PRIVATIZATION OF STATE-OWNED ENTERPRISES THROUGH ASSET SALES

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การศึกษาการแปรรูปรัฐวิสาหกิจมีวัตถุประสงค์เพื่อศึกษาว่านโยบายการขายทรัพย์สิน ของรัฐให้แก่ภาคเอกชนได้ทำในลักษณะที่ก่อให้เกิดประโยชน์สูงสุดต่อเศรษฐกิจ และสังคมหรือไม่ เนื่องจากสินทรัพย์ที่รัฐเป็นเจ้าของนั้น ถือว่าเป็นสินทรัพย์ของชาติ และของประชาชนในชาติทุกคน การขายสินทรัพย์ดังกล่าวจึงควรได้รับการจัดการอย่างดีที่สุด เพื่อความเป็นธรรม และนำประโยชน์สูงสุดมาสู่สังคม และประเทศชาติ โดยพิจารณาจากอัตราของผลกำไรในการซื้อสินทรัพย์ของนักลงทุนเอกชนเป็นบรรทัดฐาน ซึ่งตามทฤษฎีของการเกิดประโยชน์สูงสุดกล่าวไว้ว่าการขายสินทรัพย์ของรัฐ ไม่ควรทำให้ผู้ซื้อได้รับผลกำไรที่ผิดปกติถ้าขายในมูลค่าตามจริง หรือมูลค่ายุติธรรมของสินทรัพย์นั้น แต่ผลการศึกษาครั้งนี้พบว่าไม่สอดคล้องกับทฤษฎีดังกล่าว โดยได้ศึกษาในกลุ่มตัวอย่างทั้งหมดจำนวน 1,832 ตัวอย่าง ที่รัฐเป็นเจ้าของกิจการรัฐวิสาหกิจ และบริษัทเอกชนเป็นผู้เข้าซื้อกิจการ ได้ทำการทดสอบหาค่าความแตกต่างของค่าเฉลี่ยพบว่ามีความแตกต่างอย่างมีนัยสำคัญทางสถิติของผลตอบแทนที่ผิดปกติสู่ผู้ประมูลสินทรัพย์ในช่วงระยะเวลา 5 วัน ของการประกาศขายสินทรัพย์ มีอัตราผลตอบแทนที่ 1.06% ของกลุ่มตัวอย่างทั้งหมด 1.03% ของกลุ่มที่เปิดเผยมูลค่าสินทรัพย์ และ 2.01% ของกลุ่มที่ไม่เปิดเผยมูลค่าสินทรัพย์ นอกจากนี้ยังได้ศึกษาผลตอบแทนของผู้ซื้อแบ่งตาม รูปแบบทางการเมือง ระดับของการคอรัปชั่น กลุ่มอุตสาหกรรม และกลุ่มของนักลงทุน (ในประเทศและต่างชาติ) ผลการศึกษาพบว่าค่าเฉลี่ยของอัตราผลตอบแทนในกลุ่มตัวอย่างที่แบ่งมีความแตกต่างอย่างมีนัยสำคัญทางสถิติ แสดงให้เห็นว่าการแปรรูปรัฐวิสาหกิจผ่านกระบวนการขายสินทรัพย์ มีผลประโยชน์ของผู้กำหนดนโยบายเข้ามาเกี่ยวข้องกับการขายสินทรัพย์ในราคาที่ต่ำกว่าราคาที่เป็นธรรม ซึ่งทำให้รัฐไม่ได้รับผลประโยชน์สูงสุด

ภาควิชา : การธนาคาร และการเงิน ลายมือชื่อนิสิต.....

สาขาวิชา: การเงิน ลายมือชื่อ อ.ที่ปรึกษาวิทยานิพนธ์หลัก.....

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Privatization program is regarded as one of increasingly important policy in which the state-agency decides to sell the public assets to private sectors for various reasons. The public assets being privatized are regarded as national-owned assets, belonging to individuals in the society where these assets should be handled in a maximizing manner to provide economic welfare for the country. With the importance of public enterprises established for economic-orientation purposes, the study aims to examine on whether privatization policies being conducted in a maximizing manner to the economy and society as a whole in terms of proceeds from state-owned asset sales by using bidder's return at announcement period as a proxy. In an efficient theory, the assets should be sold at fair value creating no abnormal returns to the acquirer, however, the bidder's return tends to be significant positive in this case. The sample is based on the total number of 1,832 state-owned enterprises acquisitions by public firms. The mean difference test suggests statistically significance in the abnormal returns to bidder during the announcement periods which are 1.06%, 1.03% and 2.01%, for the full sample, deal value disclose, and deal value not disclose for 5-day window, respectively. Furthermore, classifying the samples into different political system, industries type, corruption level, and bidder nation also allows for additional insights. With the significant statistics results, the study suggested that privatization activities through M&A may be underpinned by secretive or private incentives that led the price of assets sold to deviate from fair value whereby the acquirers enjoy the gains and sale proceeds are not maximized.

Department : Banking and Finance Student's Signature .....

Field of Study : Finance Advisor's Signature .....

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CHAPTER I

INTRODUCTION

Background

State-owned enterprises (SOEs) are regarded as the legal entity created by the government to undertake operations in producing and delivering products and services to the society. Rondinelli and Iacono (1996) argue that the existence of government firms have grown in many nations as a fundamental to promote economic growth or national security. So, the existence of public enterprises is seen as essential to establish to provide public services to the society. However, these enterprises may not always be successful in terms of consistency in generating profits as there are other objectives, especially providing society with a better standard of living, leading them to have insufficient cash flows for operation purposes which may later call for transformation. Thus, after the World War II, there has been continuous conduct of privatizing SOEs in both developed and developing countries. The economic analysis of public enterprises emergence is particularly the concern with the allocation efficiency issue, according to Domberger and Piggott (1986). An allocation is efficient, if the existing outcomes in the economy achieve the highest satisfaction that cannot be redistributed without making anyone worse off. In contrast, private ownership firms rely on the policy of promoting efficiency within the firm with the focus on cost minimization. The cost minimization strategy allows the firm to enjoy profit and being successful. According to Domberger and Piggott (1986), there exist reasons that public do not follow the cost minimization strategy. Firstly, there is absence of clear-cut profit objective. With the absence of profit target, there are no incentives for the managers to operate the SOEs efficiently. Moreover, there is no ultimate punishment on the manger of SOEs when the outcomes are poor unlike in the case where private firms management may be forced to leave the company for unfavorable returns. In case of

occurrence in deficit of SOEs, the managers tend to rely on the subsidy by the government as their exit strategy. The second problem, SOEs are directed to pursue with many other objectives as higher priority than cost minimization. The other important point, government generally has significant control over management of public firms to obtain political objectives rather than commercial objectives. This led the public enterprises away from producing products and services in an efficient manner.

As discussed in the above, government may fail to minimize the cost of SOEs which led them to privatize in the later decades. According to Megginson and Netter (2001), there are various goals of privatization policy which are to 1) raise revenue for the state, 2) enhance economic efficiency, 3) lower the degree of government influential power, 4) allows the wider group of investors, 5) induce competition, as well as, to promote capital market for development. However, the aims of privatization may be conflicting in terms of efficient resource allocation or arises of inefficiency. As stated earlier, existence of public enterprises can be due to facilitate and provide public services for the society which in later periods government may call for privatization in order to allow the private sector to involve in terms of management to achieve a higher profit level that remains business viability to serve goods and services to the society. On the other hand, selling its partial stake may be underlined by the secretive incentives that can lead to inefficient outcome, thus the question of whether welfare being maximized and/or resources are allocated efficiently still remain.

Over the past two decades, the privatization programs launched by the governments from all around the world increases its popularity. The first successfully launched privatization program by the Britain's Thatcher government leads the privatization program to be an alternative policy for government in many countries (Megginson and Netter 2001). So privatization policy, as a significant tool, uses the markets for allocation of resources. Privatization in this context is defined as the sale by a government of state-owned enterprise (SOEs) or assets to private economic agents (Megginson and Netter 2001). Privatization can be done through various methods which

include shares issue privatization, mass/voucher privatization or merger and acquisition. This paper focuses on the method of privatization through sale of state property where a government trades its ownership claim for an explicit cash payment and other payment methods in the forms of direct sales. The direct sales involve the sale of SOEs to an individual, an existing corporation, or a group of investors. Alternatively, share issue privatizations (SIPs) are the partial sale or all of the SOEs shares to investors through a public share offering. This form is similar to initial public offerings for private firms. However, the attention of this study is on the direct sales or asset sales that is privatization through the so called “mergers and acquisitions” since the deal can be negotiated privately and announce upon the agreements by all parties.

The value of privatization in all forms have been rising over the years and exceeded US$1.25 trillions in 2005 as reported by Megginson (2005). The total market capitalization of public enterprises accounted for 18 percent of the total market capitalization of the firms in Business Week Global 1000 in 2004 for US market. Most privatizations are being taken in the form of voucher privatization or direct sales of SOEs especially in the communist countries. Voucher privatization is another method of privatization by using the issued vouchers or coupons to buy assets or shares being privatized where vouchers/coupons are distributed for free or at a price to all citizens meaning that individuals who hold these vouchers have the right to purchase the shares. The other method, asset sales, is done through merger and acquisition method where the acquirer directly buys the SOEs assets in trade for the ownership. Apart from Communist countries, share issue privatizations (SIPs) through the public share offerings via capital market method are mainly applied for large SOE privatizations. According to Jones et al. (1999), most of the large size common stock offerings in history processed by SIPs. Total proceeds in SIPs amounted to over US $446 billion during the period 1977-1997. The advantage of SIPs is the sales of shares to the public through a well organized capital markets which attract the privatization of large SOEs. The studies of SIPs have received intense attention by academics while privatization through asset sales has been neglected by academic community since such asset

sales are not commonly found in the earlier periods. Although, the asset sales are less initiated in the history but the values of privatization through this method has been increasing recently and the outcome may not follow those shares issue method due to specific-deal characteristics. Moreover, the advantage of studying privatization through assets sale is appropriate for the transaction that its value is not big enough to gain economies in privatizing through IPO since entering into a public-traded market involves costs i.e. processing fee, document fees, legal fees, etc. In this case, it is likely that the asset sales provide an alternative to SIPs because the value of asset sales in privatization consistently increases throughout the study period with the average transaction value at USD 225 million during 1990s and USD 438 million during 2000s. In addition, Glambosky et al. (2010: 874) has also mentioned that "Much research focuses on the privatization of assets in which there is an initial public offering of shares. However, another form of privatization that has not received attention is the sale of assets to a domestic or foreign bidder. Since the acquisitions of SOEs are unique, previous research on other types of acquisitions cannot be used to infer how the market perceives them." The uniqueness in asset sale transactions is regarded as the level of information disclosed to the public where it tends to be at a different degree to those sales via publicly traded market resulting in private insights gained to those involved parties.

There are abundant researches on the share price performance of shares issued privatization (SIPs). Perotti and Guney (1993) provide evidence on offer pricing for privatizations in Malaysia, Spain, and Turkey, as well as France and the United Kingdom. Overall, the evidence presented in these studies indicates that IPOs of public enterprises tend to be underpriced in accordance with the private firms. There are several studies on the comparison of offers by state-owned companies' privatizations and privately-owned companies. Vickers and Yarrow (1988), Jenkinson and Mayer (1988), Jacquillat (1987), and Perotti and Guney (1993) all concluded that degree of underpricing is higher in state-owned privatizations than for privately-owned companies. Jones et al. (1999) have illustrated on political and economic factors

influencing the structure in share issue privatizations. The theoretical concept is based on both Perotti's (1995) and Biais and Perotti's (2002) models of how SIP terms can be designed to obtain political objectives where there are two types of government, the committed and uncommitted in interfering the privatized firm in the future. They concluded that SIP offers tend to signal for political benefits due to the offered price, shares allocation, and control allocation outcomes. However, it is important to remind that there are differences between SIPs and asset sales of SOEs activities. The conduct of SIPs is done through public sale whereas the asset sales of SOEs are regarded as an off-market transaction, meaning that the offered price is unobservable until the deal is complete and effective. The off-market nature allows the handling official to avoid the public scrutiny of the sale which may lead the agreed of buy-sell price to deviate from its fair value. This gave rise on the reason that is appealing to study the acquirers' announcement period return in asset sales of SOEs since the price of assets sold may deviate to a lower degree than the fair value that is measurable by abnormal returns to bidder.

The conduct of asset sales in SOEs and corporate mergers and acquisitions seems to be different because managers of the privately-owned target tend to maximize the proceeds from bidders whereas the values of asset sales in SOEs are not always maximized due to the fact that transactions occur may be both for commercial and/or political objectives. Therefore, the motivations of privatization can be sophisticated since the government party has the power to privatize the SOEs that is driven by incentives to benefit the interested group (Stiglitz 1998). To be more specific, the government or state-agency has the power to call for sale of SOEs where the ultimate objective is to promote efficiency but the process of privatization may not gone through the highest transparent method with no interference and influence by these parties. Moreover, there is no particular group of individuals in a country that will always monitor the action or process of privatization of the government which may lead the political parties to diverge from the social welfare maximization manner instead of enhancing values for the society by selling SOEs at a fair value. Therefore, the use of its

power in privatization that underlies with incentives for secrecy may not lead the economy to be Pareto efficient. With the existence of private incentives to government, the impact of privatization should be examined to enhance better understandings on how pricing of SOEs asset are determined in order to further clarify whether the proceeds from the sale of SOEs are maximized.

This paper focuses on the study of valuation effect on bidders via merger and acquisition transactions in the global market for the January 1990 – December 2009 period since the returns to the acquirer signal whether such assets sale are done at a fair price, meaning that positive abnormal returns to acquirers derived from the lower price bought for SOEs assets relative to the true value. The significant increase in M&A activities and the widespread of study in privatization through initial public offerings shall shift the interest towards this research through the study of asset sales of public enterprises in order to gain insights whether the policy conducted is done in a similar manner as those earlier studies of shares issue privatization, specially underpriced. The number of asset sales in December 2009 has increased 147% from January 1990. The increase in merger activity for privatization program is consistent with the analysis of Glambosky et. al. (2010) where their study is based on earlier period and single market. This paper extends the prior research by studying the M&A transaction over the longer period across global markets for a large data set of 1,832 for full sample data.

The overall empirical results demonstrate that the privatization programs create significant abnormal returns over the studied period. Moreover, returns for sample classification political system, corruption level, industry type, and bidder nation support the hypotheses that public enterprises are sold at a discounted price or deviate from the fair value in the privatization through asset sales activity which will be discussed in detail in the later section. In addition, the paper employs robustness test through the regression models by applying both the controlled variables and interest variables to capture bidder's abnormal returns.

Statement of Problem

The establishment of state-owned enterprises (SOEs) was to promote growth for the society as a whole since the private sector may not be able to invest in certain type of industries. However, SOEs face with constraints to efficiently manage the firm which, in turn, call for privatization. Some of the privatization program was, thus, launched in order to relieve budget deficit or loss of SOEs by selling the SOEs to private investors for instance. The asset values of SOEs should be sold at its fair price when selling off to the private sector to maximize the proceeds for the society. As to reflect the state-agency behavior in terms of forming decisions for the SOEs asset price in privatization, the examination on whether there is excess returns to acquirer will provide the signal of whether the agencies perform the best interest manner for the society, specifically maximizing sale proceeds. Individuals of a society do concern on selling SOEs assets since these enterprises are regarded as the national asset where every individual in the society has an ownership or claim towards it which in turn they would want to receive the highest proceeds. Therefore, the question of whether policy-maker has done in a best interest manner for the society as a whole under privatization programs needs to be examined.

Objective of Study

The objective of study is to examine on bidder's return at the announcement period to reflect on how the price of SOEs assets are determined by the government party. To be more specific, the gains of the bidder are resulted from discounted price paid for the public assets privatized relative to the fair value. This interesting finding also has the implication on private benefits or secretive motives issues underlined in the transactions since assets sale proceeds are not maximized once state-agency conduct privatization. Furthermore, the study classifies the samples into various groups; communist vs. non-communist, high corruption vs. low corruption,

regulated vs. non-regulated industry, and local vs. foreign acquirer to gain additional insights on bidder's return behavior.

Contribution

With the existing number of studies in the area of privatization, the focus was mainly on determining the degree of underpricing (the study of abnormal returns to both the target and bidder) and efficiency enhancement after the launch of privatization program. However, the studies were implemented by using the data from privatization that taken in the form of selling state owned assets in the public market, in other words, issue shares to the publicly traded market. There is less extensive study on the effect of privatization through the asset sales of SOEs via the merger and acquisition. Therefore, this study intends to fill the gap of studying privatization since asset sales can be done through a private negotiation that the selling price can be determined secretly and the information may be announce once the deal has been completed. Moreover, recent studies on the privatization through asset sales do exist but those are limited to one market as well as shorter period being studied which may not generalize the findings for every markets due to specific country settings. For this paper, the intention of period extension and market expansion will allow the analysis to a much larger data set that provides the overall returns behavior in privatization programs and be able to gain insights in the differences between the sub-samples. The valuation effect is focused in the study on the abnormal returns to acquirers/bidders since the abnormal return proxy for the gain from such asset acquisition where the SOE assets should be sold at a fair price to reflect that government agent has maximized the proceeds from the transaction. So, the conclusion of this study will lead to an understanding of the bidders' abnormal return that is plausible to infer any private benefits arise under the privatization programs. In addition, the sample classification can be used to compare the degree of abnormal returns across different national characteristics (political system and corruption level), industries, and type of acquirer since these factors further support the evidence secretive incentives of the political party. One important issue to be pointed out in this study is that asset sales are unlike IPO since the private deal allows us to gain

additional insight regarding private benefits under privatization where detail of the deal information may not be revealed until it has been completed.

