A Study of Going-Private Transactions in Hong Kong

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This is the first time for me to carry out empirical research. It is a completely new experience to me. From the time-consuming data collection, to rigorous data analysis, and to hypothesis testing, I experienced the hardship of research and the rigor required in academic life. The completion of this study should be dedicated to my dear supervisors, *Mr. Francis Lam* and *Prof. Firth*. They offered me considerable instructions and warm supports during the course of study. I believe, without them and their constructive advice, I could not finish this thesis in a timely and smooth manner. I would like to take this opportunity to express my gratitude to them and hope I can reward them with more excellent research results in the future.

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Abstract

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Abstract for the thesis entitled ' A Study of the Going-Private Transactions in Hong Kong'

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This study aims to empirically investigate going-private transactions in Hong Kong. A total of 54 buyout proposals within the period 1986-1996 are selected to be the final sample. It is found that going-private practices in Hong Kong have unique characteristics not found in Western countries. For example, the management is always the controlling (substantial) shareholder of the target firm and the management already owns overwhelming equity interests even before the buyout. Another feature is that gone-private firms seldom choose to revert to stock market, i.e. reverse LBOs as the American counterparts usually do.

Among competing hypotheses, this study provides strong support to the gains-sharing hypothesis. Positive wealth increase is observed around the announcement of the going-private proposals. All evidence suggests that minority shareholders are not subject to systematic exploitation in the course of going private.

An important finding of this study is that regulation and its effect must be a factor to be taken into account in doing research. The requirement of trading suspension has a great influence on the calculation of CARs in the study. Significant difference is found between the suspension and non-suspension group.

At the same time, this study finds supporting evidence for the information asymmetry hypothesis as one likely motivation behind going-private transactions in Hong Kong. The property industry is hypothesized to have a greater extent of information asymmetry on the basis of its high property to total assets ratio. It is found in the study that property companies are more prone to going-private buyouts and that the property ratio is the only significant variable, among the ones considered, in explaining the odds of going-private decisions.

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Part I Introduction

1.1 Motivations

The public corporation has long been regarded as one of the most efficient organizational forms. It is an important way by which a company obtains finance it needs for development. It also helps investors realize their investments very quickly. From 1970's on, however, some public corporations have chosen to convert their organizational forms into privately held firms, a process commonly described as a "going-private transaction" in the literature. As in other countries, going private is also a controversial issue in Hong Kong. Some instances of going-private transactions aroused controversy and even adverse reactions in society, such as the "Chinese Estates" and "Shui Hing" cases. However, no study has been carried out to systematically investigate the going-private practice in Hong Kong. Thus, it is worthwhile doing this study so to fill a void in the current literature.

There are several other reasons for focusing on Hong Kong. Generally speaking, Hong Kong is an important financial center in the Asia-Pacific area. Its stock market is one of the largest in the world and is highly international in nature. The market is open, free, and transparent, and with simple tax rules. Little governmental intervention makes it close to a perfectly competitive market. Many famous international investment funds have substantial investment proportions in the Hong Kong market. More importantly, going-private transactions in Hong Kong have unique characteristics that are different from those in other countries.

For example, in Hong Kong, MBOs can be also called PBOs (Parent Company Buyouts) for most of the cases, because the management of the target firm usually has a close relationship with the controlling shareholders or even is the controlling shareholder itself. Other special features about going-private transactions of Hong Kong include industry characteristics, absence of reverse LBOs, and the main motivation underlying going-private transactions. These features will be covered in Part IV of this thesis.

1.2 Objectives

This study aims to empirically examine going-private transactions in Hong Kong. First of all, the **gains-sharing hypothesis** will be tested in the Hong Kong context. Since their emergence, one critical issue of going-private transactions is the fairness to minority shareholders in the course of buyouts. People would ask, "Have minority shareholders been exploited when a firm goes private? Do minority shareholders lose their interests when being bought out?" To answer these questions, the gains-sharing hypothesis has been developed in the literature. It hypothesizes that minority shareholders share the gains with the party who wants to privatize the firm. Several American studies (DeAngelo, DeAngelo and Rice (1984), Lehn and Poulsen (1989), Marais, Schipper and Smith (1989), Hite and Vetsuypens (1989), and others) provide empirical support to this hypothesis. Significantly positive abnormal returns to the public shareholders of the target firms are identified around the announcement of going-private proposals in these studies. Similar tests will be carried out using data in Hong Kong. The effect of going-private transactions on the public shareholders' wealth will be examined around the announcement of going-private proposals.

Secondly, the main motivation underlying going-private transactions in Hong Kong will be investigated. In past studies, researchers developed a number of hypotheses about the motivation for going-private transactions, such as tax shields, wealth transfer from bondholders, reduced agency costs and improved incentives, all of which will be discussed in Part III, the literature review section. However, I

conjecture that one possible motivation for going-private transactions in Hong Kong is the information asymmetry hypothesis and some empirical support to this hypothesis will be provided in my study.

Part II Legal Background

As already mentioned, the major concern of a going-private transaction is its fairness to public shareholders. Minority shareholders are potentially exposed to exploitation in the course of going-private. At the same time, the law, codes and some other regulations provide a framework for the protection of minority shareholders. The main regulations concerning going-private transactions are the *Hong Kong Companies Ordinance* and the *Hong Kong Codes on Takeovers and Mergers and Share Repurchases*.

2.1 Hong Kong Companies Ordinance

According to the *Companies Ordinance*, a going-private transaction can be effected either by means of a scheme of arrangement or by a public offer, or even by share repurchase.

When a company alters its capital structure (such as taking the firm private) by means of a scheme of arrangement, Section 166 of *Hong Kong Companies Ordinance* comes into force. It applies to companies making reorganizations by a compromise or by a scheme of arrangement. It enables a company to compromise or make arrangements with its creditors or other related members with the sanction of the court. Under Section 166, when a compromise or arrangement is proposed between a company and its creditors or any class of creditors, or between a company and its members or any class of members, a meeting of all the members or

creditors, or a class of either members or creditors, is ordered to be summoned by the court on the application of the company or any other related parties. When the meeting is summoned, a statement explaining the effects of the scheme must be sent with every notice summoning the meeting. In the statement, both the material interests of the directors and the effects of the scheme must be disclosed. At the meeting, the approval of a majority of 75 per cent in value of the creditors or members present or voting in person or by proxy is required before the petition to the court for sanction of the scheme. The court must ensure that the *Ordinance* has been complied with and that the majority has acted bona fide. Once the scheme is approved by the majority in the meeting and sanctioned by the court, it is binding on all the related parties. In summary, two key procedures exist in Section 166. The first step is the summoning of the meeting, and the second is the sanction by the court after approval by the majority at the meeting. Basically, the 75% approval level is critical for a successful buyout proposal. As an example, it is because the requisite 75 per cent of share approval was not obtained that the going-private proposal advanced by Bond Corporation International Ltd. in 1989 ended in failure.

Another avenue to go private under the *Hong Kong Companies Ordinance* is through a public offer. When a company makes a general offer to buy all the shares or an entire class of shares in another company not already owned by it, *Companies Ordinance* Section 168 provides that Schedule 9 of the *Ordinance* should take effect. In Schedule 9, both the rights of the transferee company and the minority shareholders are specified. Approval of 90 per cent in value of shares of the

transferor company has to be obtained if the offer is to be accepted. In fact, a company that has acquired 90 per cent or above of another company's shares has the obligation to buy the remaining shares. The court can prevent the acquiring company from compulsorily acquiring the shares of dissenting members if it is proved that it is unfair to the general body of shareholders in the transferor company. Generally, since the scheme has been approved by 90 per cent of the shareholders, prima facie, it will be taken to be a fair one.

Lastly, in the event that a company makes a general offer to buy back all of its shares, or all of a class of shares, Section 168B of Companies Ordinance provides that Schedule 13 applies. The provisions given by Schedule 13 are very similar to those discussed above. It also requires the agreement of shareholders representing 90 per cent by value of the shares in issue.

2.2 Hong Kong Codes on Takeovers and Mergers and Share Repurchases

Another important regulation directly governing going-private transactions is the *Hong Kong Codes on Takeovers and Mergers and Share Repurchases* (*Codes*) issued by the Securities & Futures Commission (SFC). The primary objective of the *Codes* is to protect the interests of minority shareholders. The *Codes* aims to ensure that minority shareholders have an opportunity of receiving full information and a fair price for their holdings when control of their company changes. It has no force of law as the *Companies Ordinances* does, but it provides guidelines for listed companies involved in takeovers and mergers, going private, and similar kinds of transactions. It applies to all listed companies in Hong Kong. *The Rules Governing the Listing of Securities* on Hong Kong Stock Exchange expressly require compliance with the *Codes*.

The *Codes* has been subject to modifications and alterations from time to time. The main amendments regarding going-private transactions are summarized below.

Before 1993, the requirements in the 1975 *Codes* were almost the same as those of the *Companies Ordinance*. For a successful going-private proposal, the approval of shareholders with 90 per cent by value of shares under consideration was required in a general offer. As for going private by way of scheme of

arrangement, shareholders with only 75 per cent by value of shares were required to vote yes in the member meeting.

In 1993, the rule concerning going private by way of scheme of arrangement was amended. The required percentage of approval to be obtained from independent shareholders (shareholders other than the person seeking to take the company private and persons acting in concert with him) was increased from 75 per cent to 90 per cent, in addition to satisfying any voting requirements imposed by law. In addition, an independent financial adviser had to be appointed. The terms of the scheme had to be fair and reasonable in the opinion of the appointed independent financial adviser. With the purpose of protecting the interests of minority shareholders, the 1993 *Codes* made going-private transactions more difficult to succeed. According to a consultation paper issued by the Securities & Futures Commission on 12 February, 1998, "The offer prices in 12 privatization proposals which have been made since the rule (1993) was introduced have been higher on average than the (offer) prices in the three years before its introduction."

Contrary to the 1993 *Codes*, the newest amendment to the provisions regarding going-private by way of scheme of arrangement made it much easier for listed companies to go private. Under the new rules effective form 1 August 1998 on, a going-private proposal may become successful even with the vote of less than 90 per cent of the independent shareholders, as long as two conditions are satisfied. First, the approval of 75 per cent in value of the shares required under the

Companies Ordinance must be satisfied, and second, independent shareholders voting against the going-private proposal can not make up more than 2.5 per cent of the total voting rights of the firm. In addition, the requirement that the terms of the scheme must be fair and reasonable in the opinion of an independent financial adviser is removed, too. The SFC believes that by changing the requirement, greater opportunities can be created for stockholders to receive more accurate independent financial advice.

In addition to above-mentioned rules, the *Codes* stipulate a lot of disclosure requirements so that the going-private transactions will be highly transparent and shareholders may be well informed. Thus, the information asymmetry can be alleviated with more disclosure. For example, when a firm announces its intention to make an offer, the announcement is required to contain such information as the offer terms, the identity of the ultimate offeror or the ultimate controlling shareholders, as well as the details of any existing holding of voting rights in the offeree company. Other disclosure requirements include the disclosure of asset revaluation, disclosure of dealings in relevant securities during the offer period, disclosure of acquisition or disposal of shares carrying voting rights for 10% or above, etc. All these requirements provide useful information to public shareholders for reference.

In addition, other regulations also lay down disclosure requirements helpful to minority shareholders. *Securities (Disclosure of Interests) Ordinance* requires

the disclosure of substantial shareholdings (10 per cent or more) in listed companies and disclosure of all dealings by directors and chief executives in securities of listed and associated companies. *Securities (Insider Dealing) Ordinance* prohibits insider trading induced by information asymmetry. Insider dealing occurs when someone related to a listed company takes advantage of some confidential information unknown to the public to make personal gains by trading on this company's securities. Insider dealing is contrary to the public interest. It creates unfairness and can destroy investors' confidence in capital market. The *Securities (Insider Dealing) Ordinance* specifies that it is the duty of every officer of a company to take all measures to prevent the occurrence of insider dealing. The Securities & Futures Commission (SFC) is responsible for enforcing the *Securities (Disclosure of Interests) Ordinance* and has specific power in the tribunal related to insider dealing.

A special requirement related to going-private transaction comes from the *Listing Rules* of the Stock Exchange of Hong Kong (Chapter 6 and Practice Note 11, Volume 1, *Listing Rules*). It stipulates that when there is price-sensitive information which cannot be disclosed for the moment, or when the issuer is subject to an offer, or when issuer goes into receivership or liquidation, among others, a request for suspension of trading should be made to the Exchange by the issuer or the issuer's authorized representative or financial adviser and this request must be supported by specific reasons. However, the Exchange does not feel it necessary or appropriate to suspend dealings following the publication of an announcement in the

press, simply on the grounds of allowing that information to circulate through the market. In summary, some firms may ask for a period of suspension of dealing when they announce their going-private proposals. In this study, of the 52 going-private transactions in the sample (2 cases are excluded here due to information deficiency), 30 requested a trading suspension, while the remaining 22 did not. In fact, this regulation has significant implications on the design and results of the study, particularly on the determination of event days. These implications will be discussed in Part VI of this thesis.

A large number of Hong Kong companies are incorporated in Bermuda. Bermuda companies are governed by the *Bermuda Companies Act 1981*. However, if the shares and/or the debentures of a Bermuda-incorporated company are listed on the Hong Kong Stock Exchange, it must comply with the *Listing Rules, the Hong Kong Codes on Takeovers and Mergers and Share Repurchases*, and *the Securities (Disclosure of Interests) Ordinance*.

Part III Literature Review

To begin with, the distinction between the two terms "going private" and "privatization" is worth noticing. By "privatization", we usually mean the transformation of a state-owned enterprise into a privately held firm. For instance, the government in some country may sell a state-owned enterprise to the private sector, but it is not related to a change in the listing status of the firm. However, the term "going private" means that an originally publicly held firm is delisted from the stock exchange and transformed to a private company. In real life, these two terms are sometimes used interchangeably. For example, in Hong Kong, the *Codes on Takeovers and Mergers and Share Repurchases* employs the term "privatization", instead of "going private". In this study, in order to avoid unnecessary confusion, "going private" will be used to describe the transformation of a listed firm into a privately held firm.

3.1 Gains-Sharing Hypothesis

The first influential study on going-private transactions is done by DeAngelo, DeAngelo and Rice (1984). They apply the standard event study methodology to a sample of 72 firms making going-private proposals during the 1973-80 period to test the gains-sharing proposition. Two tests are presented respectively. The first test examines the average wealth change effect on public stockholders around the initial public announcement of going-private proposals. The second test observes the average wealth change associated with the withdrawal

of going-private proposals. According to the gains-sharing hypothesis, a positive abnormal wealth change is expected on the announcement of going-private proposals in the first test, while a negative abnormal wealth change should be observed in the second test upon the withdrawal of going-private proposals.

