (2.24) ^{**}	0.810 (2.74) ^{***}
Connected transactions*Pyramids with ultimate owners		0.223 (3.17) ^{***}	0.117 (2.07) ^{**}
Connected transactions*Controlling owner alone		0.018 (1.76) [*]	0.317 (1.34)
Connected transactions*Management		0.917 (1.83) [*]	0.492 (0.77)
Connected transactions*Family		1.301 (1.66) [*]	1.671 (2.07) ^{**}
Connected transactions*Analyst dummy		0.218 (-1.39)	0.017 (1.81) [*]
Connected transactions*Size dummy		-0.701 (0.88)	0.031 (1.37)
Connected transactions*Age dummy		0.077 (1.03)	-0.071 (0.66)
Lambda	0.037 (0.91)	0.029 (0.61)	-0.109 (0.64)
Controls included	Yes	Yes	Yes
Industry Dummies	Yes	Yes	Yes

F-value	5.99 ^{***}	4.18 ^{***}	7.32 ^{***}
Adjusted R-squared	20.86	18.02	29.33
Number of firms	69	56	56

This table shows the cross-sectional regressions estimating the determinants of the premiums in CSBOs. The anticipation window for the premiums is 30 days. “Ownership dummy” equals one if managerial ownership is higher than the median and zero otherwise; “Deviation dummy” equals one if the ratio of cash-flow to voting rights is lower than the median and zero otherwise; “Pyramids with Ultimate Owners” (when companies are not widely held) equals one if the controlling owner exercises control through at least one publicly traded company, zero otherwise; “Controlling Owner Alone” equals one if there is no second owner holding at least 10% of the stock, zero otherwise; “Management” equals one if the CEO, board chairman, or vice-chairman comes from the controlling family, zero otherwise. “Family” equals one if the controlling owner of the corporation is a family, zero otherwise. “Analyst dummy” equals one if the analyst coverage is lower than the median and zero otherwise; “Size dummy” equals one if the firm size is smaller than the median and zero otherwise; “Age dummy” equals one if the number of years the firms staying public is smaller than the median and zero otherwise. Lambda: following the Heckman (1979) procedure, a PROBIT model is estimated with, as predictors, Managerial ownership, Square of managerial ownership, Performance-adjusted current discretionary accruals, Price-to-NAV, Size, Analyst, Age, Free cash flow, Sales growth, Dividend, and Tax. Estimates of the PROBIT model are used to compute the inverse Mill’s ratio (Lambda) for each firm. The results for Free cash flow, Sales growth, Dividend, Size, Analyst, Age, Tax, and Leverage are not tabulated. ^{***}, ^{**}, and ^{*} stand for statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 19 Determinants of CARs in CSBOs (with interactions)

	Model 1	Model 2	Model 3
Intercept	-0.731 (0.69)	1.008 (0.67)	1.899 (-1.31)
PACDA	-2.344 (3.03)***		-1.877 (2.71)***
Connected transactions		2.667 (2.90)***	2.007 (2.17)**
Price-to-NAV	-0.976 (1.82)*	-1.097 (1.67)*	-0.988 (-2.06)**
PACDA*Ownership dummy	-0.137 (-0.46)		0.613 (-0.60)
PACDA*Deviation dummy	-0.377 (-2.99)***		-0.311 (-2.78)***
PACDA*Pyramids with ultimate owners	-0.133 (1.76)*		-0.071 (1.90)*
PACDA*Controlling owner alone	-0.833 (-1.08)		-0.032 (-1.69)*
PACDA*Management	-0.027 (-2.07)**		-0.077 (-1.37)
PACDA*Family	-0.413 (-1.09)		-0.034 (1.17)
PACDA*Analyst dummy	-0.137 (-0.33)		-0.319 (0.08)
PACDA*Size dummy	0.311 (0.16)		0.771 (0.26)
PACDA*Age dummy	-0.389 (2.29)**		-0.144 (2.12)**
Connected transactions*Ownership dummy		0.026 (0.45)	0.714 (1.39)
Connected transactions*Deviation dummy		0.977 (2.36)**	0.138 (3.34)***
Connected transactions*Pyramids with ultimate owners		0.127 (2.17)**	0.110 (1.88)*
Connected transactions*Controlling owner alone		0.207 (1.36)	0.179 (0.10)
Connected transactions*Management		0.312 (1.63)	0.313 (0.09)
Connected transactions*Family		2.073 (1.88)*	1.031 (1.09)
Connected transactions*Analyst dummy		0.087 (-1.13)	0.109 (1.01)
Connected transactions*Size dummy		0.307 (0.38)	-0.013 (1.43)
Connected transactions*Age dummy		0.039 (2.03)**	0.021 (1.79)*
Lambda	-0.022 (0.18)	0.060 (0.71)	-0.097 (0.39)
Controls included	Yes	Yes	Yes
Industry Dummies	Yes	Yes	Yes

F-value	3.41 ^{***}	5.07 ^{***}	6.88 ^{***}
Adjusted R-squared	17.22	16.08	24.33
Number of firms	69	56	56

This table shows the cross-sectional regressions estimating the determinants of the premiums in CSBOs. The anticipation window for the premiums is 30 days. “Ownership dummy” equals one if managerial ownership is higher than the median and zero otherwise; “Deviation dummy” equals one if the ratio of cash-flow to voting rights is lower than the median and zero otherwise; “Pyramids with Ultimate Owners” (when companies are not widely held) equals one if the controlling owner exercises control through at least one publicly traded company, zero otherwise; “Controlling Owner Alone” equals one if there is no second owner holding at least 10% of the stock, zero otherwise; “Management” equals one if the CEO, board chairman, or vice-chairman comes from the controlling family, zero otherwise. “Family” equals one if the controlling owner of the corporation is a family, zero otherwise. “Analyst dummy” equals one if the analyst coverage is lower than the median and zero otherwise; “Size dummy” equals one if the firm size is smaller than the median and zero otherwise; “Age dummy” equals one if the number of years the firms staying public is smaller than the median and zero otherwise. Lambda: following the Heckman (1979) procedure, a PROBIT model is estimated with, as predictors, Managerial ownership, Square of managerial ownership, Performance-adjusted current discretionary accruals, Price-to-NAV, Size, Analyst, Age, Free cash flow, Sales growth, Dividend, and Tax. Estimates of the PROBIT model are used to compute the inverse Mill’s ratio (Lambda) for each firm. The results for Free cash flow, Sales growth, Dividend, Size, Analyst, Age, Tax, and Leverage are not tabulated. ^{***}, ^{**}, and ^{*} stand for statistical significance at the 1%, 5%, and 10% levels, respectively.