CHAPTER II

LITERATURE REVIEW

Existence of Privatization and Nature of Government

The privatization of SOEs has been conducted since many years ago. The program has been designed in various forms that are different from one another in diverse aspects i.e. payment method, economics, development level, industry privatized, etc. In addition, each country that announce for privatization does not behave in the same way due to its political system or structure that requires the understanding in the nature of the government party which further underlies the rationale of privatization. Thus, this section intends to explain on the existence of privatization as well as government behavior.

According to Brada (1996), the difference between socialism and capitalism lies on the ownership of the property. Socialism is the system where enterprises are owned by the government sector whereas the latter are privately owned firms. In bringing the economy from socialism to capitalism requires the induction of private sectors in playing an important role as the operator or owner of firms, referred as the conduct of privatization. The policy implementation depends on both political and economic arguments. The objective of market restructuring, privatization, is to improve efficiency by reducing government intervention and allow the private sector to participate. The most compelling economic reason that called for privatization is due to the failure of state-owned enterprises in minimizing the cost of production. Thus, privatizing SOEs for private ownership is often seen as a solution to solve the problem since they believe that this type of economic agent would be able to stimulate productive efficiency due to the fact that privatization will stimulate small businesses, attract for foreign investment and begin industry transformation. With various types of assets being privatized, the privatization methods may vary across one another. Therefore, privatization methods can be taken in one of the forms; 1) restitution to original owners, 2) sale of state property, 3) mass or voucher privatization, or 4) the

formation of new firms by private sector. Theoretically, privatization through restitution is normally conducted in the case where property is being returned to former owners. However, in practice, the determination of reallocation can lie both in part of former ownership and political decisions on who to compensate to. In addition, the return of these properties can also be restricted with regulations in the post-privatization such as the required in use of land for certain activity, rights over the land, etc. Sale of state property privatization is referred to the case where the sale of SOE assets are to private investors both domestic and foreign. The goal of this method is to produce state revenue, speeding up private involvement and introducing foreign investors. In the mass/voucher privatization program, eligible citizens will be able to utilize their voucher to buy the shares of SOEs that are privatized. The last method, start-up of new firms is done in the privatization policy by spinning off from the existing SOEs through new company establishment by the private sector. However, this method is not commonly found, with less evidence on the record.

There have been debates (Brada 1996 and Aghion and Blanchard 1998) on identifying the best method used in privatization. The best method can be viewed in different ways, by focusing on advantages and disadvantages of each methodology. However, many studies have proven that various methods seemed to be successful. Regardless of method of privatization being applied, the concerned on public welfare effect that results from privatization still remain.

According to Stiglitz (1998), the issue of private uses of public interest was raised. Stiglitz shared the experience on the insight of government failures to counterbalance the market failures. There were explanations on the possibilities and constraints of government. The issue of why Pareto improvements are difficult to exercise was addressed in the study. Stiglitz stated that the complexity of political decision-making is involved with the trade-offs among different interest groups. There are four explanations on why Pareto improvements fail. According to the nature of the government behavior, as one of the explanation, they tend to fail in making

commitments. In addition, government has the monopoly power to enforce or even impose rules to create favorable possibilities among themselves. However, in the society there is no definite party to continuously take role of monitoring or guard the government's action. Furthermore, the government cannot consistently promise because it has power and likelihood in changing commands that cause uncertain policies to be implemented and the earlier agreements may not be able be enforced. The second explanation is grounded with the theory of coalition formation and bargaining. Once the bargaining game starts, the outcome results in a suboptimal condition under the imperfect information market which is not truly an efficient outcome or inability to achieve Pareto optimal outcome since each party will negotiate for their benefits without the avoidance to make other parties worse off. Pareto optimal condition occurs when there is no other superior outcome without making any individual worse off which is unlikely to occur under imperfect information world where each party negotiates for their best benefits. Once the new bargaining game starts, each party would negotiate and find a new outcome for its own benefit where the other party tends to be worse off, requiring another round of negotiation continuously. Therefore, the optimal equilibrium will not be obtained since there will be no new outcome without the cost of the other party. However, the bargaining game started since the parties believed in 3 ways; 1) they want to signal their strength in continuation under the old condition, 2) they hope for a better outcome for their benefits, and 3) the existence of lobbyists. The third explanation is that political game tends to be a worse off game since the gain of one party is at the expense of another party. The fourth explanation is the uncertainty about the consequences of change since there is no perfect information in the world. Thus, once there is changes in the policy people tends to questions on the consequences of change and one might oppose the policy that leads to an inefficient outcome to the public as a whole. Thus, from these findings it is clearly seen that government has secretive incentives in implementing the policies which cause market failures or not the optimal outcome in its choice and decision for each policy conducted. Thus, it is very

appealing to study whether privatization policy exhibits a sub-optimal outcome condition to the society especially in terms of pricing for the assets sold of SOEs.

In addition to the earlier findings of Stiglitz (1998), the study also documented that there are incentives of why the government remain information privately. The secrecy creates rents where there are both side of the parties in the market that have incentives for continuing the artificially created private information. Therefore, the policies being implemented by the government are often driven by private benefits that the relevant parties of policy makers receive. With the issued raised in the above, it gave rise to an interesting point in examining whether privatization leads to efficiency of the public welfare. In other words, it is worth to study whether privatization policy conduct by the government achieve the optimal outcome or Pareto condition for the economy as a whole as there exist the evidence of private benefits under the public interest.

Bortolotti et al. (2003) presented new evidences of incentives or rationale for countries to conduct the privatization program from the panel of 34 countries over the 1977–1999 periods. The study aimed to provide answers on reasons to privatize, scale of privatization, processes in privatization, and proportion of divestment. The empirical result presented that privatization is correlated with high levels of public debt, degree of development of stock market, and a right-wing majority in office. The deficit in balance of payment expedites privatization, meaning that the government would raise money through privatization programs once experiencing deficit in balance of payment. Second, political party exploited the bear market to list the SOEs in publicly-traded market. Specially, a liquid stock market would be advantage for divesting public enterprises to fully recognize the market value and generate more higher proceed from sales. Third, the other type of government privatized in order to spread capitalism system, which aiming on the political objectives to promote the market oriented platforms.

Empirical Evidence of Returns to Bidder under Shares Issue Privatization (SIPs)

Jones et al. (1999) examines political and economic factors affecting the structures of state enterprises in public offerings. In this paper, the scholars studied with total samples of 630 share issue privatizations (SIPs) from 59 countries during the period 1977- 1999. As mentioned earlier, the framework is based on Perotti's (1995) and Biais and Perotti's (1997) models for policy objectives in conducting privatization policy. Perotti (1995) shows that market-oriented government will underprice at a high degree to signal that they will unlikely to control these privatized firms in later periods. On the other hand, a populist government, where they support the rights and power of people, will underprice to a certain extent since this case it will be unable to resist interfering even after a sale. The initial SIPs are normally underpriced at a different level upon each privatization. The tender offers or book building is conducted for institutional and foreign investors. Furthermore, the government provides better practice for domestic and retail investors with guarantee shares allocation scheme. However, the underpricing in SIPs are often aimed to conquer its political obstacles. To be more specific, the findings of returns are positive correlated with percent of a SOE sold, negative correlated with populist government, positive correlated with income inequality, and direct relationship with the size of SOEs. From the finding of this study, under privatization program through SIPs, it can be seen that each government party tends to have different objectives in affecting the design of privatization program. However, both parties, market-oriented and populist government underpriced the shares issue privatization but to a different degree since they have distinctive goals to intervene after the program. So, this finding raises the opportunity for this research to further examine on how different political system or government characteristics affect the privatization under another aspect, sale of SOEs.

Megginson and Netter (2001) pointed out that there is wide conduct in privatization programs, especially after the introduction of Britain’s Thatcher government in the early 1980s. There have been debates value enhancement in government versus

private ownership, thus the goal is to review empirical research on privatization. The paper surveys on the increasing literature on privatizations and addressed the issues concerned with the following conclusion of thoughts on the current literature; 1) reducing role of government sector in the market for the past twenty years, 2) enhancement of efficiency and profitability by the private firms than SOEs, 3) government uses three methods in privatizing the SOEs which are shares issue privatization, asset sales, or voucher/ mass privatizations, 4) government pursues multiple aims in SIPs for either economic, political, and financial objectives, 5) investors who purchase initial SIP shares at the offering price and then sell those shares at the first-post issue trading price experience significantly positive returns to acquirers in short period, and 6) countries with large SIP size tend to have rapid growth in their capital market. From this study, privatization programs are increasingly famous as another tool for policy-makers to reduce its role in managing the SOEs assets in various methods. In addition to this, the empirical evidence has supported that privatization is not done in a proceeds maximizing manner where there are abnormal returns to the bidder in buying the shares issued by the public enterprise. Thus, the findings support the evidence that privatization programs create gains to investors, where theoretically; these SOEs assets should be sold at a fair value to maximize the proceeds for the economy as a whole.

Dewenter and Malatesta (1997) examine privatization of state-owned enterprises through public offerings of common stock from the global perspective that privatization events took place which are Canada, France, Hungary, Japan, Malaysia, Poland, Thailand, and the United Kingdom (U.K.). The focus is on the pricing of initial public offerings (IPOs) of state- owned companies and the initial returns to investors who participate in these offerings by comparing between SIPs and private initial offerings. The empirical evidence stated that the United Kingdom underprice IPOs in SOEs at higher degree than their private company. In Canada and Malaysia, however, the opposite is true. Underpricing in privatization at a greater degree than privately-owned firms is not explicitly intended. On the overall, across the studied countries, the evidence presented that mean initial returns for SOEs are not the same as IPOs of private firms. In

addition these findings, returns in privatization of regulated industries tend to be higher than firms in unregulated industries. This result does not appear to be driven by the United Kingdom experience even though in the sample approximately half the privatizations of firms in regulated industries occurred in the United Kingdom. The initial returns for privatizations in the relatively less developed capital markets of Hungary, Malaysia, Poland, and Thailand tend to higher than privatizations in the more highly developed capital markets of Canada, France, Japan, and the United Kingdom since the less developed capital markets environment and new regulations may the cause the uncertain that affect the price offered in privatizations. From the findings, abnormal returns to bidders under SIP program, on average, tend to be positive based on the countries being studied. Therefore, the empirical evidence within the studied scope allow this study to further extends the countries in the worldwide to explore whether the similar pattern still exist. In addition, Dewenter and Malatesta also report the difference in the degree of underpricing in different countries which is worth to further the study on how each country settings and characteristics broadly explain the pattern of abnormal returns to bidder. Nonetheless, industry settings, regulated versus non-regulated industry also indicated the difference in the degree of underpricing which this study intends to incorporate industry settings in order to be able to suggest whether privatization done under the asset sale method is at a fair value or not.

In addition to the above literature review, there are abundant evidences on the initial public offerings of privately-owned companies which tend to be underpriced. Ibbotson (1975), Ibbotson, Sindelar, and Ritter (1988), Logue (1973), McDonald and Fisher (1972), and Ritter (1984, 1991) study IPOs in the United States all conclude that on average initial offer prices are significantly less than early after-market prices. Loughran, Ritter and Rydqvist (1994) reviewed more than 30 studies of IPOs in 25 countries with the evidence indicated that IPOs are underpriced and provide higher returns for the investors for the short period of investment. The evidence on initial public offerings of state-owned companies is consistent with that for privately-owned companies. Vickers and Yarrow (1988) and Jacquillat (1987) report on privatizations in

the U.K. and France, respectively. Jenkinson and Mayer (1988) analyze privatizations in both of these countries. Perotti and Guney (1993) provide relevant evidence on offer pricing for privatizations in Malaysia, Spain, and Turkey, as well as France and the United Kingdom. Jones, Megginson, Nash, and Netter (1996) studied a sample of privatizations in many different nations. Uniformly, the evidence presented in these studies indicates that IPOs of state-owned companies tend to be underpriced as those private companies. Therefore, the empirical evidence on the existence of underprice in SIP programs tend to be interesting for study whether such underpricing exist in other type of privatization, especially asset sales since the privatization under SIP method requires more disclosure on the SOEs information whereas M&A transactions will normally release public information once the deal has been completed. The sale of SOEs in SIP will be bought by various group of investors in the public-traded market where there are requirements to make available of material information. Thus it is worth to study and examine these abnormal returns to bidder since the nature of transaction and disclosure requirements may affect the returns pattern.

Over the past, there have been massive attentions towards the study of valuation effects in privatization program through initial public offerings or shares issue privatization programs where other forms of asset sales are less likely of interest. In addition, the degree of asymmetric information in privatized asset sales is different from a privatization process through public offering of shares since there is no requirement for the disclosure of financial information and detail of the privatized assets which is worth for this study.

Empirical Evidence of Bidder Returns: Privatization through Asset Sales

Gleason, McNulty, and Pennathur (2005) studied the returns to bidders in acquisitions of privatized financial services firms in the global market, examine short performance period, and test whether such acquisitions result changes in the risk for the

bidding firm. The background of this study arises from the liberalization of financial services across the markets allowing foreign financial services to acquire the domestic banks as well as the privatized banks. The announcement of acquisitions of privatizing financial services firms' data are obtained from SDC database and World Bank Privatization database which scoped the data where acquirers are listed in NYSE, Nasdaq, or American Stock Exchange during the period of 1980-2002. Bidders generate wealth in acquiring financial services firms at the announcement period. Non-bank firm acquirers experience significantly positive gains. The evidence presents returns are less when the bidders are banks which signal that they are more cautious regards to regulation of the privatized SOEs. In addition, the scholar finds that the activity led to the increase in total risk for bidding firms. US banks experiences lower returns since they have lower systematic risk as compare to the US market, but in general US bidder's total risk increased. Banks faced with more strict regulatory than non-bank firms, thus, they are more concerned with risk- adjusted return by the search for diversification benefits that result in lower systematic risks than other firms in different industry. In addition, under the empirical evidence of privatization in financial services with positive abnormal returns to acquirer gave an interesting point to this research as financial services are regarded as one of the regulated industries, heavily subjected to regulations imposed by the government which may be highly expose to government influential manner in the later periods of privatization resulted in uncertain policy that calls for discounted asset price.

Glambosky et. al (2010) assesses the valuation effects (the returns to bidders over window period) and risk for acquirers of privatized state-owned enterprises (SOEs) based on the data taken from SDC database. From this study, the findings are compelling for further study in privatization through asset sales by focusing on whether the privatization programs conducted hidden by any of private benefits, the tendency to deviate from fair value asset sales, by the connected government or state-agency party since corruption tends to be an important factor in determining the abnormal returns to bidders. The privatization announcement period of the study is between 1985 and 2002,

where the bidder parent company is listed on the NYSE, American Stock Exchange, or Nasdaq after verification on accounting information the samples in total is 509 samples. The paper measures the gain to bidder by using event study method with event windows of (-1, 0), (-1, +1), and (0, 0) at announcement date being estimated. To be more specific, the returns are estimated 1-day prior, 1-day prior and after, and at the announcement date. The ordinary least squares market model is applied for the calculation of cumulative abnormal returns to bidders. The test of change in the risk of the purchasers is based on three return-based measures of risk, systematic risk, total risk, and unsystematic risk. The findings of the study showed the abnormal return to bidder at 0.19% for window (0, 0) both statistically and economically significant (measured by dollar equivalent returns at USD 47.5 million). One important notice in the regression analysis is the characteristics of government variable. The corruption variable is negative and significant which says that bidder returns are less for acquisitions with the governments that are more corrupted. The bureaucracy variable is negative and significant means less favorable for the acquisitions of SOEs assets from bureaucratic governments. The other two variables that are negatively correlated with the bidders' returns are debt repudiation and ethnic tension variables. From the regression analysis, the bidders experiences abnormal returns in an acquisition of SOEs assets where the magnitude of gain depends upon the exposure to political risks. In addition, the acquirers' total and unsystematic risk increases concluded that the buyer of privatized assets received diversification benefits. However, the data used in this study limits only where acquirers are listed in the US stock markets which may not be able to draw a clear conclusion on how such privatizations program is conducted whether in a transparent and welfare maximizing manner.