Their results are consistent with the hypothesis. Upon the initial announcements of going-private proposals, a significant average abnormal wealth increase is identified. The average abnormal change in stockholders' wealth at announcement (t = 0) is 22.27%, which is significantly positive at any conventional level of statistical significance. In order to avoid under-estimation caused by possible information leakage and to catch all the wealth effects associated with going-private announcement, the average cumulative abnormal returns beginning with 40 days before the announcement day, i.e. (-40, 0), is calculated, too. The figure is positive 30.40%, which is also highly significant from a statistical standpoint. In addition, it is found that on average, the initial offer price in the sample proposals exceeds the market price (two months before the proposal) by 56.31%. These evidences show that the public stockholders experience substantial wealth increases when there is a proposal for converting their firm to private ownership. Further investigations reveal that whether or not there is a third party involved, i.e. leveraged buyout, minority shareholders harvest a substantial wealth increase at the announcement of the proposal. They also find that no matter how many shares the management holds in the firm, public stockholders still earn significantly positive returns.

In the second test, there are 18 firms out of the full sample whose going-private proposals finally ended in failure. The two-day (-1,0) average prediction error is negative 8.88% upon the withdrawal, which is again statistically significant at any conventional level. However, the average cumulative prediction error is found to be positive 12.89% for event window (-40, -2). One possible explanation to this is the confounding effect caused by the initial proposal announcement during this period. When the seven firms with initial announcement during this period are dropped, the corresponding figure becomes insignificantly different from zero. In fact, a negative wealth effect characterizes almost all 18 sample firms at the withdrawal announcement. Sixteen suffer negative abnormal returns and the remaining two are trivially positive. The same conclusion is drawn when an extended sample of 22 firms is used, which includes those with other potential confounding events at the withdrawal announcement.

At the end of their study, a comparison is made between the stockholder gains observed in going-private transactions and those reported in other arms-length acquisitions. The average stockholder wealth increases are found to be of the same order of magnitude: 30% in going-private transactions, 24% in merger and 40% in successful interfirm cash tender bids. Offer premiums show a similar pattern. The average premiums are 56% for going-private proposals by way of cash offer and 49-56% for the interfirm cash tender offers. All these similarities tend to suggest that no systematic exploitation of minority shareholders exist in going-private transactions.

Lehn and Poulsen (1989) obtain similar results in their study. Adopting the same methodology, they cover 263 successful going-private transactions from 1980 through 1987. Over the sample period, both the number of buyout proposals and the average value of equity of going-private companies (firm size) increased dramatically with time. They ascribe this large increase in going-private activities partly to the increase of hostile takeover threat. For the 244 transactions with data available, the average cumulative abnormal returns around the first announcement of going-private proposals are significantly positive 16.3%, measured over a (-1, +1) window. When extended to the (-10, +10) and (-20, +20) event windows, the average cumulative abnormal returns are 19.9% and 20.5%, respectively. Both figures are highly significant from a statistical standpoint. Another measurement of wealth change, the average premium paid, is directly examined. The premium is defined as the value of cumulative non-market-adjusted return over 20 days preceding the initial announcement divided by the final price at which the firm's common shares traded. The average premium for the 257 firms in the sample is 36.1%.

Marais, Schipper and Smith (1989) investigate the wealth effects of going private on senior securities, such as nonconvertible bonds and preferred stock. Their sample contains 290 buyout proposals made by 264 American companies from 1974 to 1985. In the study, they also estimate the wealth effects to the common stockholders by using the index model---conditioning on the returns to the equal-weighted stock index. Their results show that in the pre-announcement period

(defined in their sample as 68-day period preceding the appearance of the going-private proposal announcement), an average 9% abnormal return is observed for common stockholders. Over the announcement period (-1, 0), the average abnormal return for common stock is 13%. As for the post-announcement period, no significant abnormal return is observed for successful buyouts, while in contrast, almost uniformly negative abnormal returns are identified for buyout proposals that ultimately fail.

Another empirical study is conducted by Hite and Vetsuypens (1989). They focus on the wealth change to parent company shareholders around the announcement of divisional management buyouts. Their sample consists of 151 division buyouts during the period 1973-1985. Their research method remains the same---the conventional event study technique. Despite the absence of "arms-length" bargaining, they find for their 151 sample companies, the mean cumulative prediction errors are 0.55 % over the two-day period (-1, 0). The number is very small relative to the findings in previous studies, but it is still statistically significant at 0.05 level. When it is compared to the mean two-day prediction errors for 468 interfirm asset sales, 1.12 %, no significant difference is found. In summary, the evidence indicates that management buyout of divisions will not result in a reduction in the parent company's share price. Neither does divisional management buyout produce smaller gains to shareholders than interfirm asset sales. Instead, small but significantly positive gains are captured during the two-day period around the announcement of divisional management buyouts.

Similarly, Travlos and Cornett (1993) find in their study that going-private buyouts generate large benefits to the firm's owners. They select 56 firms undertaking going-private proposals during the period 1975 through 1983 as the sample. The mean percentage of managerial holdings for their sample is 28.34% (48.74%, if including beneficial ownership). The mean cash premium, that is, the offer price divided by market price (one month before the proposal announcement) is 141.90%. The average cumulative abnormal returns over the two-day announcement period (-1, 0) are 16.20%, which is significantly positive at the 0.01 level. Among the 16.20%, 8.17% is earned the day before the announcement day (t = -1) and another 8.03% is earned on the announcement day (t = 0). The average cumulative abnormal return for the 31-day period (-15, +15) is 17.63%. No systematic pattern of abnormal returns is observed with respect to the post-announcement period. It can be seen that almost all the gains from the going-private buyout are captured on the announcement day (t = 0) and the day before (t = -1). According to Travlos and Cornett (1993), the positive abnormal return on the days immediately prior to the announcement can be explained by a possible information leakage. Their empirical results are consistent with the gains-sharing hypothesis.

Another related study is conducted by Lowenstein (1985), who studies 28 management buyout proposals from 1979 to 1984. In his sample, the mean percentage of shares owned by management is only 6.5%. He observes a 56% mean offer premium ((offer price – market price) / market price) for the stockholders in

his study. He also finds that the size of the premium increases with the number of outside bids involved in the going-private transaction. When more than three bids are involved, the mean premium jumps to 69%. He, therefore, concludes that multiple bids are encouraged in order for the stockholders to get fairly treated and gain a good deal.

Some other studies on going-private transactions give support to the gain-sharing proposition, too. For example, Asquith and Wizman (1990) find in their analysis that for 47 successful going-private transactions during the period 1980-1988, the average abnormal return gained by stockholders is 37.9%. The way they calculate the abnormal return is simply subtracting the change in the Standard & Poor 500 index (S & P 500) from the change in stock price of the target firm. Other researchers such as Kaplan (1989), Muscarella and Vetsuypens (1990) draw similar conclusions on the gains-sharing hypothesis. Kaplan (1989) finds in his study on 76 management buyouts from 1980 to 1985 that the shareholders earn a median premium of 42.3%. After adjusting for the movement in the S & P 500 over the same period, the median return to shareholders is 37.3%.

Apart from above mentioned, Cheung & Shum (1993) investigate takeover activities in Hong Kong. Their sample consists of 50 target firms and 19 bidding firms from 1986 to 1991. They find that there are significantly positive abnormal returns for the public shareholders of the target firms, while no significant wealth increase effect for the bidders. On the announcement day, the abnormal return

earned by the shareholders of the target firms is on average 5.506%. This figure can serve as a basis for comparison with this going-private study in Hong Kong.

3.2 Gains from Going-Private Transactions

While the gains-sharing proposition has substantial empirical support as reviewed above, the source of gains in going-private transactions is a much more controversial issue. It has received a good deal of research attention but the research results are mixed. So where are the gains from? Why does the management or the controlling shareholder wants to change the corporate structure of the firm by taking it private? Several explanations have been advanced.

3.2.1 Tax Shield Effect

Leverage buyouts (LBOs) characterized going-private transactions and takeover activities in the United States in the 1980's. According to DeAngelo and DeAngelo (1987), LBOs constituted nearly 60% of going-private transactions during 1978-82, while the corresponding ratio for the prior five-year period was only 33%. In 1982, only 2 in 15 sample buyouts did not include third-party equity investors. On the grounds of the popularity of LBO and the material level of corporate debt induced, tax credits associated with the increased financial leverage attract people's attention. Interest savings resulting from increased leverage, depreciation deduction due to asset step-ups and the use of employee stock ownership plans (ESOPs) are considered to be the three principal tax incentives in going private in the past literature. Kaplan (1989) has empirically examined these three factors on 76 management buyouts made in the period 1980 to 1986. These companies experience substantial increases in leverage. The median ratio of debt (book value) to total capital rises from 18.8% at the time of buyout to 87.8% after

buyout. His results indicate that the tax benefit from interest deductions varies with the marginal tax rate and the maturity. The longer the maturity and the higher the marginal tax rates, the larger the value of the interest deductions will be. When using 15%, 30% and maximum 46% as the tax rate, the median percentage of the premium paid to pre-buyout shareholders are respectively 13.1%, 26.2% and 40.2%. Stepping up the assets will naturally increase the depreciation expense and thus brings about some tax advantage. 33 out of 76 companies in his sample elect asset step-ups. The tax benefit from asset step-ups makes up 30.4% of the premium paid to pre-buyout shareholders for companies electing step-ups and –27.0% for those not electing step-up. Although asset step-up elections do have a positive value, Kaplan points out that they are not the driving forces behind management buyouts. The first reason is that almost 50% of the MBOs do not involve an asset step-up. The second reason is that even for companies making such an election, the benefit from the asset step-up is much smaller than that from interest deductions. In his study, Kaplan finds that companies rarely intend to use Employee Stock Ownership Plan (ESOP), the third potential source of tax advantages. Only 5 firms are observed to use it as part of the buyout package. Kaplan's study supports the hypothesis that tax benefits are an important source of the wealth gains in management buyout transactions.

Previous studies, like Lowenstein (1985), Lehn and Poulsen (1989), Marais, Schipper, and Smith (1988) also find that premiums paid to stockholders are correlated to tax savings.

In contrast, as noted by Travlos and Cornett (1993), the positive relationship between changes in financial leverage and share price (stock value increase being induced by the increased tax credits) described by M-M theory still remains controversial. It is believed that any level of debt other than the optimum debt ratio can decrease the firm's value, as well as the share price. Miller (1977) argues that the personal tax disadvantage of debt offsets the corporate tax advantage of debt. Only the leverage change that moves a firm closer to its optimal tax-induced debt level leads to higher tax savings, and thus a higher stock price.

To conclude, the tax shield effect is one important source of gains in going-private transactions in the United States, but not an exclusive one. It can only partially explain the premiums paid to stockholders.

3.2.2 Wealth Transfer Effect

The premium in going-private transactions may come from the transfer of wealth to shareholders from other parties, especially bondholders, since a big portion of going-private transactions are effected with leverage buyouts. Empirical evidences on this factor are inconsistent.

Marais, Schipper and Smith (1989) investigate the effect of going-private buyouts on the value and default risk of the convertible and non-convertible debt, as well as preferred stock. They select 264 American firms making 290 buyout proposals from 1974 to 1985 as the final sample. Before the buyout, the median leverage ratio for the sample is 26.3%, and only 22 of 113 firms had ratios exceeding 50%. After the buyout, however, the median leverage ratio increases to 84.5%, and 43 of 113 firms' ratios exceed 90%. The largest increase in leverage is due to the increase in private non-convertible debt. To measure the wealth effects on the debtholders and preferred stockholders, a two-index model is used by conditioning the returns on both stock index and the bond index. The wealth effects are reported respectively in the pre-, post- and the announcement periods. In the pre-announcement period (-68, 0), the average abnormal return for convertible debt is significantly positive 3%, while non-convertible debt and preferred stock do not experience abnormal returns significantly different from zero. At the buyout announcement, the average abnormal return for convertible debt is 6%. Although their research shows that the mean and median abnormal returns of non-convertible debt are approximately zero in the announcement period, individual cases in the

sample do experience statistically significant abnormal losses or gains, ranging from –7% to +5%. In the announcement period, no significant abnormal returns are observed for securities associated with successful buyouts, while negative abnormal returns are found for unsuccessful proposals. In this study, the only class of securities without gains on average is non-convertible debt. However, analysis by individual securities does not suggest that the non-convertible debtholders are seriously harmed. If wealth transfer from bondholders is the main factor behind going–private buyouts, then a larger ratio of pre-buyout debt to equity should yield a greater percentage return to stockholders through debtholder expropriation. Based on the investigation of 103 buyouts, the rank correlation between abnormal returns to common stockholders and debt-equity ratios is less than 0.01 and is not significant at any conventional level of statistical significance. As a result, their study does not support the hypothesis that wealth transfer from bondholders is an important source of stockholder gains. Similar to above results, Lehn and Poulsen (1988) find no evidence that bondholders and preferred shareholders suffer losses in going-private transactions.

In contrast, both Asquith and Wizman (1990), and Travlos and Cornett (1993) observe statistically significant wealth losses to bondholders upon the announcement of going-private proposals. In Asquith and Wizman's study, 214 bonds representing all publicly traded, nonconvertible debt securities in 65 leveraged buyouts during the period 1980-1988 are analyzed. LBOs once used as samples in previous studies (Kaplan (1989) and Lehn and Poulsen (1988)) are cross-

checked here. Abnormal monthly bond returns are computed by subtracting the change in the bond index from the bond returns over the same time period. The average cumulative abnormal returns earned by the bondholders are reported over one-month, four-month and the entire-period (two months before the announcement till two months after the successful or withdrawal day). They are respectively –1.1%, -2.2% and –2.0% for the total sample. For ultimately successful buyouts (47 firms in the sample), the figures are -1.7%, -3.7% and -2.8%, while for unsuccessful buyouts (18 out of 65 firms), abnormal returns earned by bondholders are very close to zero. The total abnormal loss suffered by public debts makes up 3.2% of the total abnormal stockholder gains. In summary, Asquith and Wizman (1990) state that leveraged buyouts decrease pre-buyout bondholders' wealth, but of the abnormal gains earned by shareholders, wealth transfer from bondholders constitutes only a small fraction. Another important finding of their study is that it can make a substantial difference whether the bond is protected or not and how strongly the bond is protected. Bonds without protection covenants (such as limiting leverage increases) suffer in the course of going private, while bonds with such covenants can have positive abnormal gains. At the same time, compared to unprotected bonds, protected bonds are more likely to be retired, secured, or renegotiated and thus get compensated. Likewise, using the data of going-private proposals made by 56 firms from 1975 to 1983, Travlos and Cornett (1993) undertake some analysis on the same issue. Daily average abnormal returns to the non-convertible bonds are calculated based on 10 going-private firms. On the event day ($t = 0$), the daily average abnormal bond return is -1.08%, which is significantly less than zero. This

figure indicates that on average, non-convertible bondholders experience statistically significant losses at the announcement of going-private proposals. Consistent with Asquith and Wizman (1990), the study also implies that among the total benefits that shareholders derive from going-private transactions, bondholders only contributes a very small portion.

3.2.3 Reduced Agency Cost and Improved Incentive Effect

In a public corporation, the potential conflict between managerial incentives and stockholders' interests, as well as that between inside informed manager-owner and outside uninformed investors has long been a dilemma. An alternative explanation of the source of gains in going-private transactions is the reduced-agency-cost or improved-incentive hypothesis. It assumes that by going private, conflicts described above can be effectively mitigated and agency costs can be reduced, thus leading to value-increasing decisions and operational improvements. As DeAngelo, DeAngelo and Rice (1984) suggest, going private can produce gains by more closely attaching managerial rewards to managerial performance so that more profitable projects are undertaken. Similarly, by going private, the costs that the management wastes in "position defense" can be eliminated. Unobservable (by less informed outside shareholders) but profitable investment projects can be accepted.

Travlos and Cornett (1993) examine three alternative sources of abnormal returns in going-private transactions: the elimination of public servicing costs, the capital structure changes resulting from large borrowings, and the elimination of agency costs existing in the pre-buyout company. 56 firms engaged in going-private proposals from 1975 to 1983 are analyzed. A test of joint hypotheses is conducted by running cross-sectional regressions. They take the two-day (-1, 0) cumulative abnormal returns as the dependent variable. Independent variables include the listing cost, debt ratio, relative price-earnings ratio, a dummy variable

for buyout types (management buyout or third-party-involved buyout), managerial shareholding, and a dummy variable for outcome (success and failure). The relative P/E ratio is defined as the firm's P/E ratio divided by the average P/E ratio of its industry. In the study, it is used to capture the gains from reduction of agency costs when firms go private. It is believed that the more severe the agency conflicts are, the lower the relative P/E ratio will be and the greater is the room for improvement. Thus, more productive efficiencies are expected to be realized by going private. As a result, a negative relationship between abnormal returns and the relative P/E ratio is anticipated. The regression results strongly support such a relationship between them. Their findings show that going private can generate productive gains, and the elimination of the existing agency costs is the explanatory factor behind such gains.

Likewise, both Kaplan (1989) and Smith (1990) provide some indirect support to the improved-incentive hypothesis. Kaplan finds the equity percentage held by the management team increase from a median of 5.88% before buyouts to 22.63% after buyouts. The fact that the increase is smaller for two top officers than that for the other managers implies that new incentives for junior managers play an important role in going-private buyouts.

Among the agency problems, one particular formulation is the free cash flow hypothesis. As Jensen (1986) points out, " Free cash flow is cash flow in excess of that required to fund all projects that have positive net present values when discounted at the relevant cost of capital. Conflicts of interest between shareholders

and managers over payout policies are especially severe when the organization generates substantial free cash flow. The problem is how to motivate managers to disgorge the cash rather than investing it at below the cost of capital or wasting it on organization inefficiencies." Jensen (1986) argues that takeovers in general, and going-private transactions in particular, can result in the mitigation of agency problem associated with free cash flow. Increased debt ratios in going private, especially LBOs, commits the cash flow to debt payment. Repaying the debt becomes the effective substitute for dividend payment, over which management has less control. On the other hand, the great pressure of debt payment can force the management to improve the firm's performance.

Lehn and Poulsen (1989) provide evidence consistent with the above free cash flow proposition. They collect data for a sample of 263 successful going-private transactions from 1980 through 1987. The average percentage of equity owned by the management is 23.4% before the buyout announcement. First, they make a comparison between the sample and a control group, trying to find some explanation of the determinants of going private. Secondly, they attempt to interpret the cross-sectional variations in offer premiums paid to public shareholders. Undistributed cash flow is expressed as a percentage of the total market value of common equity (CF/EQ). By comparison, the average CF/EQ is significantly larger for the sample firms (0.119) than for the control group (0.068). Their difference, 0.052, is significantly different from zero at the 0.05 significance level. Moreover, the growth rate of going-private sample (from 0.193 to 0.263) is found to be

systematically lower than that of the control group (from 1.33 to 2.56). Jensen's assertion that significant undistributed cash flow and relatively low growth rates characterize target firms for going-private transactions finds its support here. To find the underlying determinants of premiums paid in going-private transactions, they run an ordinary least squares (OLS) regression. Premium paid to shareholders is the dependent variable and one of the three explanatory variables is undistributed cash flow (CF/EQ). The estimated coefficient is 0.177, which is significantly positive. The result shows that premiums paid to the public shareholders in going-private transactions are positively related to undistributed cash flow.

3.2.4 Information Asymmetry Effect

It is assumed that inside corporate managers are generally better informed than outside investors about the intrinsic value of the firm. In the same way, controlling shareholders are assumed to know more about the prospect of the firm than minority shareholders. This is commonly called information asymmetry or underpricing hypothesis. According to the hypothesis, when there is some evidence that a firm's future prospects are much better than previously expected or a firm is less risky than originally assumed by the public investors, the management or the controlling shareholders may have the motivation to take the firm private. Owing to the information advantage, the buyout investors can purchase the firm at a relatively lower price while the public stockholders receive much less than that they would have received if they were adequately informed. Under the hypothesis, the abnormal returns gained by public shareholders come from the post-buyout returns earned by post-buyout investors. It seems that the management gives the public shareholders a spoon of sweets first so that they can monopolize the whole jar of honey later after the buyouts. Studies on this hypothesis produce controversial results.

Kaplan (1989) provides indirect evidence against the underpricing hypothesis. His sample consists of 76 buyouts completed between 1980 and 1986. He tests whether public stockholders have the same information as buyout investors and managers. First of all, the shareholdings of managers and directors in the target firms, as well as other informed players who do not invest in post-buyout equity, are

investigated. The directors and management are classified as management participants and non-participants according to whether they hold equity in the post-buyout firm or not. An investor having purchased more than 5% of the target firm's stocks within the two years preceding the buyout announcement and with different opinion than the incumbent management is classified to be the hostile party. Those hostile parties are named hostile non-participants if they do not invest in the equity of post-buyout firm. The study finds that management non-participants control a median 5.50% of the target company before the buyout announcement. Before going private, the hostile non-participants have an average stake of 9.78% in 20 of total 76 firms. The holding percentage of all informed non-participants equals a median of 10%. If the information asymmetry hypothesis is the underlying motivation for going private, and if the buyout is underpriced, these non-participants must be stupid or irrational to sell their shares and approve the buyout while they have the same information as the participating management team. Secondly, the post-buyout equity ownership structure is investigated too. According to the underpricing hypothesis, if managers know the firm is undervalued, they will rationally maximize their ownership interest in the post-buyout firm. Results indicate that the managers' shareholdings do increase after the buyout. Before the buyout, the directors and managers own a median of 19.30% of pre-buyout equity and after the buyout, managers control more than 22.63% of the post-buyout equity. However, the increase is smaller for the two top managers (median 4.41%) than for all other managers (median 9.96%), which is hard to understand and thus casts doubt on the underpricing hypothesis. Thirdly, the actual performance after buyout

and management projections at buyout announcement is compared. It is believed that under the underpricing hypothesis, the manager may have the incentive to mislead the investors by underestimating the projections in the proxy statement, and the operation performance after buyout will significantly exceeds the projections. Analysis of 32 buyout companies finds that only 37.5% and 28.0% of the sample meet the expected projections in the first and second years after the buyout respectively. On average, the actual operating income in the first two years after buyout is 20.7% and 25.8% less than projected. The projections given to the shareholders at buyout announcement tend not to be lower, but are sometimes even higher than actual post-buyout realizations. This finding indicates that the management does not deliberately mislead the public shareholders in the way that the information asymmetry hypothesis supposes. Finally, according to the information asymmetry hypothesis, the managers before and after the buyout should have remained unchanged, while in Kaplan's study, the management turnover at the time of the buyouts is unusually high.

Following Kaplan, Smith (1990) obtains similar results after a careful investigation of 58 management buyouts for the period 1977-1986. Smith notes that an increase in operating returns following unsuccessful buyout proposals would support the information asymmetry hypothesis. The observations show that the operating returns of unsuccessful buyouts do not increase in the year following the buyout proposal announcement. The second evidence concerns the relative increase in operating returns of different buyout types. Under the information asymmetry

assumption, non-defensive offers should experience greater increases in operating incomes than defensive offers (e.g. offers preceded by outside takeover offer), and management initiated offers should be subject to greater returns than offers not initiated by management. However, no systematic difference of changes in operating outcome is observed between different types of offers.

In contrast, Harlow and Howe (1993) find supporting evidence that the management has information not known to the public shareholder. In their study, abnormal insider trading activity is interpreted as the signal of private information held by insiders such as chairman, directors and officers. They use 303 LBO announcements from 1980 to December 1989 in SDC (Securities Data Company) database as the sample. The 12 months prior to the announcement day are defined as the pre-announcement period. It is found that there are abnormal insider buying activities preceding the announcement of MBOs. Positive abnormal numbers of net buyers, the proxy for abnormal insider trading, are found in 75% of the pre-announcement months. In contrast, third-party LBOs exhibit no significant increase in net insider buyers at any time in the 12-month pre-announcement period. This finding is consistent with the hypothesis that managers do possess private information not available to the public stockholders, as well as the outside third party. A further test examines the relationship between the premium paid and insider trading. The correlation coefficient for the management buyouts is significantly positive, 0.29. It indicates that higher levels of insider net buying are

associated with higher offer premiums. It seems that investors require greater compensation when there is a relatively high degree of information asymmetry.

In conclusion, evidence on information asymmetry hypothesis remains ambiguous. To answer this question more accurately, two questions have to be examined. First, do managers or controlling shareholders (or other insiders) really hold some private information unavailable to the outside parties? Second, is information asymmetry a main motivation for firms to go private?

3.2.5 Others

Saving of public stockholders' servicing fee and other related expenses, annual listing fees, for example, are considered to be another source of gains in going-private transactions. DeAngelo, DeAngelo and Rice (1986) give some discussions on this issue in their study. Yet it does not appear to be a major factor in Travlos and Cornett's study (1993). Their regression result indicates a lack of positive relationship between abnormal returns and annual listing costs.

To avoid the threat of outside hostile takeover bids is sometimes regarded as another factor underlying going-private transactions. Lehn and Poulsen (1989) note that 30.6% of their sample buyouts in 1980-1983 were accompanied by a competing bid or takeover speculation. The corresponding figure increases to 49.7% over the period 1984 to 1987. Further regression results suggest that going-private transactions are induced, at least in part, by the threat of hostile takeovers.

Part IV Sample Selection and Sample Characteristics

4.1 Sample Selection and Description

To identify all the going-private proposals for the past 11 years starting from 1986, *the Securities Journal* (originally named *Securities Bulletin*) is inspected from its initial publication issue in May 1986 to March 1997, which covers the eleven-year-long sample period 1986-1996. Supplementary information is then collected from some other sources to ensure the reliability of the data. These data sources include (1) *Fact Book* issued by the Hong Kong Stock Exchange, (2) *Newspaper Clipping Image Database* in the library of the Hong Kong Polytechnic University and, (3) *Extel Database*, (4) *PACAP* database, and (5) others, including the microfilms and fiches provided by the Hong Kong Stock Exchange and the Hong Kong Company Registry. However, there are limitations for each kind of source. The *Securities Journal* provides most of the information required for this study, but in its first 30 issues, no exact date is supplied for each company event; at the same time, for some cases, no adequate information is given. The *Fact Book* only lists the successful going-private buyouts each year, and there is a slight difference in the definition of going-private for a few cases between *Fact Book* and *The Securities Journal*. One of the biggest problems with the *Fact Book* is that the proposed announcement date it provides always lags behind that of *The Securities Journal* and the *Newspaper Clipping Image Database*. In order to avoid any possible information leakage, the earlier announcement date is adopted for this study. The

Newspaper Clipping Database provides some relevant information but generally not enough for this study, and the same problem applies to the *Extel Database*.

Finally, 54 going-private proposals made by 50 firms are identified to be the sample, among which 34 (62.96%) are successful and 20 (37.04%) are unsuccessful, as set out in Table 1.

The distribution of going-private transactions within the sample period is not even. Years 1988 and 1989 are the climax stage with 10 proposals each. After that, the going-private activity slows down and even withers to zero in 1994. In 1995 and 1996, going-private transactions revive again, and begin to display a rising tendency. Closer observation of Table 1 reveals that before 1993 (especially from 1988 to 1990), the probability of success is much higher than after 1993. Before 1993, there are 26 successful cases out of 37 going-private proposals, making up a success rate of 70.27%. After 1993, the corresponding ratio falls down to 47.05%.

Apart from the number of proposals and the probability of success, the average market value of firms also displays a similar pattern. The mean market capitalization increases from HK$64.6 million in 1986 to HK$545 million in 1991. After that, it begins to decline. In 1992, the average market value is HK$323 million, while in 1996, the corresponding figure drops to HK$87.77 million.