Most of the studies focused on the privatization of assets thorough initial public offerings of shares. However, the other form of privatization has not received intense attention, the asset sales of SOEs. This study intends to fill the gap of study about privatization through this later method of privatization program due to distinct nature of the transaction where one is done in public market and the other in private

market that exist the asymmetric information. In addition, empirical evidences on privatization have examined various aspects of privatization such as objectives and incentives of privatization, efficiency of the privatized firms, and the determinants of SOEs assets' values. Assessments of privatization conduct are normally concluded that consequence of privatized firms tend to be positive in terms of performance (Boubakri and Cosset 1998, Megginson and Netter 2001). However, the outcome is limited, especially in examining the profitability of privatized firms solely. If the improved profit results from higher prices charged on buyers, the net welfare effect is not necessarily increase (Kikeri and Nellis, 2004). The existing studies of privatization through M&A activity is often limited to certain periods of study and focused on either single market of the target or bidder which limits the ability to generalize the finding of the valuation effects under privatization program, thus, it is called for investigation in this study.

CHAPTER III

HYPOTHESES DEVELOPMENT

Background

In the absence of inefficiencies, the privatization of state-owned assets should carry fair valuations in price in order to benefit the public as a whole because SOEs are regarded as firms which are owned by every individual in the nation while under the control and management of the government as an agent. Therefore, the process of privatization through asset sales at fair price is a Pareto efficient condition. However, the power and incentives granted to government may have an impact on the value of the firm during the sale of SOEs to deviate from the fair values and it could be more pronounced in asset sales. This proposition seems to be attractive due to the consistency with early findings of underpricing in privatization firms via SIPs program. In addition, Stiglitz (2002: 58) cited in Bjorvatn and Soreide (2005: 904) stated that "Perhaps the most serious concern with privatization, as it has so often been practiced, is corruption." From the statement, government officials may not seek to maximize proceeds to the state but to pursue other political and economic objectives in privatization programs. In some instances, government officials may seek to benefit indirectly by underpricing shares and allocating them to political allies. The mentioned of political objectives suggest that government officials have stronger incentives than private issuers to underprice the sale of SOE assets by a greater degree.

As there are extensive studies in SIPs, the privatization policy that results from asset sales is another interesting aspect to study since private benefits granted to the government party do exist in both alternatives. This remarkable point gave rise to the first hypothesis of this study. To test for other incentives in privatizing the SOEs, rather than the manner in maximizing welfare of the society, the acquirers' announcement period return is use as a proxy to determine whether public assets are sold at discounted price that deviates from its fair value. The announcement period return is calculated by the difference between the return on firm i and the value-weighted market

index. In addition, the research is designed to control more of the variables about bid characteristics. Thus, it allows for a more direct method of examining the impact of target and bidding characteristics on the returns of acquirer than previous researches.

Existence of Abnormal Returns in Acquirer's Announcement Period in Privatization through Asset Sales

There are several models of IPOs that explain the underpricing reasons. Most of the models have come to the conclusion that underpricing is a consequence of informational asymmetries where one agent has better information than others about the price of the offerings. According to Rock (1986), Beatty and Ritter (1986), and Chowdhry and Sherman (1994) stated that the better informed class avoids overpriced IPOs since they do not want investors to lose their confidence with regards to the true value of the firm. IPOs must, then, be underpriced on average to attract the participation of uniformed investors. In the case of privatizations, the asymmetric information between the government selling agent and the buyer explicitly exist under the privatization through M&A method since there is limited availability of public information during the period prior to any announcement. The common requirements of publicly traded firms are for them to be subjected to public announcements or reports regarding its performance, in a standardized format for the ease of analysis and comparison purposes. However, the lack of similar sets of information for the SOE target firms may result in bias for fair price valuation by the buyer causing overpayment for the acquisition that may discourage the purchasers to bid. The state selling agents may also foresee the problem of losing buyers, thus it is called for a more persuasive strategy by discounting the price sold whereas governments may receive other forms of benefits in compensation for selling at a discounted price. Moreover, the sale of SOEs at a discounted value may be partially due to different factors other than asymmetric information signaling effect. In this case, the government party may not need to be concerned on the sale of SOEs at a discounted price as long as they receive private benefits, unlike private companies where management or people in positions of power

to influence the operation of the company are often holding a stake which would lead them to maximize their profit or proceeds if they were to sell their stake. Nonetheless, government parties or people who control these SOEs are not the people who have the stake since these SOEs belong to the state. Thus maximizing the proceeds in asset sales is not the priority in a privatization since such proceeds would be transferred to the state-agencies' offers and not create personal wealth for themselves. However, the other perspective or objective of the policy makers are on how they can create private benefits from the asset sale of SOEs to private acquirers and seem to be more pronounced since the returns that they get from such secretive incentives will be enjoyed among the benefited parties, hence it is another important issue that the government parties tend to have interest which may not exist under privately-owned firms.

The private incentives could be in various forms such as bribes or off-market transactions which lead to sub-optimal outcomes for the social welfare. The private benefits are the primarily incentive for the political parties to be corrupt and extract benefit since the proceeds from the sale of SOEs asset does not necessarily create wealth for the political or connected parties whereas private arrangements benefit the government officials. In this way, this study can possibly infer that the government has the incentive not to maximize the social benefits, not selling the SOEs assets at the fair value, as long as the private benefits outweigh the cost to negotiate with the buying parties. To determine whether privatization through asset sales is transacted at a price that deviates from fair value, the abnormal return during the acquirers' announcement period should be given attention as a proxy for evaluation. In maximizing the social welfare, the sale of SOEs should be a fair value which creates no abnormal return to acquirers. If there is abnormal return for the acquirers, it is possible to hypothesize that "corruption or private benefits arise in the privatization through asset sales" and it needs to be examined. Specifically, the first hypothesis for this study: *sale of SOEs assets in privatization creates positive abnormal returns to the bidder around the announcement period*. However, the result from the first hypothesis by itself cannot

lead to the conclusion that privatization policies were implemented to benefit private groups. Nevertheless, the result of the first hypothesis intends to signal the pursuit of other private incentives rather than maximizing the public value or sales proceeds. Therefore, further hypotheses tests are needed in order to reflect a clearer picture of how private benefits impact privatizations.

Djankov (2004) stated that state rulers (government) with power tend to seek the maximization of their own wealth. With this sort of actions, the government affects the payoffs of public welfare, benefiting some and hurting others. The actions that the government takes to improve their welfare by reducing the return on SOEs can be referred as “expropriation of the state”. According to North (1981), the role of the state depends on the country’s characteristics, on the level of financial and economic development, on its institutions, and on the incentives of the rulers. Therefore, the degree of expropriation of public welfare should vary across country, industries, and ownership allocation to different type of investors. This gave rise to other hypotheses.

Existence of Higher Abnormal Returns in Acquirer’s Announcement Period in Privatization of Communist Targets

The other interesting proxy for the examination of whether or not privatization through asset sales leads to sales proceeds maximization is the characteristic of country’s original political or legal system as stated by Nankani (1990), that privatization is an important instrument in less-developed and former communist countries. Moreover, the study of Lenway and Murtha (1994) suggest that there might be significant differences among developed, less-developed and former Communist countries with respect to post-privatization conditions. The explanation for this is argued in four dimensions; role of authority vs. markets in domestic policy, the emphasis on individualism vs. communitarian, economic vs. political objectives in forming decisions and the relative valuation of equity vs. efficiency. The role of authority versus markets affects privatization policy in terms of vulnerable government conditions after the post-

privatization, especially under the tilt towards role of authority. The authority role can alter the conditions to industrial policy and privatization before, during, and after the acquisition. Thus, the role of authority versus markets then can alter government's approach in privatization, degree of SOEs becoming market controlled, degree in control process by government, and firm characteristics after privatization across different countries which may then have different degree of impact in determining the price of assets sold. The other three dimensions can also affect characteristics of privatization programs. With a communitarian political system where rulers focused on political objectives, the economy tend to be subjected to the rules and regulations more since the political party wants to ensure the rights and duties of community membership as well as play a significant role to influence the society in the desired manner (Lodge 1990). On the other hand, individualism where individuals strive for its own output and productivity will signal an economy which tends to be driven by the people itself, which mean that government rules and regulations shall be less than the communitarian aspect. The problem of income inequality, political freedom, and property rights gradually increases as the country develops. The government tends to decide on whether to trend towards equity or efficiency. The government in countries where emphasis is placed on equity tends to influence the society by imposing regulation and/or policies more which may limit the economy to operate by itself and produces inefficiency. Thus, countries with more equity concerns, the property rights to SOE will be distributed (i.e. vouchers, partial ownership for employees) which is likely that government would include more post-privatization conditions. However, for the governments in developed countries tend to stipulate fewer post-privatization requirements since these countries experience a more well-established market, tend to have high individualism, and emphasizes on economic concerns and efficiency.

According to La Porta et al. (1999), the national legal traditions are divided into common law, French civil law, German civil law, Scandinavian law, and socialist law. The distinctions between the French, German, and Scandinavian families are very small, but the distinctions between socialist, civil, and common law traditions

are not. Under socialist law, mainly applied in Communist countries, the government's intent is to establish regulatory bodies to protect the power and resources among themselves without much regards to the public interest or liberties. La Porta et al. (1999) stated that socialist law aimed at keeping Communist party in power with no protection on property or freedom. Civil law is created to support the state power but also to promote the development of society. The emphasis of the common law is to restrict the government party involvement by allowing individuals to form its own decisions. From this point, it is clear to expect that countries with socialist laws (Communist countries) have the highest government involvement, followed by other legal traditions (Non-Communist countries). From the differences in political structure to political motives behind privatization, developed, less-developed, and former communist countries have significant differences that would also allow for differences in the means of privatization. Therefore, it is sensible to hypothesize that Communist countries result in higher control and influence over private sector which may cause the state-agency to discount the SOE asset by more than its fair value than those SOEs in non-communist countries resulting in higher abnormal returns to acquirer that should be examined since these policy makers would compensate such lower selling price with the power to influence and control in the later periods on post-privatization by firstly inducing investors with the attraction of a cheaper price.

The Communist countries are the states with a form of government characterized by single-party ruling and guiding principle of state (Wikipedia Encyclopedia). Normally, Communist states are granted with the higher priority or dominant role in decision making. Most Communist states adopted planned economies where the economic system is driven and manage by the central government. The most important advantage of these states is the consistency in policy implementation. Though, there exist dark sides of Communist countries, one which is being a point of focus in this study, is the control and influence over private businesses. A planned economy creates social conditions favoring political parties and the benefit groups. According to Hahnel and Robin (2002), they stated that command economies are

corrupt due to its power to form an ultimate decision. The popularity of corruption in privatizations is pronounced in the former Communist countries of Eastern and Central Europe and the former Soviet Union, especially Russia. The case study of corruption under privatization stated that Russia's policy of privatizing state assets became to the critical point leading to an end of the Communist system due to its extensive corruption occurred during the process.

Moreover, Perotti (1995) has modeled the policy uncertainty regarding intervention by the government after the SOEs are privatized. These interferences are in the form of control over operations, changing the regulatory environment, or implement policies which lead to private benefits of the government and their interested parties. As discussed in the above, Communist countries' governments tend to intervene more in order to achieve the multiple objectives. However, as stated earlier that most government party of every nation has incentives to sell the SOEs at below the fair value in exchange for private benefits, thus the sale of SOEs asset in both types of nation should result in positive acquirers' abnormal return. In comparing the return between Communist and Non-Communist countries, the degree of SOEs asset values being discounted should be at a different level. To be more specific, the Communist countries should have higher degree of discounted price than Non-Communist countries. By discounting the SOEs assets at a higher degree (Communist countries) induces the private sector to acquire the assets since no investor would forego the opportunity of buying cheap assets.

From the mid-1980s, there has been intense conduct of privatization deals, in particularly in less-developed and more recently, post-communist economies (Young 1987), thus it is interesting to further investigate since the government agent of Communist nations have the authority and power to influence over the privatized firms in the later period, which may lead the privatized SOEs being subjected to regulations enforced by the government. In this way, there would be higher degree of abnormal return as explained earlier in the Communist privatization program than Non-Communist

countries because the lower price of SOEs assets is compensation for the control by government agents over private firms. From this point, it is worth to remind that purchase of an SOE is different from other private firm acquisitions since the government is likely to change rules or conditions of markets and deals before, during, and after the acquisition, leaving an acquirer particularly vulnerable. Therefore, government intervention after the sale of SOEs is regarded as an inefficient policy since the welfare would not be maximized in terms of not leading to optimal resource allocation for the public sector. Consequently, it is possible to hypothesize that there is a higher degree of price being discounted in the sale of SOEs and consequently increase return to acquirers in Communist countries targets. Thus the development of the second hypothesis is hereby: *communist country targets have higher degree of abnormal returns to bidder than non-communist country targets around the announcement period.*

Existence of Higher Abnormal Returns in Acquirer's Announcement Period in Privatization of High Corruption Targets Countries

Corruption is known in every parts of the world, not only threatening the developing countries. Communists, Fundamentalists, and Nationalists are particularly well-known for its corruption behavior. According to Celarier (1997), in Asia, India is on important example of a country that transformed to a market state and has been threatened by corruption from the political parties. The other example, in Mexico, it clearly evidenced on the country reformation due to the rise in corruption problem. It is often seen that corruption occurs in all types of economic systems and as a part of the privatization programs, it also becoming more pronounce when the targets are in low degree of controlling system countries. Corruption in this context can be broadly defined as government officials abusing their power for private gains either in the form of extracting/accepting bribes or granting favorable measures to the private sector. On the other hand, the supply of bribes can be distinguished into different objectives which are to obtain government benefits or to reduce costs. From this point, it is very interesting to

raise the question: “Why do acquirers pay bribes to obtain government benefits or reduce the costs?” The answer is that the government buys and sells goods and services in off-market transactions, distribute subsidies, organizes privatization of state firms, and provide concessions, which bestows the state ruler with market power. In addition, government officials frequently have a monopoly of valuable information. Thus, turning over state assets to private owners can create incentives for corruption since acquirers do want to obtain valuable information as a return for paying bribes as well as paying less than its fair value. Real case examples exist where acquirers pay bribes in compensation for them to be included in the list of qualified bidders or restricting the number of bidders. The bidders may also pay bribes to obtain a low assessment of the public property to be sold resulting in discounted price of the state assets to create abnormal returns to acquirers, etc. In the case where there is absence or the lack of governmental regulatory systems places the privatization process increasingly at risk. To explain this, state enterprises are not subjected to same standards of accounting practice and valuation of assets as those private companies, thus leading to the gap where political parties can extract for their own benefits. With such an accurate measure to determine the fair market value of state assets, it creates the gap that can be easily fulfilled by bribes. Likewise, in the competitive bidding process for SOEs, bids can be kept confidentially, and the final decision depends on the involved parties creating room for corruption because of its power. Countries that observed to have corrupt governments are prone to higher corruption privatization programs.

In the case of privatization, Rose-Ackerman (1999: 36) stated that “Corrupt officials may present information to the public that makes the company look weak while revealing to favored insiders that is actually doing well”. There is a tendency to experience an unequal proceeds from sale of public assets and the actual price to public announcement, where political party has already extract some wealth for themselves. According to Bjorvatn and Søreide (2005), they analyze the relation between corruption and privatization by employing the economic models to identify the behavior of bribes receivers (political parties) and bribes payers (bidders). The

important remark was the increased fraudulence for highly corrupt governments lead to a higher acquisition price and higher degree of market concentration than when government officials are honest or moderately corrupt. The findings also stated that a stronger incentive to appropriate state revenues may reduce the benefits from corruption due to the eagerness of government officials to take bribes resulting in cheaper price the acquirers are willing to pay. Even though the study suggest for high price in the more corrupt government officials but the economic model applied here is based on a theoretical framework where the 2 firms, local vs. foreign acquirer, compete to win the bid over the SOEs under different levels of government corruption. However, the acquisition price stated in the study often reflects willingness to pay by each party but does not reflect the proceeds from sale of SOEs to the public as governments may have tendency to appropriate the portion for themselves in compensation for winning the bid and/or receive favorable market positions after the acquisition i.e. monopoly. In every government party, conflicting choices of policy implementation always exists but each party often put weights towards public welfare or private benefits at different degrees. Thus, the existence of the relationship between corruption and acquisition price in the theoretical framework calls for the study in empirical evidence. As stated earlier, the price or acquisition value may not be the proceeds received by the public in the sale of SOE assets. So this study intends to fill the gap by employing empirical study through the application of market data. To empirically test for the hypothesis, the appropriate criterion has to be applied as a proxy for the degree of corruption by the government. There is limitation in obtaining precise information on the degree of corruption unlike since corruption in not easily quantify because it mainly consists of secrecy, illegality, and variations across different economic activities. Despite the fact that corruption is difficult to quantify, survey-based measures of “corruption perception” are increasingly being used in many studies. Therefore, accounting for level of corruption in each country, the Corruption Perception index (CPI) is also applied in the study as it represents assessment of the corruption level of the government in each country. Transparency International conducted the CPI Index which defines corruption

as “the abuse of entrusted power for private gain”. The CPI, then, is the indicator that ranks countries according to the degree to which corruption is perceived to exist among public officials and politicians by combining from different sources of information, allowing it to compare across countries. The lower score of the index indicates that government officials are likely to demand special payments in the form of bribes (International Country Risk Guide). Therefore, the lower score index countries should demand more private incentives in compensation for selling the assets of SOEs at a discounted price and result in higher returns to acquirers. The set up of this hypothesis can provide further evidence on whether the conduct of privatization policies are associated with private benefits where the government could possibly not be maximizing the sale proceeds. In overall, the objective of this hypothesis is to analyze how government officials’ potential to corrupt determine between its conflicting objectives, and thereby how private benefits affect the outcome of privatization, in terms of acquisition price that translate into the abnormal returns existence which translate into the abnormal returns to bidder. Thus the development of the third hypothesis; *high corruption level of privatizations in countries with high levels of corruption experience higher degree of abnormal returns to bidders than countries with low levels of corruption.*

Existence of Higher Abnormal Returns in Acquirer’s Announcement Period in Privatization of Regulated Industry Targets

The theory of regulation has been introduced to the market for many years underpinned by two main assumptions; market failures (i.e. monopoly, externalities) and governments are capable in correcting the market failures through regulation. On the other hand, there are various criticisms on how well the regulation tool can reduce and improve these problems as there are debates for either market self-correction or government regulators are incompetent and corrupt which leads to a worse outcome for the society as a whole. Nevertheless, governments often intervene in the market actively by seeking to impose regulations on certain industries with the

primary reason to protect and benefit the public. However, apart from the primary reasons, are there political benefits in the underlying? The question is raised in this study due the “power of the state” where the government has the right to form economic decisions. Given the power provided here, there are possibilities for the utilization by the state to favor regulated industries in different forms. One way for corrupt officials or political parties to extract benefits in the privatization process is to offer the acquiring firm a monopoly position in the post- privatization market. This would lead the acquirers’ willingness to pay higher for the assets, but at the same time it can potentially increase the amount that the government ministers are able to appropriate for themselves.