Table 1: Going-Private Proposals for the Period 1986-1996

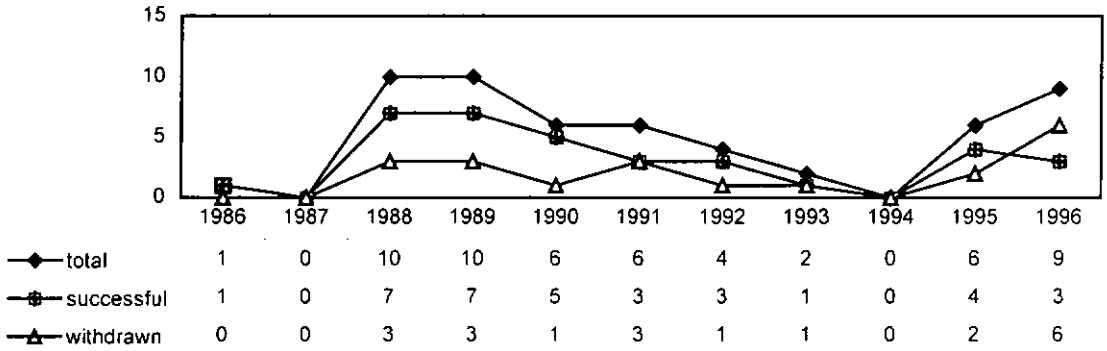
Year	Number of Proposals	Successful Proposals	Withdrawn Proposals	Mean Value of Market Capitalization [a]	Mean Debt to Asset Ratio [b]	Mean Debt to Equity Ratio [c]
1986	1	1	0	64.46	0.64	1.80
1987	0	0	0	---	---	---
1988	10	7	3	161	0.36	0.81
1989	10	7	3	94.92	0.24	0.45
1990	6	5	1	246	0.39	0.92
1991	6	3	3	545	0.30	0.63
1992	4	3	1	323	0.17	0.22
1993	2	1	1	316	0.24	0.32
1994	0	0	0	---	---	---
1995	6	4	2	86	0.57	1.63
1996	9	3	6	87.77	0.42	1.37
1986-1992	37	26	11	177	0.33	0.72
1993-1996	17	8	7	100	0.41	1.15
Full sample	54	34	20	150	0.36	0.86

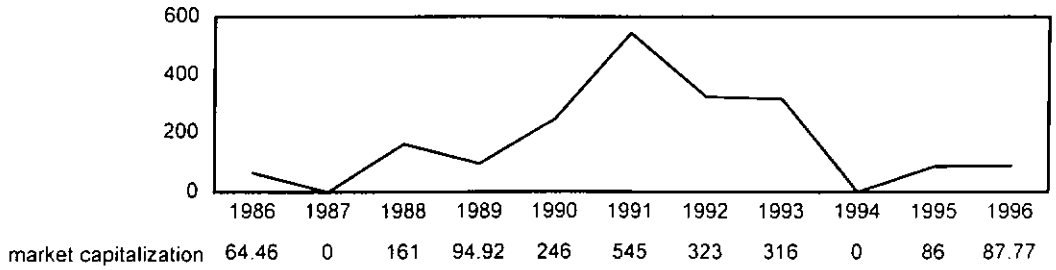
All the figures are based on the financial statement data of the fiscal year immediately preceding the calendar year of the going-private proposals, as provided by PACAP.

a: Market Capitalization (in millions) is the product of total common shares outstanding and the closing price of common stock at end of the fiscal year.

b: Debt to asset ratio is the total liabilities divided by total assets at the fiscal year end.

c: Debt to equity ratio is the total liabilities divided by total shareholders' equity





One note worthy item is that in 1993, the *Codes* on going private by way of a scheme of arrangement was amended. The required approval level for a successful buyout proposal was increased from its original 75% to 90%. This amendment, to some extent, explains the change in success rate before and after 1993. Similarly, the sharply decreased success rate in 1995 and 1996 may indicate why the Securities & Futures Commission relaxed the regulations on going-private transactions in 1998.

In fact, similar patterns can also be found in the United States. Going-private activities reached its peak from 1986 to 1988. In 1988, the LBO transactions jumped to a total of $88 billion. In the late 1980s, however, economic and legislative changes, particularly tax regulations, brought LBO transactions into a correction period. In 1991, the total value of LBOs withered to $7.5 billion. Very quickly then, the subsequent new developments in the nature of LBO transactions and market conditions led to a revival of LBO. The dollar amount concerned in going-private buyouts in 1995 was $20.6 billion.

The last two columns of Table 1 list the leverage of the sample. The average debt to asset ratio is 0.36 and the average debt to equity ratio is 0.86 for the full sample. It appears that proposals made before 1993 have lower leverage than those after 1993; however the t-statistic (-0.519 for debt to asset ratio and -0.719 for debt to equity ratio) indicates the difference is not significant.

Table 2 provides some more descriptive information about the sample. A comparison is made between the successful and withdrawn groups first. No significant difference is observed between them, in terms of market capitalization, leverage and management's ownership percentage before the buyout announcement. Then, another comparison is made between property and non-property groups. Two methods are used to classify the property and non-property groups. The first is based on the classification of HKSE; the other is based on whether the firm has involvement in the property investment or development business, as revealed by the financial statement information in PACAP. No matter which classification approach is used, some significant differences are found between property and non-property groups.

Table 2: Comparison between Successful and Withdrawn Offers, And between Property and Non-Property Groups

	Market Capitalization [a]	Debt to Asset Ratio		Debt to equity Ratio		Management's Shareholding	Property Ratio [b]	
Successful	153 (30)[c]	0.369 (31)		0.807 (31)		62.94% (33)	34.86 (27)	
Withdrawn	150 (19)	0.349 (19)		0.956 (19)		57.08% (20)	42.08 (20)	
Property 1[d]	119 (22)	0.280 (23)	*0.013*[e]	0.469 (23)	*0.014*[e]	61.94% (22)	54.90 (20)	*0.000*[e]
Non-Property 1[d]	179 (27)	0.431 (27)	**	1.201 (27)	**	59.86% (31)	25.50 (27)	***
Property 2[f]	156 (36)	0.310 (37)	*0.004*[e]	0.588 (37)	*0.058*[e]	59.426% (36)	46.0 (34)	*0.000*[e]
Non-Property 2[f]	141 (13)	0.510 (13)	***	1.65 (13)	*	63.475% (17)	17.1 (13)	***

a: In millions of dollars
b: Defined as net book value of property divided by total assets; expressed as a percentage.
c: Figures in parentheses represent the number of proposals with information available
d: Based on the classification of HKSE
e: p-value
f: Based on the classification of substantial property business (according to information provided by PACAP)
, ** and * denote significance at the 0.1, 0.05 and 0.01 levels respectively.*

The first difference exists in the property ratio, the percentage of property in total assets. Under the first classification, the property group (54.90%) has a much higher property ratio than the non-property group (25.5%) with a p-value of 0.000. Similar results apply to the second classification. This difference is expected and can be easily explained by their business nature.

The second remarkable difference exists in the leverage, measured by both debt to asset ratio and debt to equity ratio. Under the first classification, the average debt to asset ratio is 0.280 for the property group and 0.431 for the non-property group with p-value equal to 0.013. Similarly, the mean debt to equity ratio is 0.469 for the property group and 1.201 for the non-property group (p = 0.014). Similar results are obtained for the second classification. Further investigation shows that this is not a specific phenomenon for the going-private sample, but a common one in Hong Kong. When taking into account all the listed firms in the stock market, property firms always have lower leverage than non-property firms over the whole sample period[1]. One possible explanation to this phenomenon is as follows. The sample period 1986-1996 in the study is a prime time for the property industry in

Note (1): The leverage (both debt to asset ratio and debt to equity ratio) between property industry and other industries is compared for each year over the whole sample period 1986-1996, using the financial statement data provided by PACAP. The mean debt to asset ratio of property firms is significantly lower than non-property industries over nearly all the sample period years (10 out of 11 years). There are 7 years that the debt to equity ratio of property industry is statistically lower than other industries.

Hong Kong. The property business developed rapidly and the price of real estate kept rising. The property firms could have their property revalued at regular intervals (every one year if they have investment property). The total asset value increased sharply because of the prosperous property market. The leverage of these firms fell as a result. So, it does not mean that property firms borrow less than other firms, but rather their asset values increase rapidly. Further investigation supports this explanation. When excluding the revaluation reserve from the total assets in calculating the debts to asset ratio, the difference between these two groups is not significant any more [2].

Note (2): the debt to asset ratio is re-calculated by excluding the revaluation reserve from the total assets. Only 22 firms in the sample separately disclose the revaluation reserve. The difference between the property group (based on the classification of HKSE) (0.36) and non-property group (0.51) is not significant.

4.2 Types and Means

In America, going private came into being in the 1970's and reached its climax in the following decade. "Between the beginning of 1981 and the end of 1989, there were over 1400 "going-private" transactions" (Allen, 1996). Moreover, as mentioned before, LBOs characterized going-private transactions of America in the 1980's. By comparison, going-private transactions are not so popular in Hong Kong. The number of going-private transactions is rather small, and the use of LBO in going private is never heard of.

In fact, in Hong Kong, a typical going-private transaction takes place when the controlling or majority shareholder wants to buy out the minority shareholders, with the purpose of converting a partly-owned subsidiary into a wholly-owned one. The privatizing party is always the controlling or, at least, substantial shareholder of the target firm. Further, the management of those target firms are always the controlling or substantial shareholder themselves. In the sample, there are 53 buyout proposals with ownership information available. The management is the controlling (or substantial) shareholder for 40 cases, and management is also found to have some close relationship with the privatizing party in the other 13 cases. In simple words, in Hong Kong, the going-private transaction is not only Management Buyout (MBO) but also Parent Buyout (PBO, buyout by the parent company).

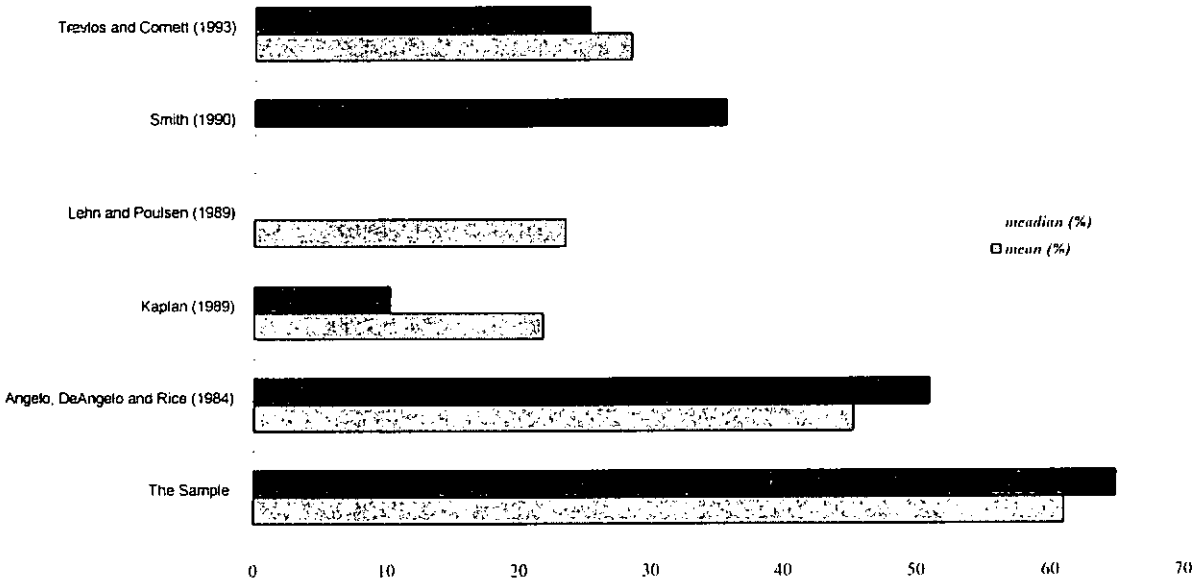
Unlike the going-private transactions in Western countries, in Hong Kong, even before the buyout, the privatizing party, or the management in most cases, has

obtained an overwhelming interest in the target firm. Table 3 compares the ownership characteristics of the Hong Kong sample with other studies in the literature. The mean ownership percentage held by the management before the buyout is already 60.93% (the median percentage is 64.84%) for the 53 going-private proposals with available information in the sample, prominently ranking the highest in all similar studies.

Both the highly intimate relationship between the management and controlling shareholder, and the substantial ownership percentage held by the management before going private are consistent with the fact that quite a lot of firms in Hong Kong are closely held firms — the typical form is family control.

Table 3: Ownership Structure before Going-Private Buyouts

	Equity Held by the Management before the Buyout		Observations	Sampling Period
	Mean (%)	Median (%)		
The Sample	60.93	64.84	53	1986-1996
DeAngelo, DeAngelo and Rice (1984)	45.2	50.90	72	1973-1980
Kaplan (1989)	21.71	10.17	75	1980-1986
Lehn and Poulsen (1989)	23.4	---	263	1980-1987
Smith (1990)	---	35.5	58	1977-1986
Travlos and Cornett (1993)	28.34	25.17	56	1975-1983



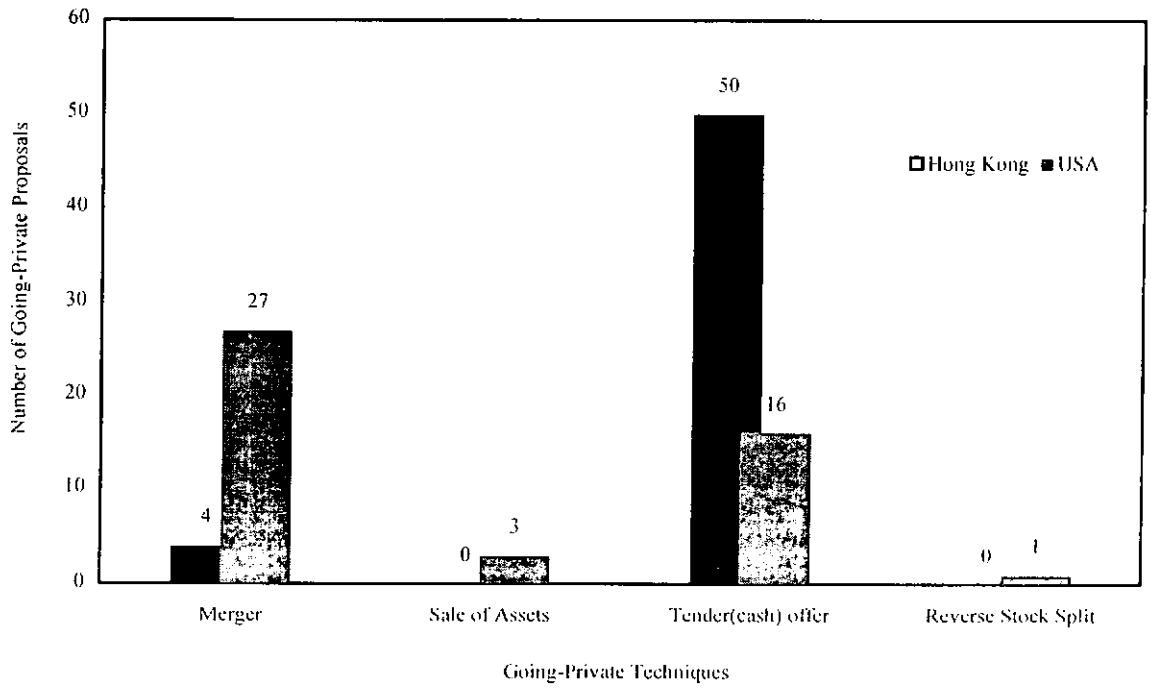
This tightly held firm structure could help to explain the unpopularity of LBOs among going-private transactions in Hong Kong. One of the supposed advantages from LBO is the increased equity stake of management. Since the management has already owned substantial or controlling interests in the target firm even before the buyout, the attractiveness of a LBO is greatly reduced. In initiating going-private transactions, the management, or the controlling shareholder, is not willing to share company ownership with others, while LBO means possible dilution of ownership with outside third parties providing the funding. Another contributing factor is the lack of developed junk bond market in Hong Kong. The widespread use of junk bonds is regarded as one important factor facilitating going-private transactions in the United States.

On the other hand, the way in which Hong Kong companies effect going private is very simple and uniform. Firstly, almost all of the going-private transactions in Hong Kong are undertaken by way of a scheme of arrangement. There is little use of public offer or share repurchase in going-private transactions. Secondly, cash tender is the most common means adopted by Hong Kong firms.

Table 4: Going-Private Techniques in Hong Kong and the U.S.A.

Techniques	Hong Kong (1986-1996)		United States (1973-1980) [a]	
	Number	*Percentage*	*Number*	*Percentage*
Merger	4	7.41	27	57.45
Sale of Assets	0	0	3	6.38
Tender (Cash) Offer	50 [b]	92.59	16	34.04
Reverse Stock Split	0	0	1	2.13
Total	54	100	47	100

a: Based on the study by DeAngelo, DeAngelo and Rice (1984)
b: *2 cases use share exchange as a supplement.*



Seen from Table 4, in the sample, there are 50 cases adopting cash offer, accounting for 92.59% of all techniques. 4 cases employ the means of merger, making up 7.41%. No firm in the sample uses either asset sales or reverse stock split. However, in the sample of DeAngelo, DeAngelo and Rice (1984), merger is the dominant technique for going private in the United States. 27 firms in the 47 pure going-private proposals (without outside third-party participation) use merger as a means to effect the going-private transaction, representing 57.45% of the sample. The second most popular approach is the tender or cash offer (16 out of 47 firms, accounting for 34.04%), followed by asset sales (6.38%), and reverse stock split (2.13%).

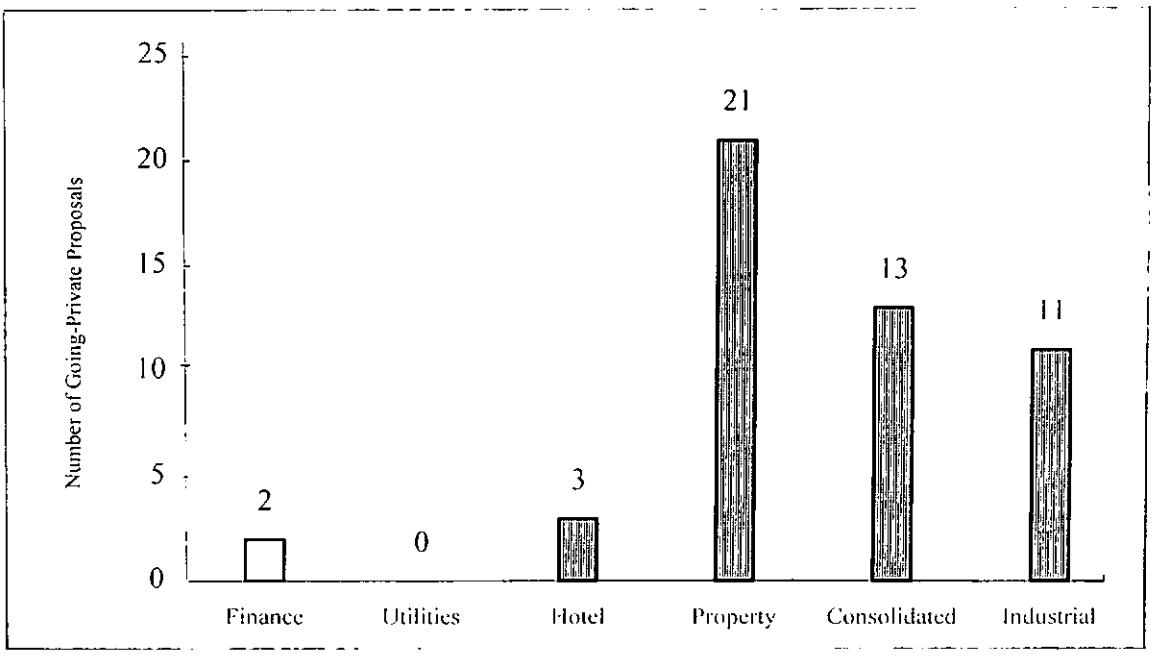
4.3 Industry Features

Lehn and Poulsen (1988) find in their study that half of their sample companies belong to mature industries with limited growth opportunities. Manufacturing firms in basic, non-regulated industries with at least predictable and low financing requirements are considered to be the perfect targets for going-private transaction. This conclusion does not apply to the practice in Hong Kong at all. Property is a rapidly growing industry in Hong Kong whose development requires a great deal of financing. As seen from Table 5, in the 50 sample firms making 54 going-private proposals, 21 firms, 42% of the sample, belong to the property sector (based on the classification made by the Hong Kong Stock Exchange). For the same period 1986-1996, the listed property firms' share of the total market capitalization is only 26.15%. A comparison of the two figures tends to suggest that the property industry is more prone to going-private buyouts in Hong Kong.

Table 5: Industry Distribution of the Sample

Industry [a]	Number	Percentage
Finance	2	4
Utilities	0	0
Hotel	3	6
Property	21	42
Consolidated	13	26
Industrial	11	22
Total	50	100

a: *Based on the classification of the Hong Kong Stock Exchange.*



The pattern would be even more pronounced if the classification of a property company is based on involvement in the property business. According to the information provided by PACAP, there are a total 34 firms (nearly 68%) in the sample that have involvement in property investment and development. In addition, the property ratio for each firm in the sample is further investigated. The property ratio is defined as the net book value of all the property divided by the total assets value. Here, 'property' includes land and buildings, property under development and property investment disclosed in the financial statements immediately preceding the buyout announcement. 47 firms in the sample provide the annual reports of the year immediately preceding the buyout announcement. The mean property ratio for the 47 firms is 37.92% (the median value is 35.38%). This shows that property constitutes more than one-third of the total assets in a target firm for going private.

4.4 Reverse LBOs

Travlos and Cornett (1993) argue that the going-private buyout is expected to be a temporary extraction from the organizational form of public corporation. Most of the gone-private firms are expected to redesign their relevant contracts in such a way that the public corporation again becomes the most efficient organizational form, and to subsequently reconvert back to a public concern. In simple words, most of the gone-private companies will choose to revert to public ownership sometime after the going-private transactions. That is what actually happens in the United States. Kaplan (1991) reports that 45% of a sample of LBOs completed between 1979 and 1986 returned to public ownership. In 1991 alone, 56 leveraged buyouts returned to the public equity markets. This phenomenon is what we usually call "reverse LBOs". It is usually believed that after going private, the operating performance of the firm can be greatly improved. By reverse LBO, management can realize the returns associated with the greatly improved operating performance after going private.

Only 1 firm in the Hong Kong sample can be identified to have gone back to the stock exchange shortly after the successful going-private transaction. For most of the gone-private firms, there are no records of their new listing in the stock exchange. So, unlike the American counterparts, in Hong Kong, most of the gone-private companies will not choose to revert to a public company again. What is the way for the management to realize their returns then? In theory, instead of public re-listing, mergers and acquisition, asset sale and private ownership transfer can also

be practical ways to realize investments. Owing to the limitations of data sources, no further information can be provided on this issue.

4.5 Motivations

As discussed in Part III, going private can produce quite a lot of gains. These gains can become the motivations for the majority shareholders or the management to initiate going-private transactions. Common motivations include tax advantages, transfer of wealth from bondholders, information asymmetry and savings of public servicing fees.

It seems that tax advantage is not the motivation for going private in Hong Kong. As is well known, Hong Kong is a low tax rate region. The tax rate for companies has remained stable at around 16.5% for many years. Some Hong Kong listed companies, moreover, are incorporated in Bermuda, a tax heaven. The tax obligation should not be overly burdensome. The three sources of tax advantage described in past American studies do not exist in Hong Kong. The infrequent use of LBO leaves the tax benefits from increased leverage out of the question. Neither is there much use of ESOPs. Even if there were asset step-ups in going-private transactions, the depreciation expense booked by the company is not relevant to tax calculation. The Inland Revenue Department (IRD) has its own independent method in determining the depreciation allowance, which is based on the purchase price.

As for the wealth transfer from bondholders, it is obviously not the motivation underlying going private, either. In Hong Kong, entities issuing bonds are mainly the banks, investment corporations, utilities and overseas organizations.

Few companies in Hong Kong have ever issued any public bonds. In the sample, according to *Fact Book 1986-1996* published by Hong Kong Stock Exchange, no company has issued any bonds or has bonds outstanding around the going-private proposal announcements. Further inspection of annual reports reveals only one company with debentures (HK$ 560 million) in issue. The purchasers of such debentures are two fellow subsidiaries of this firm. One purchased HK$ 1 million and the other purchased HK$ 599 million, but there are no public bondholders at all. Therefore, there is no reason to believe that transfer of wealth from bondholders constitutes the motivation for going private.

How about the savings of public servicing fees? Again, it can not be a primary motivation for going private. It is rather like a by-product, instead of main motivation of going-private transactions. No companies will choose to go private only because of the savings of the relatively small amount of listing fee and other public servicing fees. According to *Fact Book 1997*, depending on the firm size (market capitalization), the initial listing fee falls within the range of HK$150,000 to HK$650,000, and the annual listing fee for a company is between HK$145,000 and HK$1,188,000. Compared to the market capitalization or the total assets of a firm, the total listing fee is relatively trivial. For instance, in this study, the mean value of the market capitalization of the sample is HK$ 150 million. Even if taking HK$1,188,000, the upper limit, as the annual listing fee, the listing cost does not make up more than 0.8% of the firm value. It is worth noting that the average annual listing fee over the sample period 1986-1996 is much cheaper than in 1997.

Is avoiding hostile takeovers a primary motivation for going private? It seems not. In the sample, *the Securities Journal* shows no evidence of takeover bids in advance of the going-private proposals. One explanation is provided by Cheung and Shum (1993) when they try to explain why there are less takeovers in Hong Kong compared to the UK market. According to Cheung and Shum (1993), the reason is related to the closely held ownership structure of Hong Kong companies. Since there is usually one controlling shareholder for each Hong Kong listed firm, it is very difficult to make a successful hostile bid.

Sometimes, it is argued that going private is just a kind of group strategy that aims to serve some organizational purposes, such as reducing the number of listed firms in a certain stock market. Even though it can be considered as a motivation for one or two firms, it is not a predominant factor behind the going-private transaction in general.

There are reasons to believe that one likely motivation behind the going-private transaction in Hong Kong is the information asymmetry hypothesis which will be discussed in detail in Part V of this thesis.

Part V Research Design

5.1 Test of the Gains-Sharing Hypothesis

Gains-Sharing Hypothesis: *If public shareholders can share the gains from going-private transactions with the privatizing party, there will be significantly positive abnormal returns at the announcement of going-private proposals, i.e. the public shareholders will experience significant wealth increases.*

Like DeAngelo, DeAngelo and Rice (1984), the traditional event study methodology is adopted to estimate the wealth effects of going-private proposals. Cumulative abnormal returns (CARs) are calculated within different event windows. The estimation period includes 100 trading days, ranging from 140 days before to 40 days before the proposal announcement, that is (-140, -40).

Specifically, three approaches are used to test the gains-sharing hypothesis: *the market model, mean-adjusted abnormal returns, and market-adjusted abnormal returns.* The variables and main methods used are summarized in Table 6.

Table 6: Variables in the Test of the Gains-Sharing Hypothesis

Variable	Explanation
R_{jt}	single-day rate of return for sample firm j on day t (with dividend reinvested)
R_{mt}	single-day rate of return for equally weighted market portfolio on day t (with dividend reinvested)
AR_{jt}	abnormal return for sample firm j on day t. i.e. the difference between the actual and expected daily return.
	Market Model: $AR_{jt} = R_{jt} - (\alpha_j + \beta_j R_{mt})$, α_j, β_j are obtained from OLS based on estimation period (-140, -40). *Mean Adjusted Abnormal Return*: $AR_{jt} = R_{jt} - 1/n \sum_t R_{jt} \quad t \in (-140, -40)$ *Market Adjusted Abnormal Return*: $AR_{jt} = R_{jt} - R_{mt}$
CAR	cumulative abnormal returns $CAR = \sum_j \sum_t AR_{jt}$

5.2 Test of the Information Asymmetry Hypothesis

In this study, I argue that going-private transactions in Hong Kong can possibly be explained by the information asymmetry hypothesis.

Information Asymmetry Hypothesis: *The majority (controlling) shareholder and the management know much more about the intrinsic value of the target firm so that when the market value of the firm falls below its intrinsic value, they have the incentive to convert the firm into a private company.*

It is difficult to test the information asymmetry hypothesis directly. Some derivative hypotheses are therefore examined instead.

Hypothesis 1 (H1): *If information asymmetry is the underlying motivation for going-private transactions in Hong Kong, property companies will be more susceptible to going-private proposals than companies in other industries.*

Compared to companies in other industries, property firms have some unique features. On the one hand, the major assets of a property firm are land, building and other real estates. Unlike machinery or equipment, the value of such real property can be easily estimated by professional surveyors. This feature of property firms makes the value of its assets more readily knowable to its management. On the other hand, SSAP17 requires that if a firm, whether public or not, owns investment properties with net book values over 50 million dollars or over

15 per cent of the total assets, it should have its investment properties revalued at the balance sheet day. The revaluation includes (1) annual appraisal by professional valuers with related experience, and (2) at least every three years by an external professional valuer. Under the present financial reporting framework, firms can take advantage of the fact that the standard allows inside employees to do the annual revaluation. If this happens, the intrinsic value of assets after revaluation may not be accurately reflected in the financial statement. As a result, an information asymmetry emerges, as the management owns information not accessible to public investors. Once the market value of the firm goes below its "true value", the management or majority shareholder who possesses an information advantage, would have the incentive to put the going-private proposal on their agenda.

Hypothesis 2 (H2): *If information asymmetry is the underlying motivation for going-private transactions in Hong Kong, the sample firms should have a higher property ratio than other firms.*

According to H1, property firms are more susceptible to going-private initiatives, because, compared to firms in other industries, they hold more properties, which creates greater potential for information asymmetry. If the going-private practices in Hong Kong can be explained by the information asymmetry effect, firms in the sample should have a higher proportion of properties in their assets than other firms.

To test this hypothesis, a control group that matches with the sample in terms of the fiscal year end, profitability (return of assets) and firm size (market capitalization) is first selected. The property ratios of the sample and the control group are then compared. A significant difference in property ratio between them is expected if H2 holds.