The characteristics of each industry is a primarily indicator for governments to make decisions on whether or not to intervene. The forms of intervention could be social welfare maximization, political motives, or both. Privatized firms are often in industries which are subject to extensive government regulation such as communications, transportation, utilities, and banks. Governments privatizing these industries may retain influence over the firms through newly created regulations or other authorities to control the activities. As a consequence from government’s intervention, uncertainty occurs due to the nature and implementation of applicable regulations. To be more specific on firm characteristics, regulated industries are often industries with a significant control by the government, therefore the constraints imposed tend to have multiple objectives which also includes political motives. The regulated industries mainly consist of monopolies where the firms achieve definite profit. This assurance is very attractive to private investors in buying these SOE assets. Thus, the government party knows that they will receive high bids from selling these regulated SOEs since this investment seems to be very attractive to acquirers. Apart from the competition perspective, uncertainty regarding the characteristics of regulatory policy also contributes to uncertainty about the intrinsic value of privatization of regulated firms. As mentioned earlier on Perotti’s (1995) study, firms in regulated industries often possess some market power and the potential to earn monopoly rents. However, these rents are subject to a high degree of political risk for appropriation in the later period. Presumably,

monopolistic industries can be subjected to higher policy uncertainty and risk being prone to political benefits extraction. Therefore, the model applied in the study predict that such firms will tend to be privatized with larger underpricing and is supported by the data on the U.K. sale program for utilities firms as in accordance to asymmetric information theory.

According to Ades and Di Tella (1999), the study focuses on what cause the level of corruption. One of the theoretical arguments on corruption is to introduce higher competition at the level of government officers receiving bribes which would bid down the equilibrium amount of corruption. Based on the framework, less competition leads the firm to enjoy higher rents (private benefits) from the firm that they control (regulated firms) and tends to have higher levels of corruption. Furthermore, the empirical evidence suggests that the countries with higher protection towards domestic firms encounter with higher corruption is higher in countries where domestic firms are sheltered, especially in the case to prevent foreign competition by imposing trade barriers. Nevertheless, Dewenter and Malatesta (1997) also evidenced the higher degree of underpricing towards protected industries in privatization programs through IPOs. As evidence exists on incentives to sell SOEs assets at lower prices than its fair value in SOEs of regulated industry by the political parties, it is then worth to study whether or not governments sell regulated SOEs at its fair value under privatizations through the merger and acquisition method. Instead of receiving the highest proceed from acquirers to regulate SOEs; government has the incentive to collude with the acquirer in order to enjoy their private benefits among themselves since the government parties can have significant control over regulated industry in the later periods which can be done in a manner to benefit their interest group. As a result, the government discounts the sale of SOEs in the regulated industry by more than non-regulated SOEs which will lead to higher initial returns to acquirers in the regulated industry group. From this point, the comparison of cumulative abnormal returns based on the type of activity in which the target firm is engaged, will allow the study to observe how price is decided by the government, whether at a fair value or deviation. Thus the development of the

fourth hypothesis is hereby; *privatization of regulated industries experience higher abnormal returns to bidders than non-regulated industries around the announcement period.*

Existence of Higher Abnormal Returns in Acquirer's Announcement Period in Privatization of Domestic Acquirers

According to Biais and Perotti (2002), they found evidence that governments allocate shares in a politically inspired manner. The conduct of share allocation towards the group of investors that they can control or provide them future benefits are often preferential. Government achieves its favorable goals by dividing the issue into tranches, with each tranche targeting a certain number of shares to different type of investors (i.e., employees, domestic, retail, institutional, and foreign). Based on their study, they have shown that the government's optimal privatization strategy is to allocate the shares to median-class voters. Therefore, in order to induce theses investors, the government tends to underprice by more. From the previous evidence, the concept of shares allocation towards preferential investors can be modified to better fit the study of privatization through asset sales.

According to Denis et al. (2002), the study documented an increase in global diversification over time as there has been an increased integration of in the economies. The general findings are that globally diversified firms trade at discount relatively to its fair value. So, from this point in the findings gave rise to a remarkable question of whether these foreign buyers are paying at an expensive price for the target firms and what are the factors driving such prices. Lopez (1997) explored on the determinants of privatization prices by using Tobin's Q as the dependent variable, the factors stems from company and industry characteristics, choice of restructuring policies, type of auction mechanism, its implementation and timing, auction requirements, and prior restructuring policies. The valuable findings in this study falls where there exist limitations in certain industry for either foreign direct investment or foreign bidders which are not restricted to be included in the bidder list. In addition to

this, the privatization value or Tobin's Q is 25 percent higher when foreigners were allowed to participate. Thus, opening the opportunities of the auction to foreign bidders translate into higher premiums for the government leading to absence of abnormal returns for the privatization program since these foreign acquires do want to participate in the bidding process and will be able to participate if the price that they bid for is by far higher than locals bidder to attract the government officials to allocate such bids to them.

From the earlier findings, it can be concluded that apart from firm and industry characteristics and economic factors, political factors has played an important role in affecting the offered price. Jones et al. (1999), as mentioned in the earlier section, found that government underprice the offers, tilt the share allocation towards the domestic buyers, and impose control restrictions on privatized firm. One of the government's common practices to achieve political goal is separating the issue into tranches with each tranche targeted at certain allocation threshold to different group of investors (including employees, domestics, retail, institutional and foreign investors). In 91 percent of the offers, shares are sold to employees with favorable terms meaning at discounted price. Shares allocation is normally targeted to individuals and institutional investors and to domestic rather than foreign investors tends to be more preferential. Furthermore, domestic investors and employees who are guaranteed for the shares wish to purchase or allocation even under the case of over-subscription. This evidence suggests that government and connected parties are building its political support (by targeting median-class voters) rather than maximizing the proceeds.

As evidenced above, it is clearly seen that the domestic investors or local acquirers tend to be more favorable to the government party than foreign acquirers. Consequently, governments often offered a discounted price in asset sales of SOEs to local acquirers by more than foreign acquirers, leading to the fifth hypothesis. Thus, the fifth hypothesis is; *privatization towards domestic acquirers experience higher abnormal returns to bidders than foreign acquirers around the announcement period.*

CHAPTER IV

DATA AND METHODOLOGY

Overview of the Sample

The variables for each privatization through SOE asset sale collected from SDC Database that are material takeover to the acquirers, which include announcement date, identity of bidder and target, payment, method, companies and transactions specific information, etc. The sample consist of company announcing the takeover the period between 1 January, 1990 and 31 December, 2009 where the value of the transaction is disclose and not disclose, however, the share price data of bidder must be available from Datastream. The consideration is only on acquisitions where acquiring firms end up with the majority of shares of the SOEs for more than 50 percent holding since this would be regard as significant control over the target firm. The data exclude acquisitions where the acquiring firm already has control of the acquired assets, therefore, the requirement is where the acquiring firm has less than 50 percent control of the shares of the acquired firm before the announcement. In addition, the samples need to meet the following criteria:

1. The transaction is completed.
2. A state owned enterprises (SOEs) are acquired.
3. The acquirer is a public firm listed on the national stock exchange market.
4. The number of days between announcement and completion date is less than one thousand.

The privatization transactions being included are from the countries across the world since international market data will allow the study to generalize the findings.

The result is a sample of total 1,832 transactions where 1,165 cases with deal value disclose and the remaining is no deal value disclose. The reason that this study sub-divide the samples into 2 different groups of deal value vs. no deal value disclose is due to the fact that transaction value is one of the most important piece of information in any transaction as it reflect how much an acquirer pays for this SOEs assets. So, the different in abnormal returns to bidder pattern under this empirical result would additionally signal for private and/or secrecy benefits by the political parties in power since the transaction value will be used by the individuals whether such takeover has done at a reasonable price or not. However, if no disclosure of such information will remain questionable to the society since no one will be able to observe whether their government has sold at a fair value. In addition, Netter et al. (2011) showed the evidence on limitations of data obtained from SDC once imposes more criteria to the merger & acquisition transactions. In their study, using US bidder firms, with the additional criteria for inclusive of transaction value made available in the database, the sample size has scoped down to only 26% of the total US bidder firms M&A deals. Thus, the fewer set of samples also cause the difference in calculating the cumulative abnormal returns. Thus, this study prefer to examine the total size and the classification based on transaction deal value is available or not to compare the degree of difference in abnormal returns to bidder.

For the 1,832 sample firms, the following variables were collected: dollar value of merger (for the samples that values are disclosed), bidder share price, method of payment, target state, bidder state, targets' SIC code, and bidder SIC code. Most of the data are obtained from SDC Database except for market data and bidder share price where obtained from Datastream. In addition to this, the data of bidder are further obtained for cross-sectional analysis purposes. There is a limitation in terms of availability of the transaction value and other parameters which would scope down the opportunity to generalize the cross-sectional analysis. For instance, in discussion the general characteristics of the offers (bidder's abnormal return), the full sample of 1,832

cases were applied. In contrast, the cross-section regressions explain returns in sale of SOE assets are limited to 953 firms for which the relevant data can be obtained. However, the study does not limit the robustness test to 953 samples but rather apply similar regression equation, omitting the unavailable data. The differences between the firms in the sample are discussed later in the section.

Table 1: Summary Statistics on asset sale of SOEs by year

The table provides detail of the asset sales of SOEs breakdown by year.

Year	Number of Transactions	No. of Deal Values Disclose	Transaction Value (US$ million)	Mean Value (US$ million)	Median Value (US$ million)
1990	51	25	9,773.34	390.93	47.52
1991	124	42	1,911.39	45.51	17.45
1992	85	45	5,557.08	123.49	49.95
1993	91	53	10,742.12	202.68	64.30
1994	122	63	6,282.78	99.73	31.23
1995	140	84	14,251.18	169.66	41.59
1996	128	81	14,146.45	174.65	37.76
1997	95	68	24,283.46	357.11	43.11
1998	71	56	16,097.53	287.46	77.11
1999	92	78	24,255.42	310.97	59.67
2000	67	48	15,793.09	329.02	57.08
2001	59	44	7,926.90	180.16	57.74
2002	46	38	15,680.23	412.64	35.86
2003	41	28	10,814.97	386.25	53.65
2004	57	42	11,988.35	285.44	78.05
2005	124	87	62,446.89	717.78	84.75
2006	101	64	26,838.51	419.35	156.54
2007	109	72	31,582.74	438.65	82.14
2008	103	64	39,509.84	617.34	66.84
2009	126	83	42,212.98	508.59	58.93
All	**1,832**	**1,165**	**392,095.27**	**336.56**	**52.26**

Table 2: Summary Statistics on asset sale of SOEs by year and transactions breakdown

The table provides detail of the asset sale of SOEs breakdown by year in accordance with political system, industry type, acquirers' nation, and corruption level classifications.

Year	Communist Targets		Non-Communist Targets		Regulated Target		Non-Regulated Target	
	No. of Transactions	*Mean Value (US $ million*	*No. of Transactions*	*Mean Value (US $ million*	*No. of Transactions*	*Mean Value (US $ million*	*No. of Transactions*	*Mean Value (US $ million*
1990	10	241.35	41	9,531.99	12	316.83	39	9,456.51
1991	18	39.78	106	1,871.61	18	96.29	106	1,815.10
1992	23	2,230.01	62	3,327.07	23	2,011.14	62	3,545.94
1993	19	2,361.63	72	8,380.49	32	5,050.97	59	5,691.15
1994	24	862.35	98	5,420.43	42	1,523.09	80	4,759.68
1995	30	2,863.48	110	11,387.71	46	4,583.89	94	9,667.29
1996	14	1,412.31	114	12,734.15	51	7,976.08	77	6,170.38
1997	22	11,447.02	73	12,836.44	36	12,220.53	59	12,062.94
1998	13	2,869.62	58	13,227.91	41	11,025.48	30	5,072.05
1999	21	4,105.36	71	20,150.06	51	18,076.71	41	6,178.71
2000	10	2,085.34	57	13,707.75	38	6,043.03	29	9,750.07
2001	19	2,623.97	40	5,302.93	30	5,028.68	29	2,898.22
2002	24	13,853.94	22	1,826.29	22	13,717.71	24	1,962.52
2003	14	4,201.55	27	6,613.43	20	4,218.60	21	6,596.37
2004	18	3,221.16	39	8,767.19	37	7,698.14	20	4,290.21
2005	43	8,893.90	81	53,553.00	60	16,323.63	64	46,123.26
2006	23	4,743.14	78	22,095.36	53	11,866.66	48	14,971.85
2007	45	10,369.53	64	21,213.22	47	10,811.25	62	20,771.50
2008	40	8,413.75	63	31,096.10	37	8,349.09	66	31,160.75
2009	81	11,578.40	45	30,634.59	41	5,400.57	85	36,812.42
All	**511**	**98,417.57**	**1,321**	**293,677.71**	**737**	**152,338.35**	**1,095**	**239,756.92**

Table 2: Summary Statistics on asset sale of SOEs by year and transactions breakdown (cont'd)

Year	Domestic Acquirer		Foreign Acquirer		Low CPI Countries		High CPI Countries	
	No. of Transactions	*Mean Value (US $ million*	*No. of Transactions*	*Mean Value (US $ million*	*No. of Transactions*	*Mean Value (US $ million*	*No. of Transactions*	*Mean Value (US $ million*
1990	19	1,230.48	32	889.84	-	-	10	46.76
1991	58	902.56	66	3,583.78	1	8.54	30	33,407.27
1992	27	11,675.00	58	15,677.73	2	7.83	15	85.67
1993	36	11,126.61	55	20,445.54	3	73.63	17	468.64
1994	55	6,051.36	67	10,357.85	3	20.69	13	174.96
1995	51	2,784.12	89	8,270.09	-	-	23	163.52
1996	53	2,799.29	75	24,231.74	-	-	26	98.54
1997	32	3,902.20	63	2,204.37	4	1,373.46	13	133.85
1998	16	1,251.40	55	9,328.78	3	58.08	5	116.16
1999	33	222.04	59	3,601.12	7	104.53	7	29.02
2000	30	2,416.48	37	4,054.72	3	65.38	6	79.18
2001	23	2,600.21	36	1,347.31	-	-	7	150.75
2002	16	664.61	30	3,968.26	-	-	3	31.68
2003	22	20,633.39	19	3,273.81	1	50.30	2	50.49
2004	32	4,134.53	25	25,729.05	-	-	4	131.66
2005	65	7,473.44	59	4,790.55	2	0.12	5	14.37
2006	42	8,731.29	59	23,107.90	1	3.36	13	351.51
2007	59	19,430.65	50	20,135.38	1	N/A	14	1,088.78
2008	61	11,152.77	42	15,978.20	-	-	8	2,064.74
2009	104	55,049.83	22	16,887.01	-	-	5	210.31
All	**834**	**174,232.26**	**998**	**217,863.01**	**31**	**1,765.92**	**226**	**38,897.82**

The description of the sample and of selected features of the transaction is provided in Table 1. The summary statistics for the asset sale of SOEs are classified by year including number of acquisitions, as well as mean and median values. The number of acquisitions rose through of the early to mid 1990s and reached a record high of 140 SOEs acquisition in 1995. The mean value of asset sales does not constantly

follow a similar pattern to that of the number of mergers as well as the median value pattern. This may be due to the popularity of privatization in SOEs has became more intense in the later periods with more deals value data available at a relatively larger scale for transaction value. The average value of the transaction is US$ 336.56 million where median value is at US$ 52.26 million.

Apart from the total samples of the data collected, the sample has to be categorized into sub-sample for the study to meet the objectives. So, samples classifications are in accordance with the proxy for measuring corruption or political incentives by the government in order to conclude whether privatization contribute social welfare or not. The classifications in this study are different economic system, corruption perception index, regulated versus non-regulated industry, and the shares allocation to foreign versus local investors.

The proxy being applied is the type of political system, Communist versus Non-Communist countries. Communist countries are countries that are ruled by a single party and tend to have planned economy. According to history compilation[1], they have classified two groups of Communist states as follow:

Current Communist Countries:

- China
- North Korea
- Vietnam
- Cuba
- Laos

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1 Wikipedia Encyclopedia, List of Socialist Countries [Online], 2009, Source http://en.wikipedia.org/wiki/List_of_socialist_countries

Former Communist Countries:

- Afghanistan
- Albania
- Angola
- Benin
- Bulgaria
- Cambodia
- Congo
- Czechoslovakia
- East Germany
- Ethiopia
- Mongolia
- Mozambique
- Poland
- Romania
- Somalia
- South Yemen
- Soviet Union
- Yugoslavia

The study would incorporate both current and former Communist countries as the sample for Communist countries. The limitation in using only current Communist countries is the number of samples since there are only five countries and these countries do not conduct many mergers and acquisitions. Therefore, the use of both groups would yield a worthiness result. The remaining samples are classified as Non-Communist countries.

As mentioned earlier, the Corruption Perception Index (CPI) will be applied as the representative of the level of corruption in each government. CPI is the assessment of the corruption in government in each country. The index orders the countries in the world according to the degree to which corruption is perceived to exist among public officials and politician. The index has defined the action of corruption as “the abuse of entrusted power for private gain. This data was assessed by “Transparency International Organization” and obtained from the Internet Center for

Corruption Research[2]. The goal of the CPI is to provide data on extensive perceptions of corruption within countries. It consists of credible sources using diverse sampling frames and different methodologies. The advantage of CPI is due to the concept of combining the data sources into a single index which increases the reliability of each individual set of information. CPI will be ranged from the scale of 0 to 10. The lower score indicates high corrupted government officials where there is high demand for special payments and illegal payments collectively refer to bribes, as compare to lower governments. Therefore, the lower scores of the index refer to higher levels of corruption. In the study, the CPI will be applied upon the year of acquisition taken place to classify the countries into different groups. The classification of high versus low corruption level in each country is done through the ranking method. The CPI index for each year and each country are ranked in order. The ranking of CPI are classified into 3 groups which are high, medium, and low corruption perception index. The high CPI index is regarded as the first 35^{th} percentile of all the countries, followed by the next 30^{th} percentile as the medium CPI index, and the remaining is the low CPI index.

The classification of regulated versus non-regulated industry focus on cases where the target firm operates in an industry that is regulated or in which the involvement of state-owned enterprises is substantial. In reality, there is no single criterion of determining which industry is regulated or not. However, at some level all economic activity is regulated to certain extent. According to Campa and Hernando (2004), they considered mineral industries, primary metal industries, transportation, communication, electricity, gas, sanitary services, and financial institutions as regulated industries in all countries. This paper will follow this industry characteristic classification. The following 2-digit SIC codes: 10, 13, 33, 40, 44-45, 48-49, 60-61, and 80 are accounted for regulated industries. With the categorizing of samples into sub-sample can further conduct the estimation of abnormal returns analysis.

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2 Transparency International Organization, Internet Center for Corruption Research [Online], 2009, Source
www.transparency.org/policy_research/survers_indices/cpi

For the breakdown of transactions in Table 2, Communist targets tend to privatize through asset sales more in the later periods with a consistent increasing value of the transactions, especially in period after 2000. The value of transaction in Communist targets account for 25.0% of the full sample transaction value, where China, Germany, and Poland mainly represent the statistic. Even the Communist countries are by far less than Non-Communist countries, the number of privatization under communist political share 27.9% of the total number of transactions. On the other hand, Non-Communist countries tend to privatize heavily in the early periods especially in the year of 1991, 1995, and 1996. Further depth of the data, in 1991 the samples of Non-communist countries mainly dominate by Germany where as 1995-1996 mostly consist of UK, France, and Hungary. However, the more number of privatization transactions in those years do not explain the mean value of transactions since the transaction values are lower than those years with less number of transactions.

Under the regulated industry target data, the privatizations tend to be consistent overtime with no outstanding number of transactions in specific year. The 3 highest numbers of transactions are in 1999, 2005, and 2006 at 60, 53, and 51 deals in each year, respectively. Unlike the other type of data classification, regulated industry transaction value correlates with the number of privatize transactions. Therefore, those 3 years experiencing highest number of transaction also have relatively high transaction value at US$ 16,323.63 million, US$ 11,866.66 million, and US$ 18,076.71 million for 2005, 2006, and 1999, respectively. The non-regulated industry target tends to privatize more in the 1990s with the drop in such sale of SOEs asset in early 2000 and sharply increased in late 2000. The highest number of transactions occurred in 1991, but the transaction value is relative low comparing to other periods. The transaction value tends to hike up in the late periods, after 2004, with no heavily privatize of SOEs in any specific non-regulated industry.

The type of acquirer data classification towards domestic bidder gradually increases its privatization activities in the late period, especially after 2004. In

2009, the highest number of privatization transactions recorded at 104 deals with mean transaction value at US$ 55,049.83 million. The pattern in number of deals and transaction value do not correlate meaning that even in various number of transactions, the mean value of transaction does not increase or relatively high. The share of domestic acquirers is at 45.5% to total number of bidders. In contrast, foreign acquirer privatization activities do not present a significant pattern; the number of transactions is relatively at the same amount over the periods. In the earlier studies have mentioned the importance of global diversification and becoming more popular in later periods, however, according this sample set the transaction activities do not exhibit such result. One notice in the foreign bidder classification sample is on the high transaction value in later periods as compared to earlier periods, especially after 2004.

Table 2 under corruption perception level sample classification is for illustration purpose, the number of low corruption index level countries (infer as high corruption countries) account for 1.7% of the total number of privatizations existed in the international market under studied period. In addition, most of the low corruption index countries do not reveal the transaction value, thus, it seems to be bias to draw conclusion on the relationship between transaction value and number of transactions. For the high corruption index countries, accounted for 12.3% of the total number of privatizations where the remaining are classified as medium corruption level as explained in the earlier. Most of the honest government country (according to corruption perception index) privatizes its SOEs in the early periods with fewer activities in the 2000s. The highest mean transaction value is in 1991 at US$ 33,407.27 million with the most privatization deals at 30 transactions.

Estimation of Abnormal Returns

The study applied the basic even study to calculate abnormal returns for the bidder firms where the focus is on two different window periods: a 5-day window (-2,

+2)[3] and a 21-day window (-10, +10) around each initial announcement date, supplied by SDC database and Datastream. Following Brown and Warner (1985), the measure of bidder announcement effects is by using market-adjusted stock returns around initial acquisition announcements where the model requires the data in longer period that is not affected by the event of mergers and acquisitions. Under the studied sample, some of the bidder conduct more than one asset acquisition transaction during this period studied. Thus, the appropriate estimation of abnormal returns to bidder is as follow:

$$AR_i = r_{,} - r_m$$

where $r_{,}$ is the return in firm i and r_m is the value-weighted market index return. The return in firm i is based on the calculation of holding period return method represent by;

$$\frac{P_i Day(t+2)}{P_i Day(t-2)} - 1 \text{ and } \frac{P_i Day(t+10)}{P_i Day(t-10)} - 1$$

where i is the acquirer firm. This equation will allow obtaining the returns to bidder for investing in the target's assets during the announcement period. For the value-weighted market index return, it is obtained from Datastream by using the total market return index as the benchmark return since it includes the dividend. However, the r_m that is applied to each transaction has to match both the period of announcement and origin country of the bidder. Additionally, it has been shown that for short-window event studies, weighting the market return by the firm's beta does not significantly improve estimation (Brown and Warner 1980). According to the study of Brown and Warner (1980) attempting to examine the impact of particular types of firm-specific events on the prices of the affected firms' stock. The abnormal performance is calculated based on three different models which are mean adjusted returns, market adjusted returns, and market and risk adjusted returns. They have found that the market adjusted model performs well under the conditions such as when securities are not randomly selected and sample

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3 According to Fuller, Netter, and Stegemoller (2002), the use of 5-day window over the event (-2, +2) captures most, if not all, of the announcement effect without introducing substantial noise into the analysis. Thus, this study tends to follow the same window for robustness test also.

security systematic risk estimates were systematically clustered and different from 1, even the mean adjusted return or market adjusted return methodologies out perform in detecting for the abnormal returns than a more sophisticated model.

In overall, the acquirers' announcement period return is based on the estimate of Cumulative Abnormal Return ($CAR_{(-2, +2)}$ and $CAR_{(-10, +10)}$). This methodology can be found in other studies such as Fuller et al. (2002), Moeller et al. (2004), and Faccio et al. (2006), etc. This return is used as the proxy for measuring the degree of bidder gain as well as the implication in the degree of welfare expropriation by state ruler. To be more specific, the abnormal returns in acquirers' return results from the discounted price of SOEs assets available to the bidder assuming that the market value of shares are correctly priced. The discounted price offered is viewed as deviating from welfare maximization by the government party since the efficient conduct of selling assets to investors should be at a fair value creating zero abnormal returns. However, the reason in applying of cumulative abnormal returns to bidder is due to limitation in observing the true value of the SOEs asset itself once the takeover has been announced since such firms may not be listed in the national exchange market. From this condition, there might be a caveat in the study since the measure of abnormal returns to bidder from the share price may also be affected by other factors. Furthermore, in order to convey meaningful empirical evidence the statistical significant test is employed by calculating the t-statistics as in the following;

$$t = \frac{\overline{X}}{\frac{s}{\sqrt{n-1}}}$$

where $\overline{X}$ is mean of sample set, s is sample standard deviation, and n is total sample size. For the median statistic test is based on Wilcoxon signed rank test since this test is appropriate for the median values. Wilcoxon signed rank test is based on the idea that the sum of the ranks for samples above and below the median should be similar. Beyond this, the focus of the study was on determining differences in the degree of

abnormal returns to acquirers among the samples classifications which requires further steps to provide the evidence. .

The CAR is further taken to test other hypotheses. According to the hypotheses development, the objectives are to test the degree of public welfare maximization by the government based on the samples classification. Therefore, the procedure of testing the hypotheses is through the use of mean difference methodology. The t-statistic value is calculated using the following equation;

$$t = \frac{\overline{X_1} - \overline{X}_2}{S_{\overline{X}_1 - \overline{X}_2}}$$

where;

$$S_{\overline{X}_1 - \overline{X}_2} = \sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}$$

where $\overline{X}$ is mean of sample set, S is the standard deviation of each sample group, n is the number of samples in each sample group, 1 is group one, and 2 is group two. In addition, the median difference test is employed through the Mann-Whitney U test or Wilcoxon Rand-sum test, which is a non-parametric statistical hypothesis test for assessing whether one of the two independent samples tend to be larger than the other sample. As stated earlier, the comparisons are based on the political system, corruption perception index, characteristic of industry, and the type of acquirer. The mean of the abnormal returns to acquirers' in the announcement period are applied to test for the mean difference among sub-samples. Therefore, the uni-variate analysis reveals the different degree of abnormal returns to bidders among samples classification, reflecting the level of welfare maximization by the government party.

Regression Methodology

In earlier methodology is to analyze returns to acquirer using uni-variate comparisons. For further robustness test, the multivariate tests on the determinants of acquirers' return are applied. The value of cumulative abnormal returns should be correlated with the issue-specific, firm-specific, and private benefit proxies that it is announced. Specifically, the test is on the existence of systematic differences in various dimensions: whether the merger takes place in communist or non-communist countries, in high or low corruption index countries, the target firm operates in an industry which there has significant regulation or small control, and whether the merger takes place between the tow firms in the same country or not. However, as stated by earlier empirical studies, there are more of the factors explaining the abnormal returns of bidder. Therefore, regression analysis is employed to check for robustness.

Previous studies have incorporated various factors in explaining the abnormal returns which will allow this study to follow some of those factors. Asquith et al. (1983) examined that the bidders' abnormal returns is related to the relative size between target and acquirer whereas Draper and Paudyal (1999) documented return to the bidders is correlated on the mode of payment. Moreover, Draper and Paudyal (2006) also showed that acquirers generate positive wealth during the announcement period where the gains are correlated with target status, mode of payment, and relative size of the parties. To allow for estimation of CAR by various factors, the regression equation is expressed in the following:

$$CAR_{(-2,+2)} = \beta_0 + \beta_1 POLITICAL_i + \beta_2 CORRUPT_i + \beta_3 INDUSTRY_i + \beta_4 NATION_i + \sum_{j=5}^{k} \beta_j X_{ij} + \varepsilon_i$$

X_{ij} represents a vector of factors known to determine abnormal return and ε_i is the regression error term. $POLITICAL_i$ is dummy variables equal to 1 if issue i is offered in communist countries and equal to 0 otherwise. $CORRUPT_i$ is dummy variables equal to 1 if issue i is offered in high corruption countries and equal to 0 otherwise.

$INDUSTRY_i$ is dummy variables equal to 1 if issue i is offered in regulated industry and equal to 0 otherwise. $NATION_i$ is dummy variables equal to 1 if issue i is offered for domestic acquirer and equal to 0 otherwise. The ordinary least squares regression is applied to estimate bidders' five-day cumulative return based on a set of interest variables. Thus, the regression coefficients on the independent variables represent the difference in the correlation to bidders' abnormal return. Furthermore, the study also introduces interaction terms into the regression equation in order to control for difference in the slopes of the explanatory variables as this test has been developed by Gregory Chow. The objective of incorporating interaction of dummy variable and control variables is to cross check whether the sets of coefficients in two linear regressions are equal, specially the slope, by confirming that the correlation under separate regression of each dummy variable model and the interaction terms of such dummy variable model has the same correlation direction and significant or not. In this way, the interest dummy variable independently will represent the intercept whereas interaction term represents the slope. So, the interaction term will further explain the correlation with cumulative abnormal returns to bidder. In addition, the study also controlled for other possible determinants of excess value including relative transaction value to bidder size, bidder size, total debt to total assets, bidder market to book value of equity, dummy variable for diversification, dummy variable for method of payment.

Explanatory Variables

The objective of this study is to explore on any private benefits arise under the privatization program by applying the interest variables together with the controlled variables, collectively explanatory variables, in the regression equation through various models. The interest variables consist of political system, type of industry, corruption level, and type of acquirer. For the controlled variables, have been applied in earlier studies, signal the implication that explains acquirers' abnormal return which is worthwhile to be captured in the robustness test for yielding effective results.

Communist Countries Target Political system has been applied as one of the interest variable as the dummy variable where 1 refers to communist political system and 0 refers to otherwise. The reason that communist politics has been of interest is due to the state-agency power to both rule and influence the political system. The higher ability to control the country in the later periods after privatization in an inspired manner towards their connected parties may then be reflected as a gain to the acquirers in compensation for policy uncertainty.

Corruption Level. The second interest variable that can explain the bidder's abnormal return is corruption level proxy by the corruption perception index. In each year the International Risk Guide conduct the surveys of bribery incentive or monitor other signals of corruption, then construct the index based on each country. The higher index indicates relatively lower corruption level and vice versa. Thus, the application on corruption perception index into the regression shall leads to possible explanations of how government officials corruption affect the abnormal returns to bidders since government played an important role in determining the sale price of SOEs assets under the privatization program.

Regulated Industry. Government privatizing the regulated industries may retain control over the firms through newly created or substantially restructured regulatory bodies which call for uncertainty to the acquirer, thus, affects the abnormal returns to bidder. The regulated industry are based on the 2-digit SIC code, as explained in the earlier, through dummy variable where 1 refers to regulated industry and 0 is non-regulated industry.

Domestic Acquirer. As the there exist evidence that domestic investor or local acquirers tend to be more favorable to the government party than foreign acquirers, which is appealing to further investigate on whether such action has an impact on the value of asset sold to investors or not. Therefore, the regression equation incorporates dummy variable for bidder nation where 1 refers to domestic acquirer and 0 is foreign acquirer.

The response in the market on share price upon acquisition announcements may also be affected by characteristics of the acquiring firms or the deal. Therefore, incorporating controlled variables for the effectiveness in robustness check purpose.

Relative Transaction Value of Privatized Assets to bidder Size. The relative value of assets acquired is measured by dividing transaction value by the value of the bidder's asset in the prior year of announcement. To the extent that acquisitions invested in should yield favorable return rate to bidders relative to the investment, which means that the abnormal return to bidder should be more favorable for larger scale of acquisitions. The transaction value of privatized assets is obtained for SDC database on each specific deal. The denominator, bidder size, is the bidder's total asset as of prior year of the announcement of takeover.