The property ratio is defined as follows. All the related financial statement information is acquired from PACAP, based on the annual report of the year of buyout announcement or the year immediately preceding it.

$$\text{Property ratio} = \frac{\text{Land and Buildings + Investment Properties + Development Properties}}{\text{Total Assets}}$$

For a sample firm, this property ratio is calculated for the financial year in which the going-private announcement is made or the immediately preceding year, depending on the availability of information. For a control firm, the ratio for the same year as the sample firm is determined.

A logit model is further used to test whether the property ratio helps explain the odds of going private, in which the property ratio is taken as the independent variable. Under the hypothesis, the coefficient β should be significantly greater than zero.

$$\textit{Prob}\ (GP = 1) = F\ (\alpha + \beta\ \text{Property Ratio})$$

where GP, the dependent dummy variable for the "going-private decision", is 1 for sample firm and 0 for control firm.

Hypothesis 3 (H3): *If information asymmetry is the underlying motivation for going-private transactions in Hong Kong, negative goodwill would appear in the financial statements of the privatizing party for the fiscal period immediately after the successful going-private transactions.*

Owing to information asymmetry, the management may have the incentive to take the firm private when its market value goes below its intrinsic value, and the price they pay should be below the intrinsic value of the target firm. Therefore, a negative goodwill is expected to be recognized for those successful going-private transactions.

5.3 Test of the Reduced Agency Costs Hypothesis

Apart from the information asymmetry hypothesis, an alternative motivation for the going-private transaction, the reduced agency costs hypothesis, is also examined in this study.

As mentioned earlier, the reduced agency costs hypothesis argues that when the conflicts between managers and the shareholders goes beyond certain limits, a going-private proposal may be initiated. In so doing, the conflicts can be alleviated and gains are produced by more closely attaching the managerial rewards to the management performance.

Specifically, two hypotheses are tested.

Hypothesis 4 (H4): *If the reduced agency costs hypothesis is the underlying motivation for going-private transactions in Hong Kong, a negative relationship between the abnormal returns gained by the public shareholders and the relative P/E ratio is expected.*

Travlos and Cornett (1993) use the relative P/E ratio to proxy for the agency conflicts in their research. The agency conflicts may diver corporate resources form productive uses, or lead to underinvestment, or misallocate free cash flow, it is expected that the assets of these firms operate below their potential and therefore, underperform comparable firms in their respective industries. The more severe the

agency conflict in a firm is, the lower the relative P/E ratio would be and more productive efficiencies are expected to be realized by going private.

In this study, a regression of abnormal returns will be run against the relative P/E ratio. The dependent variable, abnormal returns is measured by the CARs over two-day event window (-1, 0), and the explanatory variable, relative P/E ratio, is defined as the firm's P/E ratio divided by the average P/E ratio of its industry in the same fiscal year. The regression equation is:

$$\textbf{CARs}_{(-1,0)} = \alpha + \beta\ \textbf{RPE (Relative P/E Ratio)} + \varepsilon$$

If H4 holds, then the coefficient β should be significantly less than 0.

Hypothesis 5 (H5): *If the reduced agency costs hypothesis (specifically free cash flow hypothesis) is the underlying motivation for going-private transactions in Hong Kong, then the target firms for going private would have more free cash flow at hand than other firms.*

Hypothesis 5 is related to the free cash flow problem, one specific exemplification of agency conflict, advanced by Jensen (1986). "Free cash flow is cash flow in excess of that required to fund all projects that have positive net present values when discounted at the relevant cost of capital." It is argued that the agency conflicts can become especially severe when a firm has substantial free cash flow in

hand. How to motivate managers to distribute the cash to shareholders becomes the key issue. Jensen suggests that takeovers in general and going-private transactions in particular, can help mitigate the agency problem associated with free cash flow.

The definition of free cash flow in this study follows the measure taken by Lehn and Poulsen (1989). They used the term "undistributed cash flow" in their study, which is the post-tax cash flow from a firm's normal operation that is not distributed to security holders as either interest or dividend payments.

$$CF = INC + DEP - TAX - INTEXP - DIV$$

Where

INC = operating income

DEP = depreciation expense

TAX = income tax

INTEXP = gross interest expense

DIV = dividend paid to shareholders

A comparison of undistributed cash flow is made between the sample and control firms. The free cash flow hypothesis suggests a positive relationship between the likelihood of a firm going private and the proportion of its free cash flow. More free cash flow, therefore, is expected to be observed for the sample firms than for the control firms.

Instead of using CF directly, the percentage of CF to total market capitalization is used (CF/ MK) to control for the size effect.

Part VI Empirical Results

6.1 Gains-Sharing Hypothesis

Among the 54 sample proposals, one has only one day's trading data available within the estimation period, and the other suspends its listing within the whole event window. These two, therefore, are excluded from further analysis and 52 proposals are finally selected for test of the gains-sharing hypothesis. Among those 52 sample proposals, 30 requested a suspension of listing around the announcement of going-private proposals. Such suspension period is then excluded from the event window, in order to more accurately capture the market effect of the going-private announcement. Consequently, for these cases, the last trading day before the start of suspension is defined as day –1, and the first trading day after the suspension period is regarded as day 0.

In the event of missing stock returns for trading days falling outside of the suspension period, the geometric mean return is substituted for estimation and testing purposes. (3)

Note (3): For instance, the typical situation is like this:

	Closing Price (P)	Daily Return (R)
Day 1	P_1	R_1
Day 2	---	---
Day 3	---	---
Day 4	P_2	---
Day 5	P_3	R_3

--- represents missing values

So, the adjustment is: $R_2 = R_3 = R_4 = (P_2/P_1)^{1/3} - 1$.
In making the adjustment, the factor of dividend is considered. Inspection of Hong Kong Economic Journal reveals that 4 sample firms have their dividend days falling on the missing-value days. Adjustment is done to take account of the dividend effect before the geometric mean return is calculated.

6.1.1 CARs at Buyout Announcement and Offer Premiums

The empirical results give strong support to the gains-sharing hypothesis. Table 7 displays the results of the mean cumulative abnormal returns over different event windows.

Table 7
The Mean Cumulative Abnormal Returns (CARs)
Over Different Event Windows

Event Window	Market Model	Mean-adjusted	Market-adjusted
t = 0	12.73 (6.359)	12.79 (6.429)	12.57 (6.282)
(-1, 0)	13.99 (6.556)	13.75 (6.419)	13.54 (6.357)
(-5, +5)	17.17 (7.528)	16.89 (7.180)	15.27 (6.833)
(-10, +10)	20.65 (7.953)	19.66 (7.680)	17.24 (7.397)
(-20, +20)	24.59 (7.032)	24.17 (7.344)	18.39 (6.742)

Figures in ( ) are the corresponding t-statistics. All are significant at the 0.01 level.

According to the market model, the mean abnormal return on the day the going-private proposal is announced is 12.73% with a *t* statistic of 6.359. It is significantly positive at any conventional level of statistical significance. Within the two-day window (-1, 0), the mean cumulative abnormal returns are 13.99% and the corresponding t-statistic is 6.556. Again, it is highly significantly positive. Over the event period (-20, +20), the stockholders experience a substantial wealth increase which averages 24.59%. Similarly, the mean-adjusted and market-adjusted approaches give qualitatively similar results. To conclude, significantly positive

abnormal returns are identified at the announcement of the going-private proposal, which is consistent with the gains-sharing hypothesis.

Table 8 compares the results among similar studies. The abnormal return of 12.73% on day 0 in this study ranks in the middle. It is smaller than the results found by DeAngelo, DeAngelo and Rice (1984), but much higher than the gains associated with divisional management buyout (Lehn and Poulsen (1989)). Specifically, when compared to the study of takeover activities in Hong Kong (Cheung and Shum (1993)), the result of this going-private study is particularly noteworthy. As pointed out in the past literature, "the principal criticism applied to going-private transactions is based on the absence of arms-length negotiation between management as purchaser of the public stock interest and management as agent for the selling public shareholders" (DeAngelo, DeAngelo and Rice (1984)). In contrast, the interfirm takeover and merger is characterized by arms-length bargaining between buyer and seller. Here, the fact that abnormal return associated with the announcement of going-private buyouts is even higher than that in takeovers, at least implies that the minority shareholders are not subject to systematic exploitation in going-private transactions in Hong Kong.

Table 8
Going-Private Announcement Effect in Similar Studies

Study	AR for Common Stock Shareholders	Sample
DeAngelo, DeAngelo and Rice (1984)	22.27 (t = 0)	72 MBOs though 1973-1980
Travlos and Cornett (1993)	8.03 (t = 0)	56 going private though 1975-1983
Marais, Schipper and Smith (1989)	13% (-1, 0)	80 buyouts through 1974-1985
Hite and Vetsuypens (1989)	0.55% (-1, 0)	151 divisional MBOs through 1973-1985
Lehn and Poulsen (1989)	16.3% (-1, +1)	244 MBOs through 1980-1987
Cheung and Shum (1993)	5.506% (t = 0)	50 takeovers in HK during 1986-1991

Apart from abnormal returns, another approach to directly measure the wealth effect on public shareholders is the offer premium. In the study, offer premium is defined as the offer price divided by average market price over a two-month period prior to the announcement date (60 days before the proposal announcement, that is (-60, -1)) minus 1. For the 48 cash offers with price data available in the sample, the mean offer premium is 31.38%. The corresponding figures in other studies are 56.31% (DeAngelo, DeAngelo and Rice (1984)) and 41.90% (Travlos and Cornet (1989)) respectively.

Both the abnormal returns and offer premium provide clear evidence that the public shareholders experience substantial wealth increase at the announcement of going private.

It is necessary to point out that two factors may affect the wealth effect of going-private announcement. One is the possible information leakage before the proposal announcement. If it happens, positive abnormal returns are expected to be observed during the pre-announcement period. The other is the regulation about the suspension of listing. These two aspects will be discussed in the following parts.

6.1.2 Investigation of Pre-and Post- Announcement Period Returns

Further investigation focuses on the wealth change effect during the pre- and post- announcement period. Table 9 and Table 11 display the corresponding results.

The results shown in Table 9 reveals that there is possible information leakage before the announcement of going private. Positive abnormal returns are observed during the pre-announcement period. Starting from 10 days before the buyout announcement, positive wealth increase begins to emerge. Under the market model approach, within the window (-10, -5), the shareholders experience a 2.46% increase in wealth on average, which is significantly positive (the corresponding t-statistic is 2.495). In the period (-5, -1), the average wealth increase is even higher, up to 3.64% (t = 2.935). Although it seems there is a slight increase in stock returns from 15 days before the announcement, statistic test reveals it is not significantly different from zero. The results are robust as the other two approaches display a very similar pattern.

Table 9
Market Response (CARs %) for the Prior Announcement Period

Event Window	Market Model	Mean Adjusted	Market Adjusted
(-5, -1)	3.64 (2.935)***	3.37 (2.491)**	2.49 (2.066)**
(-10, -5)	2.46 (2.495)**	2.75 (2.717)***	1.38 (1.498)
(-15, -10)	0.62 (0.848)	0.69 (1.002)	0.01 (.007)
(-20, -15)	1.29 (1.716)*	1.76 (1.855)	-0.18 (-0.289)
(-40, -20)	7.38 (3.200)***	8.31 (3.525)***	3.93 (1.945)*

Figures in ( ) are the corresponding t-statistic
, ** and * denote significant at the 0.1, 0.05 and 0.01 levels respectively.*

One noteworthy phenomenon is the significantly positive CARs over the interval (-40, -20). Two possible explanations are advanced. One is potential insider trading activity and the other is the previous news announcement made by those non-suspended cases. Table 10 provides further information on this issue. It is found that the suspension group shows positive CARs during the event window (-40, -20), which might be supportive of insider trading. On the other hand, the non-suspension group displays only a weekly significantly positive CARs under the mean-adjusted approach. It might be due to either the informal announcement days of those non-suspension firms being too diffused, or some firms not having their informal announcement dates falling within (-40, -20). Owing to the difficulty in tracking down the pre-announcement dates, no further analysis can be provided.

Table 10
Cumulative Abnormal Returns (%) over the Event Window (-40, -20)

	Total Sample (n = 52)	**Suspension** (n = 30)	**Non-Suspension** (n = 22)	**t**
Market-adjusted	3.93 (1.945)*	2.95 (1.220)	5.27 (1.503)	-0.546
Mean-adjusted	8.31 (3.525)***	8.87 (3.089)***	7.54 (1.867)*	0.269
Market Model	7.38 (3.200)***	7.49 (2.760)***	7.24 (1.771)*	0.052

Figures in ( ) represent the corresponding t-statistics.
The last column is the t-statistic when comparing the difference between the two groups
** and *** denote significance at the 0.1 and 0.01 levels respectively.*

As for the post-announcement period, as seen from Table 11, the effect caused by the buyout announcement does not continue after the announcement day. No significantly positive abnormal increase in returns is observed. This is consistent with the efficient market hypothesis. The going-private information is quickly incorporated into the stock prices upon its announcement. In fact, Shum & Cheung (1993) also find in their study that the Hong Kong equity market is efficient with respect to the information of corporate takeovers.

Table 11
Market Response (CARs %) for the Post Announcement Period

Event Window	Market Model	Mean-adjusted	Market-adjusted
(+1, +5)	0.81 (1.08)	0.73 (1.088)	0.21 (0.276)
(+5, +10)	1.42 (1.946)*	0.51 (1.135)	0.55 (0.842)
(+10, +15)	1.04 (1.091)	1.59 (1.681)*	0.50 (0.514)

Figures in ( ) are the corresponding t-statistics
** denotes significance at the 0.1 level.*

6.1.3 Market Effect of the Trading Suspension Regulation

The *Listing Rules* of the Hong Kong Stock Exchange requires that, when there is price-sensitive information that cannot be disclosed for the moment, or when the issuer is subject to an offer, or goes into receivership or liquidation, among others, a request for suspension of trading should be made to the Exchange by the issuer or its authorized representatives. This regulation has significant implications for the going-private study.

First of all, it can affect the definition of the event day, and thus the abnormal returns upon going-private announcement. When the suspension period is not excluded from the event window and the daily stock returns for the period is calculated for the suspension period as if they are missing values, the results are very different. Table 12 provides the related information.

Table 12
Mean CARs (%) When Suspension Period is not Excluded

Event Window	Market Model	Mean-adjusted	Market-adjusted
t = 0	3.88 (4.850)	4.36 (5.486)	3.88 (4.846)
(-1, 0)	5.26 (6.045)	5.57 (6.033)	5.02 (5.645)
(-5, +5)	13.26 (7.599)	13.73 (7.149)	12.33 (7.088)
(-10, +10)	15.72 (7.172)	15.64 (6.286)	13.97 (6.780)
(-20, +20)	18.67 (6.023)	19.79 (5.844)	15.74 (6.381)

Figures in ( ) are the corresponding t-statistics. All are significant at the 0.01 level.

Obviously, the wealth increase effect associated with going-private announcement is sharply reduced. The mean abnormal return on the announcement day (t = 0) is 3.88%, which is significantly greater than zero, but much smaller than the 12.73% in Table 7. If measured over (-20, +20), the mean CARs is 18.67%, which is much lower than the corresponding 24.59% in Table 7. This difference indicates that the regulation can greatly affect the results of the study.

All CARs used in the later analyses of this thesis are based on Table 7. That is, the suspension period is excluded from the event window and the influence of the trading suspension regulation is taken into account.

Secondly, it creates different market response between suspension and non-suspension groups. According to the regulation stipulated in the *Listing Rules* (see Part II, Legal Background), it is only when the announcement of certain news is price-sensitive and there has been no previous related announcement in the press that the company can apply for a period of suspension. In that case, it is expected in the sample that the suspension group should bear higher abnormal returns than the non-suspension group during announcement period. In fact, the empirical results (Table 13) lend support to the above statement.

Table 13: Suspension Group and Non-Suspension Group

	Suspension Group	Non-Suspension Group	t (p) value
CAR (%) over two-day event window (-1, 0):			
Market Model	19.14 (30) [a]	6.96 (22)	3.306 (0.002)***
Mean -Adjusted	18.64 (30)	7.07 (22)	3.104 (0.003) ***
Market -Adjusted	18.55 (30)	6.70 (22)	3.207 (0.002) ***
Offer Premiums:			
Offer Premiums 1 [b]	37.67% (28)	22.57% (20)	2.925 (0.005) ***
Offer Premiums 2 [c]	32.29% (25)	35.25% (19)	-0.277 (0.783)
Leverage:			
Debt to Asset Ratio	0.289 (27)	0.430 (21)	-2.358 (0.023) **
Debt to Equity Ratio	0.521 (27)	1.189 (21)	-1.982 (0.059) *

a: Figures in ( ) represents the number of firms with data available.
b:: based on the average closing price within (-60, 0)
c: based on the average closing price within (-140, -40)
, ** and * denote significance at the 0.1, 0.05 and 0.01 levels respectively.*

As seen from Table 13, there is significant difference in the CARs over (-1,0) between the suspension and non-suspension group. The higher figure of CARs in the suspension group indicates that the going-private announcement is very price-sensitive and there is surely a need for request of trading suspension. In contrast, for those firms not requesting suspension of listing, the wealth effect related to the formal announcement day (day 0 in the sample) of going-private proposals would be sharply lower due to the previous news announcement. By excluding the non-suspended group, the cumulative abnormal returns increase to 19.14%, which is of the same order of magnitude as DeAngelo's findings under the market model approach.

To summarize, securities regulation does have significant impacts on the market. Accordingly, the effect of regulation should always be taken into account in examining market behavior.

Apart form the abnormal returns, some other significant differences are observed between the suspension and non-suspension group. The offer premium of the suspension group is significantly greater than the non-suspension group if the average closing price within (-60, 0) is used as the base price for comparison. However, if the average price within (-140, -40) is chosen as the base price, the difference becomes insignificant. One possible explanation is the share price increase of the non-suspension group within the (-60,0) due to informal announcements, but further investigation does not reveal that the non-suspension group as having higher abnormal returns than suspension group for this period. The possible contributing factor for this is the diffused distribution of pre-announcement dates in the non-suspension group.

The leverage difference between the suspension and non-suspension group is quite similar to the difference existing between the property and non-property group. The suspension group has a lower leverage ratio, measured either by debt to asset ratio or by debt to equity ratio, than the non-suspension group. Further observation shows that suspension group contains many more property firms than non-suspension group, although the Chi-square (1.7190) is not significant.[4] Based on the classification of the Hong Kong Stock Exchange, there are 15 property firms

in the suspension group but only 7 in the non-suspension group. If these property firms are excluded from respective groups, both the debt to asset ratio and the debt to equity ratio are not significantly different between the two groups.[5]

Furthermore, a comparison is carried out between the following two regression equations. The dependent variable in both regression models is the leverage (debt to asset ratio or debt to equity ratio).

$$\text{Leverage Ratio} = \alpha + \beta \text{ suspend} + \varepsilon \qquad (1)$$

$$\text{Leverage Ratio} = \alpha + \beta_1 \text{suspend} + \beta_2 \text{ property} + \varepsilon \qquad (2)$$

Note (4): Pearson $\chi^2 = 1.719$, $p = 0.1898$

		Suspension		
		0 (non-suspension)	**1** (suspension)	**Total**
Property	**0** (non-property)	15 (8)	15 (8)	30 (16)
	1 (property)	7 (14)	15 (22)	22 (36)
	Total	22	30	52

Figures in () are based on whether the firm has involvement in property business

Note (5): For example, based on the classification of HKSE, when the property firms are excluded from respective groups, the difference of debt to equity ratio between the suspension group (0.66) and non-suspension group (1.52) is not significant with a t-value of –1.645 (p= 0.113). Similar results are obtained whether the debt to asset ratio is concerned or another classification approach is employed.

Here, "suspend" is a dummy variable, 1 for suspension and 0 for non-suspension. "Property" is also a dummy variable, 1 for property firm and 0 for non-property firm. No matter which measurement is used to proxy for leverage (debt to asset ratio or debt to equity ratio), and no matter which classification is used to distinguish property and non-property firms, the coefficient of "suspend", β_1 in equation (2), is found not as significant as the β in equation (1). For instance, based on the industry classification of HKSE, and taking the debt to asset ratio as the dependent variable, β is –0.140 with t-statistic being –2.358, while β_1 is –0.113 with t-value equal to –1.918. β_2 is –0.124, and the corresponding t is –2.107.

All the above implies that the leverage difference between suspension and non-suspension group can mostly be explained by the difference between property and non-property companies.

6.1.4 Abnormal Returns and Offer Premiums for Other Groups

No systematic difference is found between any of the following groups of the sample, whether in terms of the offer premium, or the abnormal returns over the two-day event window (-1, 0). Table 14 displays related information.

Table 14: CARs and Offer Premiums for Different Subsamples

Groups	CARs over (-1, 0) (%)			Offer Premiums [a] (%)
	Market Model	Mean-adjusted	Market-adjusted	
--**Successful** (32)	15.88	15.27	15.45	33.65 (30)[b]
Withdrawn (20)	10.96	11.31	10.48	27.59 (18)
t (p) Value	*1.125 (0.266)*	*0.899 (0.373)*	*1.138(0.261)*	*0.985 (0.330)*
--**Property 1** [c] (22)	13.50	13.62	13.21	36.71 (19)
Non-Property 1 [c] (30)	14.35	13.84	13.78	27.89 (29)
t (p) Value	*-0.194 (0.847)*	*-0.052 (0.958)*	*-0.131 (0.896)*	*1.467 (0.149)*
Property 2 [d] (36)	11.97	11.69	11.39	31.64 (33)
Non-Property 2 [d] (16)	18.54	18.37	18.36	30.81 (15)
t (p) Value	*-1.435 (0.157)*	*-1.223 (0.235)*	*-1.283 (0.214)*	*0.127 (0.899)*
--**Before 1993** (36)	15.02	14.51	14.46	34.01 (34)
After 1993 (16)	11.66	12.03	11.46	24.98 (14)
t (p) Value	*0.723 (0.473)*	*0.532 (0.597)*	*0.648 (0.520)*	*1.392 (0.171)*

a: Based on the average closing price within (-60, 0)
b: Figures in () represent the number of cases with information available
c: Based on the classification of HKSE
d: Based on the classification of substantial property business (according to information provided by PACAP)

As seen from Table 14, there is no significant difference between the successful and withdrawn groups. Based on the average closing price within (-60, 0), the mean offer premiums for 32 successful going-private proposals is 33.65%, while it is 27.59% for 20 ultimately failed cases. However, the statistical test rejects any significant difference. The t-statistic is 0.985, and the corresponding p value is 0.330, which is insignificant at any conventional level.

Similarly, no significant differences are observed between the property and non-property groups, whether in terms of the classification made by the HKSE, or based on the classification of substantial property business.

As regards of proposals before and after 1993, there is no evidence that shows public shareholders on average gain much more after 1993 than before. No significant difference is observed between years before and after 1993.

6.2 Information Asymmetry Hypothesis

If the information asymmetry hypothesis underlies going-private transactions in Hong Kong, hypotheses 1, 2 and 3 mentioned in Part V should be supported by empirical facts.

6.2.1 Test of H1

First of all, as discussed in Part IV, under the classification made by the Hong Kong Stock Exchange, property firms make up 42% of the total sample. That ratio increases to 68% if those categorized as other industry but having property business are included. In addition, the average property ratio for 47 sample firms with data available is 37.92%, which shows that for firms undergoing going-private transactions, property contributes a substantial proportion of the assets.

Secondly, ratios of property firms and non-property firms going private are compared on a yearly basis for the whole sample period from 1986 to 1996. The ratios of property firms going private, p_1 and non-property firms going private, p_2 are defined below.

$$p_1 = \frac{\text{number of property firms with going-private proposals}}{\text{number of all listed property firms}}$$

$$p_2 = \frac{\text{number of non-property firms with going-private proposals}}{\text{number of all listed non-property firms}}$$

For the whole sample period (excluding 1987 and 1994, two years without going-private transactions), the mean yearly going-private ratio is 2.81% for property firms and 1.25% for non-property firms. If measured by t-statistic, the former is significantly greater than the latter with a t value equal to 1.898, which is significant at the 0.1 level. If using a non-parametric test, the result is qualitatively the same. The Wald-Wolfowitz test is significant at the 0.05 level (one-tailed p-value is 0.012).

Moreover, a Z statistic is calculated for each year to compare the going-private ratio between property firms and non-property firms, which is displayed in the third column of Table 15.

It is found from table 15 that excluding the two years (1987 and 1994) without going-private transactions, there are 6 years out of the total 9 years in which going-private ratio is higher for property industry than for other industries. Among the 6 years, there are 3 years (1989, 1992 and 1996) in which the corresponding Z scores are significantly greater than zero. In contrast, the going-private ratio of non-property firms is higher than that of property firms only for 3 years (1986, 1991 and 1995) over the whole sample period. More importantly, none of the Z scores related to the 3 years are statistically significant at any conventional level.

Table 15
Going-Private Ratio of Property Firms and Non-Property Firms

Year	Property	Non-Property	Z-Value
1986	0	0.65	-0.798
1987	---	---	---
1988	4.95	2.46	1.147
1989	6.74	1.91	2.118**
1990	3.61	1.39	1.225
1991	1.14	1.86	-0.456
1992	3.57	0.30	2.729**
1993	1.18	0.26	1.189
1994	---	---	---
1995	0	1.32	-1.082
1996	4.08	1.08	2.151**
Mean	2.81	1.25	0.914

** *denotes significant at the 0.05 level*

The Calculation of the Z-statistic is as follows:

$$Z = \frac{(p_1 - p_2 - 0)}{\sigma_{p_1 - p_2}} \qquad Z \sim N(u_{p_1 - p_2}, \sigma^2_{p_1 - p_2})$$

$$u_{p_1 - p_2} = 0 \qquad \sigma_{p_1 - p_2} = \sqrt{pq(1/N_1 + 1/N_2)}$$

$$p = \frac{\text{number of firms with going - private proposals}}{\text{number of all listed firms}}$$

$q = 1 - p$

N_1 = number of listed property firms in the year

N_2 = number of listed non - property firms in the year

In general, the results in Table 15 support H1.

6.2.2 Test of H2

In order to verify hypothesis 2, a control group is required, to hold other significant factors constant. For each sample firm, a firm with the smallest absolute difference in profitability (return of assets, ROA) and firm size (market capitalization) in the same fiscal year as the sample firm is selected for the control group. In total, 48 firms are finally singled out for the purpose.

Table 16 gives a comparison between the sample firms and the control group. PACAP contains information for only 50 sample and 48 control firms for analysis.

Table 16
Comparison of the Sample Firms and the Control Group

	Sample	Control	t (p) value
Profitability			
Return of Assets (ROA)	0.078 (49)	0.069 (48)	0.331 (0.742)
Return of Equity (ROE)	0.086 (49)	0.111 (48)	-0.443 (0.659)
Market Capitalization (in millions)	152 (49)	105 (47)	1.212 (0.228)
Leverage			
Debt to Asset Ratio	0.362 (50)	0.380 (48)	-0.453 (0.652)
Debt to Equity Ratio	0.864 (50)	0.804 (48)	0.321 (0.749)
Property Ratio	37.92% (50)	27.66% (48)	1.93 (0.057)*

Figures in () represent the numbers of observations
** denotes significance at the 0.1 level.*

Clearly, there is no significant difference in profitability, firm size or leverage between the sample and the control group. Therefore, the control firms are properly selected for comparison to hold such factors as profitability, firm size and leverage constant. More interestingly, the property ratio stands out to be the only

major difference between the sample and control group. The mean property ratio in the sample is 37.92%, which is much higher than that of the control group, 27.66%. In terms of statistical significance, their difference is significant at the 0.10 level. This observation provides strong support to H2.

A logit regression is carried out to answer the question why some firms undertake going-private transactions while others do not. Property ratio is the independent variable. Table 17 shows the result of the regression.

Table 17
Logit Regression of the Going-Private Decision on Property Ratios

Prob **(GP = 1) = F (α + βPR)**

(Number of Observation = 97)

Variable	Expected Sign	Coefficient	z-Statistic	p value
PR (β)	+	1.735	2.112**	0.017
Intercept (α)	+ / -	-0.491	-1.487	0.137
McFadden R-squared 3.51%				
Likelihood Ratio Statistic 4.726			[*p*-value] (LR stat.) 0.029	

** denotes significant at the 0.05 level.

GP = going-private decision, 1 for sample firm and 0 for control firm.

PR = property ratio, which is the percentage of property in the total assets of a firm

Just as expected, the coefficient of the property ratio, β, is 1.735, which is significantly positive at the 0.05 level. This finding suggests that property ratio can serve as one factor to help explain the odds of going private. In summary, H2 is strongly supported by empirical data.

6.2.3 Test of H3

As for the test of H3, which tries to identify the appearance of negative goodwill in the buyer's financial statement shortly after the completion of going-private transaction, no evidence could be obtained due to the lack of data. In the sample, some offeror companies are private firms and some are parent companies incorporated overseas. It is, therefore, very difficult to get access to related financial statements. Even though in cases where the buyer is also a listed Hong Kong company, the goodwill listed in its financial report is a combined figure, including all takeovers, mergers and going-private transactions in the past period. It is hard to exactly tell which portion of the disclosed goodwill comes from a certain going-private transaction.