Bidder Size. Bidder size is normally identified as determinant of abnormal returns in M&A activities. Moeller et al. (2004) shown that smaller bidders gain more than larger bidders and the result coincide with managerial hubris theory. The incentives for managers of small firms tend to be aligned with those of the shareholders than in the case of large firms. Moreover, managers of large firms are more prone to hubris behavior as they are successful which results in less constraint in takeover events in terms of sufficient resources for takeovers. Larger firms may have better tools for assessment to evaluate and integrate the privatize assets under acquisition transaction. Therefore, the gains to bidder should be positively related to size of bidder. The size of the purchaser is measured as the log of the market value of equity from the prior year to acquisition announcement

Bidder Leverage Level. In addition, the debt monitoring hypothesis suggests that debt can mitigate the problem between managers and shareholders. As a company has higher level of debt usage, the managers tend to be more focused on the operation as they are afraid of causing the firm to bankrupt. With higher level of debt, the company incurred higher interest expenses followed by the reduction in free cash flows

and managers tend to be more cautious in the takeover activities. The carefulness in its mergers and acquisitions activities leads the bidding firm with high leverage to acquire targets that generate positive abnormal returns for them. According to Maloney et. al (1993), the empirical studied has used the leverage level as one of the determinants in explaining the abnormal returns of acquirers' firms in the merger and acquisitions. The studied show a significant positive correlation between the leverage of the acquirer firm and acquirer firm's abnormal return. This study also incorporates total debt to total assets as of prior year to announcement to capture for such effect.

Bidder Market to Book Value of Equity. The market-to-book value ratio attempts to identify undervalued or overvalued securities by taking the market value of equity and dividing it by book value. It is also widely accepted that the ratio of book-to-market value of equity has significant explanatory power for cross-section stock returns according to Chan et al. (1991), Fama and French (1992), and Shleifer and Vishny (!994). They have explained that the book-to-market is used to identify stocks that are mispriced relatively to the fundamental values. Thus, the market to book value of equity, inverse of book to market value of equity, shall be controlled for the abnormal returns to bidders.

Industrial Diversification. Maquieira, Megginson, and Nail (1998) reports that acquirer's abnormal returns are higher for the within-industry acquisition than diversification acquisitions. To control for whether the acquisition is within the same industry, the indicator variable or dummy variable is to identify whether the target and the bidder have the same 2-digit SIC code or not.

Method of Payment. According to literatures, method of payment hypothesizes that a bidder will prefer cash as means of payment when they perceive that their share price are overvalued and cash when its stock are undervalued or correctly priced. Thus, it led to the prediction the prediction that bidders using stock offers will have negative price reaction to merger announcements than those making cash offers having positive or zero price reactions.

Myers and Majluf (1984) argue that the bidders tend to use stocks as the medium of exchange as they believe that its own shares are overvalued. However, the target firms know this, resulting in a failure in the takeover. Other studies have expanded the idea that higher-valued bidders will use cash or higher proportion of cash to signal their value in the market. In case of uncertainty in the value of the targets, the bidder may not want to offer cash since they are afraid of being overpaid. This gave rise to the "contingency pricing effect" (Hansen 1987) where the bidding firm tends to offer stocks to the uncertain target values firms. The rationale behind is that bidding firms forced the target firms to share the risk if the bidders overpay. In this way, bidders tend to offer cash when there is uncertainty in its firm's value and stock if the target faces with uncertainty. Thus, the dummy variable refers to transaction where the method of payment considered and/or offered is cash.

The arguments of existing empirical studies show the relation of various factors in explaining the abnormal return of the bidders which is appealing to be captured in the regression. Therefore, the explanatory variables include the relative size of the bidder (deal value/ total assets of the bidder), size of the acquirer (market value of bidder), and other dummy variables. The dummy variables include methods of payment, political system, corruption perception level, type of industry, type of acquirer, and industrial diversification. The regression estimation is done by employing one interested variables at a time with other controlled variables. Each of the explanatory variables has been suggested by theory as a determinant of the market's perception of an acquisition.

CHAPTER V

EMPIRICAL RESULTS

Evidence on Privatization Deals

The measure of cumulative abnormal returns is computed as the difference between the return to shareholders during the window and the value-weighted market index. These abnormal returns are based on the point of view of the acquirer since it is the proxy for private benefits extracted by political parties since SOE asset sales should be sold at a fair price. The used of two different windows in the calculation of CAR was to obtain some insights into the different timeframe. The two windows are: 5-day period (-2, +2) and 21-day period (-10, +10). Table 3 – Table 7 report the 5-day and 21-day cumulative abnormal returns to multiple bidders classified by complete samples, target's political system, target's industry, type of acquirer, and corruption level of target country. Nonetheless, the study also examine the median test in order to provide a clearer empirical results on how the abnormal returns to acquirer behave in general. The results of median test are normally in the same pattern as the mean test (present in Appendix 2 Table 14 – Table 18)

Table 3: Test of mean differences in cumulative abnormal returns in all samples

The table shows CARs of each sample classification, as well as the t-statistic on the significance of the difference between cumulative abnormal returns. Abnormal returns are calculated as the difference between shareholder returns and expected return on the market, using the value-weighted market index.

	$CAR_{(-2,+2)}$	$CAR_{(-10,+10)}$
Full Sample		
Mean	1.06%	2.01%
t-stat	6.940	6.854
Number of Observations	1832	1832
Deal Value Disclose		
Mean	1.03%	1.94%
t-stat	5.118	5.125
Number of Observations	1165	1165
Deal Value Not Disclose		
Mean	1.11%	2.14%
t-stat	4.729	4.626
Number of Observations	667	667

In Table 3 reports the CARs for the full sample of bidders based on different window periods. For all bids, the CAR is statistically significant positive at 1.06% and 2.01% for 5-day and 21-day window. Moreover, the returns data differentiated on the basis of whether its deal value disclosed or non-deal value disclosed, the findings are that CARs are still significantly positive 1.03% for 5-day window and 1.94% for 21-day window in the deal value disclose sample. As stated earlier that the objective of calculating return on three sets of data is to gain additional insights on the off-market transaction nature that may create higher incentive for related parties to gain its own benefit, particularly the case of no deal value disclose. In the non-

deal value disclose, results are in similar pattern where CARs are significantly positive 1.11% and 2.14% for 5-day and 21-day window. The CARs are positive and significant for the acquirers sample regardless of the disclosure of transaction values or not in both return periods which can be concluded that privatization through assets sales of SOEs tend to deviate from the fair value causing excessive returns to acquirers in the short period. It is not surprising that under the non-disclosure in deal value demonstrated the highest returns as it may correlates to the private benefit motive. This highest degree of abnormal returns is very interesting to point here since it gave rise to why such non-disclosure of transaction value experiences the highest degree of abnormal returns among other samples. One possible explanation on this is that these transaction can be negotiate privately on the price of the SOEs assets sold limiting the external parties or authorities to evaluate on the suitable price or its fair value since the government officials have the ultimate power to decide and favored the buyer in compensation for its benefited private incentives. In addition, the 21-day window empirical result suggests for significant abnormal returns in all sample models at a higher degree of abnormal return than the 5-day window. To measure for the strong evidence on private benefits toward connected state-agency party, the test of mean difference between deal value and no deal value disclose is further explore. The findings of abnormal returns in privatization through M&A activities suggest for possible private benefits. Moreover, the empirical result is also consistent with previous findings in terms of positive abnormal returns to the bidder, Doukas, Holmen, Travlos (2002) displayed significant abnormal returns for acquirer on average with different short window periods based on focused acquisitions. Other studies on various M&A activities across different industry also suggest for abnormal returns to bidder with the focus on US market by Maquieira et al. (1998) and Mulherin (2000). As stated earlier, from such complete samples of privatization through merger and acquisition activities presenting the significant abnormal returns around the announcement period which calls for further investigation in the samples composition in order to further evidence private benefit motives under these transactions. In accordance with the hypotheses adopted in the earlier section, the uni-variate results

further presented in Table 4 - 8 with different samples classification for comparison between each group.

Evidence on Political System Privatization Deals

Table 4: Test of mean differences in cumulative abnormal returns in political system classification

The table shows CARs of political system sample classification, as well as the t-statistic on the significance of the difference between cumulative abnormal returns. Abnormal returns are calculated as the difference between shareholder returns and expected return on the market, using the value-weighted market index.

	$CAR_{(-2,+2)}$		
	Communist	Non-Communist	Mean Difference
Full Sample			
Mean	1.99%	0.71%	
t-stat	5.759	4.291	3.368
Number of Observations	551	1321	
Deal Value Disclose			
Mean	2.02%	0.62%	
t-stat	4.593	2.917	2.865
Number of Observations	340	825	
Deal Value Not Disclose			
Mean	1.92%	0.84%	
t-stat	3.519	3.300	1.798
Number of Observations	171	496	

	$CAR_{(-10,+10)}$		
	Communist	Non-Communist	Mean Difference
Full Sample			
Mean	2.43%	1.85%	
t-stat	3.735	5.785	0.800
Number of Observations	551	1321	
Deal Value Disclose			
Mean	2.37%	1.76%	
t-stat	2.901	2.248	0.665
Number of Observations	340	825	
Deal Value Not Disclose			
Mean	2.55%	2.00%	
t-stat	2.385	3.993	0.466
Number of Observations	171	496	

In Table 4 reports of CARs for the communist country and other countries under different political system. CARs for Communist countries are statistically significant positive at 1.99%, 2.02%, and 1.92% for full sample, deal value and no deal-value disclosed for 5-day window (21-day window: 1.85%, 1.76%, and 2.00%, respectively). The study has hypothesized that the bidder returns in Communist country targets will be influenced or subject to government control and policies in the later periods after privatization, which stimulate the bidders to demand for lower price pay for target's assets. The empirical results evidenced that abnormal return for the acquirer in the Communist target countries tend to be significantly higher in all sample groups, consistent with hypothesis adopted earlier regarding to Communist countries environment and character where it may leads to higher abnormal returns as compared to Non-Communist targets. The higher level of abnormal returns in Communist country shown that there exist such private incentives in conducting privatization in terms of the control influence over the company after the sale. In addition, the difference test

between these two groups also evidenced that the return of Communist sample data is significantly different from Non-Communist countries in full and deal value disclosed sample at 0.05 significant level. However, the long window period only result in abnormal returns for each sample composition but no statistically significant in the difference. The explanation for this is the impact on share price of a company caused by different factors where longer window period are often exposed to it. Nonetheless, the return for non-communist target countries tend to be positive but to a less degree than the other sample sets among all data groups. As a consequence, it can be inferred that the hypothesis adopted in the earlier section is true that Communist countries tend to provide private benefit for its policy-makers since such benefits bring favorable outcomes to the connected parties in post-privatization. In addition to this finding, there exists a pattern that Communist countries tend to experience higher rate of abnormal returns in the later periods, especially from 2006 onwards up to 6.21% in 2009 (presented in Table 13, Appendix I). This greater positive returns in later offers made for Communist countries is possibly due to more divestment of SOE in China where the previous periods comprise of less transactions done by China. On the other hand, non-Communist countries highest CAR is up to 2.9% with high abnormal returns in the year of 2001-2004 (presented in Table 13, Appendix I) which can be clearly seen that the magnitude of positive returns reaction is by far less than those ruling countries. These abnormal returns are mainly driven by the European countries with an introduction of countries in Asia during 2004.

Evidence on Corruption Level Privatization Deals

Table 5: Test of mean differences in cumulative abnormal returns in corruption level classification

The table shows CARs of corruption level classification, as well as the t-statistic on the significance of the difference between cumulative abnormal returns. Abnormal returns are calculated as the difference between shareholder returns and expected return on the market, using the value-weighted market index.

	$CAR_{(-2,+2)}$		
	High Corruption	Low Corruption	Mean Difference
Full Sample			
Mean	2.33%	0.71%	
t-stat	5.636	3.343	3.476
Number of Observations	440	808	
Deal Value Disclose			
Mean	2.52%	0.45%	
t-stat	4.907	1.606	3.524
Number of Observations	301	471	
Deal Value Not Disclose			
Mean	1.91%	1.07%	
t-stat	2.784	3.326	1.102
Number of Observations	139	337	

	$CAR_{(-10,+10)}$		
	High Corruption	Low Corruption	Mean Difference
Full Sample			
Mean	3.11%	1.77%	
t-stat	3.903	4.557	1.508
Number of Observations	440	808	
Deal Value Disclose			
Mean	3.20%	1.80%	
t-stat	3.258	3.267	1.244
Number of Observations	301	471	
Deal Value Not Disclose			
Mean	2.91%	1.74%	
t-stat	2.149	3.296	0.806
Number of Observations	139	337	

As mentioned in the previous section that the corruption perception index (CPI) is the index that has accumulated different factors on signaling incentive of corruption of each country. Lower CPI index reflects the higher degree of corruption in each country, vice versa. The study has hypothesized that the country with lower CPI tends to have higher degree of abnormal returns meaning the M&A activities were not sold at its fair value and the empirical result is also consistent with such assumption reported in Table 5. The CAR for low CPI countries (high corruption) are positive statistically significant at 2.33%, 2.52%, and 1.91% for 5-day window and 3.11%, 3.20%, and 2.91% for 21-day window for full sample, deal value disclose, and deal value not disclose, respectively. For the high CPI countries, abnormal returns are also positive significant at 0.71%, 0.45%, and 1.07% for 5-day window and 1.77%, 1.80%, and 1.74% in 21-day window for the same 3 types of samples. The high corruption countries abnormal returns are normally higher than the low corruption countries and the mean difference is significant for the full sample model in short window. The result shown in

here is not surprising since high corruption level countries tend to have more corrupt state officials where they receive bribes or supply with favorable incentives for the party. Apart from this, these countries are normally developing or emerging countries such as Soviet Union, China, India, Pakistan, Thailand, Indonesia, Philippines, Romania, etc. where they may have weak political control system that opens the loop hole for policy makers to take advantage in an inspired manner. In contrast, low corruption countries are European countries, UK, US, Australia, etc. with a more developed market and well established controlling system leading them to be more careful towards political actions under privatization. Moreover, the abnormal return patter for high corruption is consistently positive at the highest abnormal return of 4.97% in 1998, however, in 2003 and 2007 experiences a huge negative returns at -5.60% and -8.20%, respectively (presented in Table 13, Appendix I). For low corruption returns pattern, the CAR is positive at a small scale throughout the studied periods with outstanding positive returns in 2005 at 6.71% (presented in Table 13, Appendix I). Therefore, the earlier hypothesis adopted is in accordance with the empirical under result is in accordance with the previous findings regard to corruption and the privatization programs. In the overall, it is not surprising that such difference is meaningful, as the higher degree of corruption within the country, there is higher motive to take advantage for its private benefit from selling the state-owned assets to the public.

Evidence on Industry Type Privatization Deals

Table 6: Test of mean differences in cumulative abnormal returns in type of industry classification

The table shows CARs of industry classification, as well as the t-statistic on the significance of the difference between cumulative abnormal returns. Abnormal returns are calculated as the difference between shareholder returns and expected return on the market, using the value-weighted market index.

	$CAR_{(-2,+2)}$		
	Regulated	Non-Regulated	Mean Difference
Full Sample			
Mean	1.37%	0.85%	
t-stat	6.158	4.113	1.716
Number of Observations	737	1095	
Deal Value Disclose			
Mean	1.14%	0.94%	
t-stat	4.512	3.182	0.523
Number of Observations	518	647	
Deal Value Not Disclose			
Mean	1.91%	0.72%	
t-stat	4.790	2.662	2.271
Number of Observations	219	448	

	$CAR_{(-10,+10)}$		
	Regulated	Non-Regulated	Mean Difference
Full Sample			
Mean	2.10%	1.95%	
t-stat	4.720	5.015	0.256
Number of Observations	737	1095	
Deal Value Disclose			
Mean	1.58%	2.22%	
t-stat	3.045	4.126	-0.868
Number of Observations	518	647	
Deal Value Not Disclose			
Mean	3.35%	1.55%	
t-stat	3.889	2.851	1.761
Number of Observations	219	448	

Another test conducted in here is to measure the difference in abnormal returns behavior between government regulations to regulated industry and no protection firms. In Table 6 reports the abnormal returns for both type of industries. The statistically significant positive abnormal returns for regulated industry group are at 1.37%, 1.14%, and 1.91% where as non-regulated industry are at 0.85%, 0.94%, and 0.72% for full, deal value disclose, and deal value not disclose, respectively in the 5-day window which can be seen that the regulated industry experienced higher abnormal returns. The returns for 21-day window are also statistically significant positive returns for both regulated and non-regulated. However, in the case of longer window period, the regulated industry does not necessary experience higher abnormal returns than non-regulated industry in every sample models due to the noise effect impacted stock price. The average asset sale of SOEs in privatization returns for firms in extensively regulated industries differ from that for firms in comparatively unregulated industries, and the difference is statistically significant at 0.1 significant level for the full sample model. The

important point to raise in this empirical result is the different in the t-stat value between the groups of deal value disclose and deal value not disclose. As in the earlier findings of political system, the difference in the mean values of deal value disclose is not significant, but, deal value not disclose sample tends to be significant, contradicting to this result. In this finding, that there exist bias in selling the SOE assets at lower price by more than non-regulated industry with in the deal value not disclose sample. Therefore, the secrecy incentive in providing cheaper price is often done in the transactions where the vital market information, transaction value, is not reveal that allow the political party to take such opportunity. The definition of regulated industries consists of utilities, natural resources, transportation, telecommunications, and financial institutions. Unregulated industries include retail, manufacturing, wholesale, services, construction, printings, food, consumer goods, real estate, etc. The higher returns of regulated industry is driven by the privatization in earlier periods before 2000, especially in the year 1993 and 1998 where most firms are in natural resources, financial institutions, and transportation industry. As the market and economy developed in later periods, regulated industry tends to experience lower returns and in some of the cases, returns are negative. The highest abnormal returns for regulated industry are in the year of 1993 at 3.42% for 5-day window and 1998 at 10.42% for 21-day period (presented in Table 13, Appendix I). The abnormal return pattern for non-regulated industry tends to be identical and similar across the years by comparing within the same window period. As stated earlier that non-regulated industry experience lower abnormal returns, the highest abnormal returns is at 2.07% (in 1999) and 3.91% (in 2001) for 5-day and 21-day window, respectively. The abnormal returns of 5-day window and 21-day window do not necessary follow same pattern, to be more specific, in some years short window experience negative returns whereas long window experience positive abnormal returns. With such contradicting returns pattern, it may be possible to say that privatization in non-regulated industry experience a negative market perception at the announcement date and however adjust back as investor digest information and manage their shocks towards privatization in longer window. From the overall results, the

two groups of industry type abnormal returns are different in the sense that such regulated industry are imposed with rules and regulations or highly protected from the state agency due to the barriers to entry or less market players (In some cases are monopoly SOEs) which then requires higher of involvement from the policy makers leading to discounted price and higher degree of abnormal returns on the overall and consistent with earlier adopted hypothesis development.