Another approach, instead, is designed to examine the information asymmetry hypothesis. If the information asymmetry hypothesis is the underlying motivation for going-private transactions in Hong Kong, then it means the management embraces positive expectations about the future prospects of the target firm. The management anticipates that the firm performance will improve later, irrespective of the buyout's eventual success or failure. Without access to the financial statements of gone-private companies, the focus is put on the finally withdrawn proposals. In the sample, there are 20 withdrawn proposals. PACAP provides financial information for 17 withdrawn firms in the sample. The operating performance, return on assets (ROA) and return on equity (ROE), in particular, are

compared between the years immediately before and after the going-private announcement. Table 18 lists the comparison results.

Table 18
Operating Performance before and after the Going-Private Announcement
(number of observations = 17)

	The year before announcement	The year after announcement	t-Statistic
ROA (%)	4.105	3.538	-0.164
ROE (%)	4.657	-4.378	-0.599
Sales (in millions)	1160	1320	0.368
Net Income (in millions)	174	288	0.707

The t-statistics show that there is no significant difference between the two financial years. There is no evidence to show that the operational performance after buyout announcement improves. However, the results should be interpreted with caution as it may be affected by the small sample size.

6.3 Reduced Agency Cost Hypothesis

6.3.1 Test of Hypothesis 4 (H4)

Following Travlos and Cornett (1993), the relative P/E ratio is used to proxy for the agency conflict of firms in this study. There are data in the PACAP for determining the relative P/E ratio of 46 proposals for testing hypothesis 4. Taking the cumulative abnormal returns as the dependent variable and relative P/E ratio as the explanatory variable, a linear regression is run. Table 19 summarizes the results when the market model is applied to calculate the abnormal returns.

Table 19
Linear Regression of Abnormal Returns on Relative P/E Ratios

$^{a}CARs_{(-1,0)} = \alpha + \beta RPE + \varepsilon$

(Number of Observation = 47)

Variable	Expected Sign	Coefficient	t-Statistic	p value
RPE (β)	-	-0.713	-0.828	0.206
Intercept (α)	+ / -	131.905	5.980	0.000***
R-squared 1.50%				
F-Statistic 0.686			[*p*-value] (F stat.)	0.412

a: Under the market model approach
**** denotes significance at the 0.01 level.*

$CARs_{(-1,0)}$ = cumulative abnormal returns over (-1, 0).

RPE = relative P/E ratio, defined as the individual firm's P/E ratio divided by the average P/E ratio of its industry in the same fiscal year.

Similar results are obtained if the other two methods, market-adjusted and mean-adjusted abnormal returns, are used to measure cumulative abnormal returns.

Although the sign of the coefficient β is uniformly negative, as expected, under any of the three approaches, the corresponding t-statistics are not significant. It means the βs are not different from zero from the statistical standpoint. Thus, the relative P/E ratio as proxy for the agency conflict fails to explain the abnormal common stock returns experienced at the announcement of going-private buyouts.

6.3.2 Test of the Free Cash Flow Hypothesis (H5)

No significant difference in the free cash flow (CF/MK) is found between the sample and the control group, as seen from Table 20. The CF/MK for both the sample firms (-10.06%) and control firms (-5.18%) are negative, but the difference is not significant at all. H5 is not supported here.

Table 20

Free Cash Flow (CF/MK) for the Sample and Control Firms

	N	CF/MK	t (p) value
Sample Firms	43	-10.06%	
			-0.142 (0.887)
Control Firms	45	-5.18%	

Like in the test of H2, a logit model is also used to assess the relationship between going private and free cash flow. The dependent dummy variable remains the same, 1 for sample firm and 0 for control firm, but the independent variable changes to net cash flow, CF/MK in the test. Table 21 summarizes the results.

Table 21
Logit Regression of the Going-Private Decision on Free Cash Flows

$$Prob\ (GP = 1) = F\ (\alpha + \beta\ CF)$$

(Number of Observation = 88)

Variable	Expected Sign	Coefficient	Z-Statistic	p value
CF (β)	+	-0.019	-0.142	0.443
Intercept (α)	+ / -	-0.047	-0.220	0.826
McFadden R-squared 0.02 %				
Likelihood Ratio Statistic 0.02			[*p*-value] (LR stat.)	0.887

GP = going-private decision, 1 for sample firm and 0 for control firm.

CF = free cash flow of the firm, defined as the total undistributed cash flow divided by the market capitalization.

If H5 holds, the sign of the coefficient should be positive and significantly greater than zero. The regression results fail to meet the expectation of the hypothesis. Neither the sign nor the statistical significance is as anticipated.

In summary, H5 is rejected here. There is no evidence that the mitigation of the free cash flow problem constitutes the main motivation underlying going-private transactions in Hong Kong.

As discussed before, for the sample firms and, in fact, most of Hong Kong listed firms, the management and the majority shareholder are the same. The agency conflicts between the managers and the owners are not as serious as in Western countries. From this perspective, reduced agency cost hypothesis cannot explain the going-private practice in Hong Kong.

6.4 A Multivariate Test

Finally, a multivariate test is carried out in order to isolate the real motivation behind going-private transactions in Hong Kong. Specifically, the reduced agency cost effect, the free cash flow hypothesis and the information asymmetry effect are examined together. A binary logit regression is run, in which relative P/E ratio, CF/ MK, and property ratio are used to proxy for agency conflicts, free cash flow effect and potential for information asymmetry respectively. The regression results are summarized in the following Table 22.

Similar to the results in 6.3.2, the free cash flow does not help explain the odds of going private in Hong Kong. At the same time, no significant relationship is found between the going-private decision and the firms' relative P/E ratio. The only significant coefficient is the property ratio, which proxies for the potential for information asymmetry in the study. The higher the property ratio, the higher the scope for information asymmetry, and the more likely the management want to initiate the going-private proposal. The coefficient of the property ratio is 2.140, and the corresponding p-value is 0.008. It is highly significant at the 0.05 significance level.

In conclusion, the tests reveal information asymmetry hypothesis as one possible motivation behind going-private transactions in Hong Kong.

Table 22
Logit Regression of the Going-Private Decision on Relative P/E Ratios, Free Cash Flows and Property Ratios

$$Prob\ (GP = 1) = F\ (\alpha + \beta_1 RPE + \beta_2 CF + \beta_3 PR)$$

(Number of Observations = 87)

Variable	Expected Sign	Coefficient	Z-Statistic	p value
RPE (β_1)	-	0.028	0.628	0.264
CF (β_2)	+	-0.018	-0.129	0.448
PR (β_3)	+	2.140	2.385***	0.008
Intercept (α)	+ / -	-0.791	-2.095**	0.036
McFadden R-squared 6.13%				
Likelihood Ratio Statistic (df. = 3) 7.392			[*p*-value] (LR stat.)	0.06

** and *** denote significance at the 0.05 and 0.01 levels respectively.

GP = going-private decision, 1 for sample firm and 0 for control firm.

RPE = relative P/E ratio, defined as the individual firm's P/E ratio divided by the average P/E ratio of its industry in the same fiscal year.

CF = free cash flow of the firm, defined as the total undistributed cash flow divided by the market capitalization.

PR = property ratio, which is the percentage of property in the total assets of a firm

Part VII Conclusion

The results in this study are consistent with the gains-sharing hypothesis. Positive abnormal returns are observed around the announcement of going-private proposals. On the announcement day, the average wealth increase gained by public shareholders is 12.73% and the average cumulative abnormal return within the (-20, +20) period is 24.59%. All evidence shows that public shareholders are not subject to systematic exploitation, especially when compared to the results of a local takeover study.

Another important finding is that the regulation on suspension of listing can produce significant influence on the results. The results are very different depending on whether the suspension period in the event window is taken into account. In this study, the suspension period is excluded form the event window, in order to more accurately measure the market effect of going-private announcement. I also found that the suspension group has much higher abnormal returns than the non-suspension group. The impact of trading suspension, therefore, should be considered in carrying out research.

Apart from the gains-sharing hypothesis, this study provides some support to the information asymmetry hypothesis. In this study, property companies are hypothesized to have a higher propensity for information asymmetry because properties are a major component of their assets. Empirical data reveal that

property firms are more likely to be targets of going-private transactions than non-property firms. Moreover, the property ratio stands out to be the only major difference between going-private firms and control firms. Logit regressions provide further support that the property ratio of a firm significantly affects the odds of going-private. In contrast, the reduced agency cost hypothesis is not supported by empirical tests. Based on the evidence, information asymmetry is regarded as one very possible motivation behind going-private transactions in Hong Kong.

When examining the main motivations behind the going-private transactions in Hong Kong, a positive relation between the property assets a firm holds and the potential for information asymmetry is assumed. All tests I have carried out for the information asymmetry hypothesis is based on this assumption. In addition to the information asymmetry hypothesis, very possibly there are some other reasons that may help to explain the association between going-private transactions and property ratios. Therefore, to be rigorous, I can just conclude that the information asymmetry is one very possible motivation (maybe not the only one) for going private in Hong Kong, based on the findings in this study.

The lack of data necessarily imposes another limitation on this study. This study can be extended in the future. Insider trading before going-private announcements, operational performance after successful going private, the criteria for a fair buyout proposal and the way in which management of gone-private firms

realize their investments other than reverse LBOs, are some aspects worthy of future attention.

Appendix 1: Going-Private Sample within 1986-1996

Going-Private Company	Announcement Date
Asean Resource Holdings Ltd.	19960508
B + B Asia Ltd.	19950320
Bond Corporation International Ltd.	19881026
Cavendish International Holdings Ltd.	19910209
Cavendish International Holdings Ltd.	19920527
Chasia Property Investment Ltd.	19880115
China Entertainment & Land Investment Holdings Ltd.	19920707
Chinese Estates Holdings Ltd.	19891214
Chinese Estates Holdings Ltd.	19910918
Dong-Jun Holdings Ltd.	19960409
E Tung Properties Ltd.	19891028
East Asiatic Company Ltd.	19951016
Elders Investment Ltd.	19881129
Eu Yan Snag (Hong Kong) Ltd.	19960801
Evergo International Holdings Company Ltd.	19930818
Fountain Set Ltd.	19950509
General Electronics Ltd.	19950929
Good Earning Investment Ltd.	19891028
Green Island Cement Ltd.	19881029
Harbor Center Development Ltd.	19930423
Harriman Holdings Ltd.	19900730
Hip Shing Hong Ltd.	19890916
Hsin Chong International Holdings Ltd.	19920120
Impala Pacific Corporation Ltd.	19881202
Industrial Equity (Pacific) Ltd.	19910307

Appendix 1: Going-Private Sample within 1986-1996 (Continued)

Going-Private Company	Announcement Date
Kailey Enterprises Ltd.	19900306
Kong Wah Holdings Ltd.	19960909
Kwong Sang Hong International Holdings Ltd.	19961217
Lafe International Holdings Ltd.	19950921
Li & Fung Ltd.	19881010
Manor House Holdings Ltd.	19880210
Nan Fung Textiles Ltd.	19890523
New Town Properties Ltd.	19881129
New World Hotels Ltd.	19900322
Noble Group Ltd.	19960325
Novel Enterprises Ltd.	19950105
Park Enterprises Ltd.	19910219
Paul Y International Group Ltd.	19900830
Paul Y International Group Ltd.	19911031
Polly Peck Far East Ltd.	19891011
QPL International Lt.	19911026
Rainbow Orient Corporation Ltd.	19880414
Remy Martin (Far East) Ltd.	19890918
San Miguel Brewery Holdings Ltd.	19961030
Shui Hing Corporation Ltd.	19891120
Shui On (Contractors) Ltd.	19900115
Shui On Group Ltd.	19890809
Shun Ho Investment Ltd.	19890825
South China Strategic Ltd.	19960126
Success Holdings Ltd.	19881201

Appendix 1: Going-Private Sample within 1986-1996 (Continued)

Going-Private Company	Announcement Date
Success Holdings Ltd.	19920522
The Sun Company Ltd.	19900403
Unitex Ltd.	19891114
Yaohan Hong Kong Ltd.	19960819

Appendix 2: Control Group

Control Firm	Financial Year
Harriman Holdings Ltd.	198903
Hong Kong Ferry (Holdings) Co. Ltd.	198712
China Entertainment & Land Investments Holdings Ltd.	198812
Yangtzekiang Garment Manufacturing Co. Ltd.	198503
Hopewell Holdings Ltd.	198906
Yoshiya International Corporation Ltd.	198807
Far East Consortium International Ltd.	199003
Fairyong Holdings Ltd.	199012
Grand Hotel Holdings Ltd.	199006
Lam Soon (Hong Kong) Ltd.	199012
Lam Soon (Hong Kong) Ltd.	199312
Chi Cheung Investment Co. Ltd.	198901
Heng Feng Holdings Co. Ltd.	198803
Safety Godown Co. Ltd.	199403
Far East Holdings International Ltd.	198812
China Everbright – IHD Pacific Ltd.	198902
SEA Holdings Ltd.	198712
Henderson Land Development Co. Ltd.	198806
B+B Asia Ltd.	198906
TVE (Holdings) Ltd.	198612
Raymond Industrial Ltd.	199512
Wah Nam Group Ltd.	198804
Impala Pacific Corporation Ltd.	198706
Associated International Hotels Ltd.	199603
Applied International Holdings Ltd.	198806

Appendix 2: Control Group (Continued)

Control Firm	Financial Year
Chuang's Consortium International Ltd.	198903
Tian An China Investments Co. Ltd.	199012
RJP Electronics Ltd.	198903
Lai Sun Development Co. Ltd.	198707
King Fook Holdings Ltd.	199003
C. P. Pokphand Co. Ltd.	199112
Sum Cheong International Ltd.	198906
Kin Son Electronic (Holdings) Co. Ltd.	199204
Yaohan Hong Kong Corporation Ltd.	198903
Hop Hing Holdings Ltd.	199312
Daido Concrete (Hong Kong) Ltd.	199104
CDL Hotels International Ltd.	199212
Star Paging (International Holdings) Ltd.	199412
Acme Landis Holdings Ltd.	199012
Jinhui Holdings Co. Ltd.	199412
Shui Shing Holdings Ltd.	199408
Guangzhou Investment Co. Ltd.	199212
Legend Holdings Ltd.	199603
All Pantronic Holdings Ltd.	199503
Dah Bang (Holdings) Ltd.	199512
Guangnan (Holdings) Ltd.	199512

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