Evidence on Acquirer Nation Privatization Deals

Table 7: Test of mean differences in cumulative abnormal returns in bidder nation classification

The table shows CARs of bidder nation classification, as well as the t-statistic on the significance of the difference between cumulative abnormal returns. Abnormal returns are calculated as the difference between shareholder returns and expected return on the market, using the value-weighted market index.

	$CAR_{(-2,+2)}$		
	Local Bidder	Foreign Bidder	Mean Difference
Full Sample			
Mean	1.50%	0.70%	
t-stat	5.735	3.965	2.537
Number of Observations	834	998	
Deal Value Disclose			
Mean	1.39%	0.74%	
t-stat	3.946	3.391	1.574
Number of Observations	528	637	
Deal Value Not Disclose			
Mean	1.68%	0.63%	
t-stat	4.516	2.098	2.212
Number of Observations	306	361	

	$CAR_{(-10,+10)}$		
	Local Bidder	Foreign Bidder	Mean Difference
Full Sample			
Mean	2.01%	1.65%	
t-stat	4.944	4.779	0.804
Number of Observations	834	998	
Deal Value Disclose			
Mean	2.35%	1.60%	
t-stat	3.507	3.893	0.956
Number of Observations	528	637	
Deal Value Not Disclose			
Mean	2.62%	1.74%	
t-stat	3.773	2.576	0.946
Number of Observations	306	361	

Table 7 reports the mean average abnormal returns of type of acquirers, locals versus foreigners. The mean differences are statistically significant in every samples, inclusive of domestic and foreign bidder, for both the short and long window. The returns of local bidder report at positive significant abnormal return 1.50%, 1.37%, and 1.68% for 5-day window and 2.01%, 2.35%, and 2.62% for 21-day window. Apart from local bidder, foreign acquirers also experience positive significant abnormal return at positive 0.70%, 0.74%, and 0.63% for 5-day window and 1.65%, 1.60%, and 1.74% for 21-day window, a lower degree relative to local bidders. The empirical evidence of positive abnormal returns suggest that local buyers should have higher abnormal returns than the other samples, however, the result is significant in only for the full sample model and deal value not disclose under short window. Nevertheless, consistent with previous table, the deal value not disclose is significant whereas deal value disclose is not consistent with previous findings. The reason to explain this is that the differences in mean returns under the deal value not disclose is statistically significant

where the deal value disclose sample is not significant. Therefore, under less information are being revealed to the public, there tends to be a gap for government to shift towards deviation in maximizing social welfare for the individuals in the society by selling SOEs to domestics buyer at a lower price than those sold to foreign acquirers due to the favorable incentives for the benefit party. This significant statistic measure is a strong evidence to infer that such returns for local bidder on average are more favorable in the sense that they are able to pay at a lower price to buy these SOEs assets. In addition to these findings, the positive returns for domestic bidder are normally high in 1996, 1999, and 2001 with the positive returns at 2.67%, 2.85%, and 3.34% for short window (presented in Table 13, Appendix I). The pattern for domestic buyout of SOEs assets tends to experience an inconsistency pattern where some years are negative and some are highly positive. The negative or at relatively low returns years are in the periods of 1990-1995, 2002-2003, 2007-2009 (presented in Table 13, Appendix I). The foreign buyers where they do not experience much negative returns but rather incurred largest loss in 2009 at -6.78% (presented in Table 13, Appendix I). One possible explanation in the less negative returns for foreign acquirer is that they tend to be more careful in implementing an acquisition plan for foreign assets since they may not be familiar with the market and SOEs behavior, requiring them to thoroughly scrutinize before taking a step forward. From these findings, the mean difference of both local and foreign bidder experiences statistically significant returns whereas the abnormal returns for local bidder is higher and consistent with previous findings that the privatization tends to favor local bidder by more than foreign bidder this may be because the better relationship domestically. To further explain this, the government tends to introduce favorable allocation policy towards domestic acquirer via the classification of multi share tranches such as employees, domestic, retail, institutional, and foreign bidders. In this case, the benefit group tends to be allocated with shares in a preferential manner as there existence evidence in the Malaysian citizens' allocation where a large fraction had to be individual or institutional members of Bumi-putra ethnic

group. With such allocation motives, less requirements for local bidders, it can lead to higher extraction for the government and state-agency private benefits.

From the overall uni-variate results, it can be noted that long-window period suggest for higher significant abnormal returns but the mean difference of abnormal returns in each group of data tends to be insignificant as compared to the significant abnormal returns and significant mean difference for short window period because share price are more expose to changes from various factors in longer period. In addition, the difference of deal value disclose and deal value not disclose, there exist mean difference in some decomposition of the sample group, thus, it can be said that with the status of either announcing transaction value or not do partially distort the public benefit from the deviation in selling SOEs at fair value.

In conclusion, uni-variate test suggest that there is abnormal returns on average in the conduct of privatization program through merger and acquisition activities. With such of abnormal returns, the study shall further investigate to measure the explanatory power in these factors to confirmed the existence of private benefits under privatization program with the use of various benchmark to measure for the abnormal returns such as target country characteristic, industry characteristic, type of bidder, corruption perception index, and diversification M&A. From the empirical results, there exist significant abnormal returns in the benchmark applied with the statistically mean difference in each sample group. Thus, the study can be concluded that private benefits do exist since the state agency does not conduct the asset sales program at its fair value.

Evidence on China Country Targets Deal based on Pre- and Post-country Reformation

Table 8: Test of mean differences in cumulative abnormal returns in communist country targets classification

The table shows CARs of communist country targets classification, as well as the t-statistic on the significance of the difference between cumulative abnormal returns. Abnormal returns are calculated as the difference between shareholder returns and expected return on the market, using the value-weighted market index.

	$CAR_{(-2,+2)}$	$CAR_{(-10,+10)}$
Full Sample		
Mean	3.40%	4.07%
t-stat	4.618	2.879
Number of Observations	211	211
Pre-Reformation: Period 1990 - 1999 (a)		
Mean	0.25%	3.71%
t-stat	0.173	0.963
Number of Observations	18	18
Post-Reformation: Period 2000 - 2009 (b)		
Mean	3.69%	4.11%
t-stat	4.671	2.726
Number of Observations	193	193
Mean Difference: (a) vs.(b)		
t-stat	1.308	0.078

Brandt et al. (2008) documented the historical events of China from the period beginning of Communist political party until the latest development of the country. During 1930s, China is regarded as one of the modern industrial economy, bringing growth to its economy through trade among the international market. In the later periods, China confronted Japan and the Chinese Civil War in 1937 to 1949 which

severely affected the economy. Afterwards, the Communist party is established in the political system that developed a planned economy. The aim of this political party is to rapidly transform the country through the process of rapid industrialization which suddenly change way of living of the individuals where the government conducted agricultural collectivization system, private farming are prohibited, restrictions for individuals, and social pressure. The outcome of such policies came to an end as the economy continues to experience negative growth and economic recession over the period of 1957 onwards which later call for country reformation.

China undergone the economic reform program in December 1978 by the Chinese Communist Part led by Deng Xiaoping. The economic reform was taken in two stages in the late 1970s – 1980s and 1980s- 1990s. During 1978, there were very few private firms in Chinese industry leading to the opening up of the country to foreign investments and permission granted for new firms to start business as the first stage of reformation. The second stage of reform, in the late 1980s and 1990s, transformation is often done through divestment of shares in SOEs, privatization, shift of responsibilities from the central government to the local government, and lift off in price controls. From this stage, the private sector significantly grew accounted for 70 percent of the GDP[4].

From the history of China transformation has significant impact to the economy especially the transfer of state-ownership to private ownership through the privatization program evidenced by the sharp increased in the number of privatization deals from 18 to 193 transactions in the period before 1990-1999 and 2000 – 2009, respectively. From Table 8 in the above, the study separates the period of study into two groups; 1990 -1999 and 2000 – 2009. The period of 1990s is referring as the pre-transformation period because China's timeline presented that restructuring begun since 1978 until the late 1990s where each Communist party developed policies to bring

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[4] Peter Engradio, China is a private sector economy [Online], 22 August 2005. Source http://www.businessweek.com/magazine/content/05_34/b3948478.htm

the country over economic depression. Thus, after the promotion of private ownership under China reformation policy after the 1990s period is referred to the post privatization period. The study of mean abnormal return to bidders, especially for China targets, was to gain the additional insights of whether privatization program is conducted in the welfare maximizing manner, in other words maximizing the proceeds of sale in SOEs assets.

The reason why isolating China sub-sample in this place is to find the empirical evidence on how bidders' gain pattern behave where the target country is heavily relied on centralized system in the early periods and gradually decentralized in the later. The nature of China political system is unique in the sense that in the period before country's reformation, privatization of SOEs may not result in a true independent control or decision-making process by private management team or private sectors because the government still has significant power to influence over the private sectors and individuals through its policies such as price control, quota limits, etc. with the aim to promote equality for individuals. In addition, the existence of such Communist party during this time is to relieve corruption problem. Thus, in this sense the privatization of SOEs in earlier periods should be done at a higher degree of welfare maximizing manner meaning selling the SOEs assets at a relatively fair price resulting in lower degree of abnormal returns to bidder since the state-agency power still remain under the planned economic system where political parties remain its power to implement policies that benefit themselves. In addition, during Communist time, the punishment of corruption action tends to be strict that fear the state-agency to take such action. At the other end, 2000-2009 period, the privatization program is conducted to achieve growth for the economy by private sectors whereas some industries i.e. banking and petroleum remain subject to regulations (Li et al. 2004). The sale of state-owned assets would transfer the ownership, claims, and power to acquirers which they tend to have more freedom in management meaning that profits earned are transmitted to the investors. With this transfer of assets, government would have no right over the profits which may induce them to strive for private benefits in compensation for the forego proceeds

maximization or power to control after the privatization. As the country develops towards market mechanism, strict rules on the corruption may then be more relax that causes the political party in power to take advantage. One way that can be done is through selling the SOEs assets at a discounted price where the buying party provides private benefits for the political party which is a win-win situation for both sides. So, the abnormal returns or gains to bidder in the post-reformation period shall be positive and the empirical evidence of the studied sample does justify the above rationale. Aforementioned, it is possible to hypothesize that *post-reformation of China experiences higher abnormal returns to bidder than the pre-reformation during the announcement period.*

Table 8 reports the CARs of bidder that China country are the targets based on the same window periods as other sample classification. For the sub-sample of China targets, CARs are statically significant positive at 3.40% and 4.07% for 5-day and 21-day window, respectively. The breakdown of pre- and post- reformation period, CARs of these two groups vary. The pre-reformation abnormal returns are insignificant but remain positive at 0.25% and 3.71% for short and long window, respectively. The empirical evidence of insignificant abnormal returns to bidder for earlier study period is not surprising because under a heavily command or planned political system tends to be directed by the state-agency with strict rules and punishment for any arise in corruption behavior. Period of after-reformation, the CARs are significant positive at 3.69% and 4.11% for 5-day and 21-day window meaning that the SOEs assets are sold at the discounted price, which signals that policy-maker has incentive to deviate from the optimal outcome under privatization program from the appropriate fair value due to promotion of market mechanism and less power of the politicians. However, the mean difference between the two studied periods is insignificant meaning that the abnormal returns for pre- and post-privatization does not differ from each other which is inconsistent to the hypothesis developed. The plausible explanation underlines by both economic and statistic reasons. As explained earlier, reformation in 2000s aims to promote market mechanism that driven by the private sector in order to develop China's economy, thus the government interest has put emphasis on the public sector with aim

to achieve growth for the economy where sales proceeds should be maximized and on the other hand the privately owned firms have independent decision making without much concern on policy uncertainty. On the other hand, as explained that government has power to control over processes with the objective to bring the economy over recession that results in highest society-interest manner. Further to economic rationale, the insignificant statistic results from high standard deviation of the samples since the number of observations under pre-reformation are very small.

In conclusion, the sub-sample of China targets tend to experience abnormal returns to bidder which is consistent with the full sample data of privatization programs. The post-reformation period also exhibit abnormal returns to bidder reflecting China's shift in the political system from centralized to decentralized creates incentives for political party to deviate form maximizing sale of SOEs asset proceeds.

Robustness Test

The earlier section provided evidence on the terms of bidder's abnormal return, including the political system, corruption level, target share allocation, and type of industry. The uni-variate analysis suggests that the observed terms are consistent with various private benefit objectives under the privatization program as developed in the hypothesis section. However, the study yet further examine whether underpricing correlates with private benefit proxies issue-specific terms, and bidder characteristics.

The amount of information in the database for each offer is limited due to the availability of the data that may leads to a caveat in the analysis. For example, in discussing the uni-variate evidence, the full sample consists of 1832 deals. In contrast, the cross-sectional regression explaining returns in privatization through asset sales are limited to 953 and 1469 for which the complete transaction value, accounting information, and return data are available. However, to partially solve this limitation is

through the employing various regression models with different explanatory variables to better clarify on the correlation with abnormal return to acquirer.

In this section, the study perform multivariate test on the determinants of acquirer's returns. Table 9 – Table 12 present the results of regression the bidder's CARs on factors that may impact CARs. Each model reflects different strength in explaining the abnormal returns of bidder which result in a better understanding of how each factor influences it. The constant term (α) represents the average excess return of bidder that is not captured by the explanatory variables. The regression equation is estimated using OLS methodology for each model adjusted for hetroskedacity by using White procedure. Table 9 – Table 12 confirm that various models do experience high explanatory power from the significance of the models and reasonable adjusted R-squared for the cross-sectional regression.

The estimation of bidder returns as a function of private benefit proxies by whether the target is communist country, corruption level, target is in regulated industry, and bidder is the domestic nation. Other controlled variables include the relative transaction value to bidder size, log of bidder size, total debt to total assets, market to book value of equity, and dummy variable if the deal is industrially diversified and dummy variable if cash is the method of payment. In addition, the study also introduces the interaction terms into the regression models in order to gain additional insights and discussed later in this section

The dummy of political system is to examine how countries with high government power affect the market return to bidders. Abnormal returns to acquirers can be more pronounced with the high target corrupted country under privatization programs where requiring the involvement of government party. The dummy for regulated industry, again, falls on the same reason to affect acquirer returns due to higher government intervention in terms of policy enforced. The dummy variable for domestic acquisition has been of interest in determining the abnormal returns due of favorable allocation towards the beneficial parties.

Each of the explanatory variables has been suggested by theory as a determinant of the market's reaction to the bidder on an acquisition in privatization. The relative size of transaction value to bidder return proxy for the rate of return which such capital invested, For bidder size, the larger the bidder the greater the effect of the acquisition due to hubris managerial theory. Total debt to total assets also affects abnormal returns in the sense of monitoring and being aware on taking M&A transactions. Market to book value is according to mispricing under inefficient market. Diversification towards unrelated industry can impact on abnormal returns to bidder on whether acquiring firms diversify for the benefit of reducing the risk or constructing emperor for themselves. The method of payment is to capture the relative importance of the acquisition and any information conveyed by the bidder's and method of payment choice.

Cross-sectional Analysis with No Introduction of Interaction Terms

Table 9: Cross-Sectional regression of (-2, +2) cumulative abnormal returns with transaction value and no interaction terms

The table provides the results of regression where cumulative abnormal return (CAR), over the five-day window, (-2, +2), is the dependent variable. VALUE = value of transaction/assets of the bidder; SIZE = log of bidder market value of equity prior year of the announcement; DEBT = Bidder total debt to total assets prior year of the announcement; MTBV = Bidder market to book value of equity prior year of the announcement; DIVERSE = dummy variable equal to 1 if the acquirer 2-digit SIC is same as the target; PAYMENT = dummy variable equal to 1 if the payment method is cash; POLITIC = dummy variable equal to 1 if the target is communist country; INDUSTRY = dummy variable equal to 1 if the target is in regulated industry; CORRUPT = dummy variable equal to 1 if the target country ranked as highly corrupted country level; NATION = dummy variable equal to 1 if the bidder is domestic nation; INDEX = corruption perception index of the target accumulated from International Country Risk Guide

		Regression Model with Transaction Value						
		(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
VALUE		-0.0041	-0.0042	-0.0039	-0.0048	-0.0046	-0.0043	-0.0043
	p-value	*0.0021*	*0.0015*	*0.0027*	*0.0005*	*0.0007*	*0.0013*	*0.0012*
SIZE		-0.0101	-0.0101	-0.0092	-0.0108	-0.0101	-0.0108	-0.0111
	p-value	*0.0019*	*0.0006*	*0.0014*	*0.0004*	*0.0014*	*0.0010*	*0.0002*
DEBT		-0.0025	-0.0020	-0.0024	-0.0021	-0.0019	-0.0022	-0.0019
	p-value	*0.1347*	*0.2375*	*0.1500*	*0.2304*	*0.2489*	*0.1978*	*0.2561*
MTBV		0.0012	0.0018	0.0008	0.0030	0.0027	0.0021	0.0020
	p-value	*0.7286*	*0.5968*	*0.8075*	*0.3894*	*0.4417*	*0.5519*	*0.5641*
PAYMENT		-0.0243	-0.0236	-0.0244	-0.0246	-0.0244	-0.0245	-0.0252
	p-value	*0.0011*	*0.0018*	*0.0012*	*0.0014*	*0.0015*	*0.0012*	*0.0010*
DIVERSE		-0.0031	-0.0042	-0.0040	-0.0041	-0.0048	-0.0028	-0.0031
	p-value	*0.5104*	*0.3688*	*0.3804*	*0.3674*	*0.3014*	*0.5478*	*0.5002*

		Regression Model with Transaction Value						
		(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
POLITIC		0.0064	0.0148				0.0086	
	p-value	*0.1645*	*0.0032*				*0.0961*	
CORRUPT		0.0174		0.0209				
	p-value	*0.0008*		*0.0002*				
INDUSTRY		0.0048			0.0037		0.0045	
	p-value	*0.2639*			*0.3822*		*0.3044*	
NATION		-0.0008				0.0010	0.0025	
	p-value	*0.8775*				*0.8401*	*0.6218*	
INDEX							-0.0025	-0.0034
	p-value						*0.0158*	*0.0005*
Intercept		0.0532	0.0572	0.0539	0.0624	0.0617	0.0713	0.0839
	p-value	*0.0003*	*0*	*0.0001*	*0*	*0*	*0*	*0*
Number of Observations		953	953	953	953	953	953	953
R^2		0.0640	0.0535	0.0618	0.0439	0.0433	0.0601	0.0567
Adjusted R^2		0.0540	0.0465	0.0549	0.0369	0.0362	0.0501	0.0497

In general, the results are similar to what is found in the uni-variate analysis as presented in Table 9. For the model employed using transaction values, the regression with all the explanatory variables tend to be insignificant except for those controlled variables such as relative transaction value to bidder size, bidder size, and payment method. However, for the specific interest variables in the Model (1) in Table 9), the coefficients of corruption level is the only significantly positive variable. However, the study also provides the regression equation by employing the interest variable one by one to examine how these hypothesized variables explain the CARs. From model (2) in Table 9, the result suggests that the CARs are associated with Communist country target which explains positive abnormal returns than those with other political system. The robustness is also consistent with the earlier hypothesis developed where Communist countries target should experience a higher abnormal returns due to the government power to influence the politics and economic system in later periods that causes uncertainty in policy announced as aiming to the implementation to achieve both

economic–oriented objectives and private benefits. In addition, model (3) in Table 9, corruption level variable do have significant power to explain the bidder returns through the rankings of privatized country from high to low corruption level based on the corruption perception index. The positive correlation of the corruption level is also in line with the corruption evidence explained in the earlier section where there is existence of government failure to conduct of privatization in an efficient manner for the benefit of the society.

For the remaining models (model (4) and model (5)), the interest variables are not significant, despite the correlation direction remains in accordance with the hypothesis developed. In model (5), incorporated all the independent variables into the regression do not evidence on the explanatory power but the correlation directions are mainly consistent. The controlled variable exhibit the same pattern across all models where relative transaction value to bidder size, bidder size, and payment method are significant with the same correlation direction as the previous studies, to the aforementioned and earlier section, and explain the returns to bidder under privatization programs.

As explained in the earlier section that corruption perception index is applied in this study to reflect the level of corruption in the privatized company. However, apart from applying the index by ranking the country corruption level, the study also use the index itself to examine any potential power in explaining the CARs. From model (6) and model (7) in Table 9, it can be seen that the corruption perception index does explain these abnormal returns to bidder with a negative correlation unlike the case of CORRUPT variable. This is not a surprising result since the low corruption index refers to highly corrupted country, thus the coefficient should be negatively correlated to bidders' gain. The significant of inverse relationship in this variable is one of the empirical evidence that privatization policy conducted under asset sales of SOEs tend to be hidden by the private benefit objectives since this corruption index was

constructed based on the behavior of the government party in its secretive activities in managing the country.

In conclusion, the private incentive proxies in explaining CARs under privatization program through the asset sales tend to have significant explanatory power by the variable itself, especially for political system and corruption. However, the inclusive model results in lack of explanatory power of the interest variables that may be caused by diverse variables to explain the abnormal returns to bidder and the strong explanatory power in certain variables, namely VALUE, SIZE, PAYMENT, CORRUPT.

Table 10: Cross-Sectional regression of (-2, +2) cumulative abnormal returns without transaction value and interaction terms

The table provides the results of regression where cumulative abnormal return (CAR), over the five-day window, (-2, +2), is the dependent variable. SIZE = log of bidder market value of equity prior year of the announcement; DEBT = Bidder total debt to total assets prior year of the announcement; MTBV = Bidder market to book value of equity prior year of the announcement; DIVERSE = dummy variable equal to 1 if the acquirer 2-digit SIC is same as the target; PAYMENT = dummy variable equal to 1 if the payment method is cash; POLITIC = dummy variable equal to 1 if the target is communist country; INDUSTRY = dummy variable equal to 1 if the target is in regulated industry; CORRUPT = dummy variable equal to 1 if the target country ranked as highly corrupted country level; NATION = dummy variable equal to 1 if the bidder is domestic nation; INDEX = corruption perception index of the target accumulated from International Country Risk Guide

		Regression Model without Transaction Value						
		(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
SIZE		-0.0240	-0.0265	-0.0254	-0.0280	-0.0227	-0.0248	-0.0287
	p-value	*0.0016*	*0.0002*	*0.0003*	*0.0001*	*0.0024*	*0.0011*	*0.0001*
DEBT		-0.0012	-0.0010	-0.0010	-0.0009	-0.0007	-0.0012	-0.0009
	p-value	*0.3748*	*0.4726*	*0.4847*	*0.5163*	*0.6390*	*0.4016*	*0.5303*
MTBV		-0.0026	-0.0024	-0.0030	-0.0018	-0.0020	-0.0020	-0.0021
	p-value	*0.3472*	*0.3950*	*0.2774*	*0.5393*	*0.4842*	*0.4723*	*0.4545*

	Regression Model without Transaction Value						
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
PAYMENT	-0.0074	-0.0064	-0.0070	-0.0069	-0.0062	-0.0075	-0.0074
p-value	*0.0253*	*0.0531*	*0.0371*	*0.0371*	*0.0636*	*0.0236*	*0.0297*
DIVERSE	-0.0029	-0.0030	-0.0031	-0.0027	-0.0039	-0.0026	-0.0023
p-value	*0.4011*	*0.3819*	*0.3704*	*0.4322*	*0.2535*	*0.4423*	*0.5052*
POLITIC	0.0107	0.0163				0.0125	
p-value	*0.0030*	*0.0001*				*0.0021*	
CORRUPT	0.0137		0.0201				
p-value	*0.0012*		*0.0000*				
INDUSTRY	0.0058			0.0053		0.0058	
p-value	*0.0732*			*0.0944*		*0.0744*	
NATION	0.0060				0.0064	0.0082	
p-value	*0.1039*				*0.0766*	*0.0368*	
INDEX						-0.0109	-0.0183
p-value						*0.0246*	*0.0001*
Intercept	0.0311	0.0404	0.0397	0.0444	0.0384	0.0531	0.0807
p-value	*0.0017*	*0*	*0*	*0*	*0.0001*	*0.0001*	*0*
Number of Observations	1469	1469	1469	1469	1469	1469	1469
R^2	0.0480	0.0360	0.0411	0.0237	0.0243	0.0444	0.0338
Adjusted R^2	0.0421	0.0320	0.0371	0.0197	0.0203	0.0385	0.0299

Much of the earlier literature evidenced the importance of how relative transaction value to bidder size explain the abnormal returns to bidder where the higher the value of the variable is the more it contributes to positive market reaction in return for the high investment in acquisition. However, the nature of privatization transactions especially the off-market execution nature calls for limitation on the availability of the transaction value disclose data. Therefore, it is important to analyze the robustness by omitting this variable to cross check in the consistency of the other variables whether they can explain the abnormal returns to bidder or not. Under the regression result in these models as presented in Table 10, the empirical evidence tends to be consistent with the earlier models with increasing important in the proxies of private benefits under privatization of state owned assets.

In model (1) in Table 10, incorporating all interest variables, the political system, corruption level, and industry type (at 0.1 significant level) became significant

variable for CARs and positive, The correlation for Communist countries are positively related to bidder abnormal return as consistent with the hypothesis. The corruption level variable remains significantly positive due to the driver of private incentives in compensation for selling at a lower price than the fair value to buyers. The evidence of how government has the power of control over regulated industries suggest for a correlation to the abnormal returns to acquirers which the empirical evidence of this positive relationship of the regulated industry also exist. The remaining controlled variables for this model are also similar to the previous robustness check where bidder size and payment method are significantly negative correlated.

For the remaining models of employing each interest variable into each regression equation, model (3) – model (5), the interest variables experience better explanatory power on the CARs. The Communist countries of the target are positively correlated with the market reaction. For corruption level, consistent with the previous models, exhibits significant positive correlation in high corrupt targets. The regulated industry also present significant positive relationship (at 0.1 significant level) to the CARs that is consistent with what the study has hypothesized. The domestic acquirer variable is becoming positive significant variable (at 0.1 significant level) to explain the bidders' return where domestic acquirers tend to be favored by the political party or state-agency that results in an enjoyment of the positive returns. Each of these models also shows that most controlled variables are significant in explaining the dependent variable.

In addition, through the replacement of corruption perception index into the corruption level variable, the index explains the CARs with significantly negative correlation because the low corruption index represents the high corrupt level of the privatized country government behavior. With the higher incentive to corrupt, the state-agency tends to deviate from maximizing the proceeds value to the state as they may compensate for secretive benefits.

In comparison of Table 9 and Table 10, the significant explanatory variables remain its correlation direction with the power to explain cumulative abnormal returns to the bidder even though VALUE variable has been omitted. The additional insight gained in Table 10 is on interest variable, in INDUSTRY dummy variable, and is positive suggesting that regulated industry experiences higher abnormal returns to bidders, primarily due to higher power of the government to influence these firms which requires a discount for such uncertainty. The NATION dummy variable is also positively correlated meaning that local acquirers gain from asset acquisitions in accordance to explanation in the earlier section.

In the overall of these two models without interaction terms, the robustness test confirms that the abnormal returns gained by the acquirer are associated with private benefits from the political parties proxy by those interest variables; target's communist countries, high corruption level of targets, regulated industry, and domestic acquirers. However, the regulated industry privatization do not evidence for any abnormal returns to the bidder.

Cross-sectional Analysis with Transaction Value and Introduction of Interaction Terms

Table 11: Cross-Sectional regression of (-2, +2) cumulative abnormal returns with transaction value and interaction terms

The table provides the results of regression where cumulative abnormal return (CAR), over the five-day window, (-2, +2), is the dependent variable. VALUE = value of transaction/assets of the bidder; SIZE = log of bidder market value of equity prior year of the announcement; DEBT = Bidder total debt to total assets prior year of the announcement; MTBV = Bidder market to book value of equity prior year of the announcement; DIVERSE = dummy variable equal to 1 if the acquirer 2-digit SIC is same as the target; PAYMENT = dummy variable equal to 1 if the payment method is cash; POLITIC = dummy variable equal to 1 if the target is communist country; INDUSTRY = dummy variable equal to 1 if the target is in regulated industry; CORRUPT = dummy variable equal to 1 if the target country ranked as highly corrupted country level; NATION = dummy variable equal to 1 if the bidder is domestic nation; INDEX = corruption perception index of the target accumulated from International Country Risk Guide

		Regression Model with Transaction Value						
		(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
VALUE		0.1747	-0.0049	-0.0053	0.1668	-0.0049	1.2427	0.4051
	p-value	*0.3748*	*0.0000*	*0.0000*	*0.0503*	*0.0000*	*0.1109*	*0.0209*
SIZE		0.0008	-0.0054	-0.0044	-0.0057	-0.0072	0.0043	-0.0115
	p-value	*0.8665*	*0.1142*	*0.1632*	*0.0943*	*0.0374*	*0.7163*	*0.1274*
DEBT		-0.0079	-0.0045	-0.0035	-0.0027	-0.0040	-0.0094	-0.0002
	p-value	*0.0025*	*0.0176*	*0.0325*	*0.2029*	*0.0300*	*0.1581*	*0.9710*
MTBV		0.0018	0.0010	0.0030	-0.0004	0.0009	-0.0143	-0.0100
	p-value	*0.6789*	*0.7248*	*0.2503*	*0.9243*	*0.8005*	*0.0742*	*0.2468*
PAYMENT		-0.0216	-0.0102	-0.0053	-0.0291	-0.0133	-0.0460	-0.0376
	p-value	*0.0510*	*0.1529*	*0.4018*	*0.0046*	*0.0910*	*0.0490*	*0.0547*
DIVERSE		-0.0109	-0.0088	-0.0065	-0.0103	-0.0065	-0.0192	-0.0031
	p-value	*0.1083*	*0.0629*	*0.1336*	*0.0864*	*0.1893*	*0.2114*	*0.7986*
POLITIC		-0.0064	0.0576				0.0418	
	p-value	*0.8283*	*0.0645*				*0.2789*	
POLITIC*VALUE		0.1202	0.2251				-0.0395	
	p-value	*0.7951*	*0.0392*				*0.8457*	
POLITIC*SIZE		-0.0011	-0.0072				-0.0094	
	p-value	*0.8659*	*0.2309*				*0.1961*	
POLITIC*DEBT		0.0100	0.0081				0.0093	
	p-value	*0.0349*	*0.0408*				*0.0481*	

	Regression Model with Transaction Value						
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
POLITIC*MTBV	-0.0012	-0.0046				0.0031	
p-value	*0.8477*	*0.5726*				*0.7077*	
POLITIC*PAYMENT	0.0295	-0.0147				0.0042	
p-value	*0.0323*	*0.4026*				*0.8401*	
POLITIC*DIVERSE	0.0105	0.0107				0.0127	
p-value	*0.3065*	*0.3320*				*0.2938*	
CORRUPT	0.1160		0.1047				
p-value	*0.0013*		*0.0027*				
CORRUPT*VALUE	0.0913		0.1946				
p-value	*0.8479*		*0.0680*				
CORRUPT*SIZE	-0.0120		-0.0114				
p-value	*0.1163*		*0.0707*				
CORRUPT*DEBT	-0.0038		0.0033				
p-value	*0.4824*		*0.4750*				
CORRUPT*MTBV	-0.0149		-0.0155				
p-value	*0.0384*		*0.0626*				
CORRUPT*PAYMENT	-0.0644		-0.0434				
p-value	*0.0013*		*0.0489*				
CORRUPT*DIVERSE	-0.0071		0.0020				
p-value	*0.5456*		*0.8712*				
INDUSTRY	0.0111			-0.0015		0.0097	
p-value	*0.7265*			*0.9583*		*0.7614*	
INDUSTRY*VALUE	-0.1820			-0.1731		-0.2264	
p-value	*0.3555*			*0.0423*		*0.2240*	
INDUSTRY*SIZE	-0.0093			-0.0070		-0.0092	
p-value	*0.1819*			*0.2815*		*0.1862*	
INDUSTRY*DEBT	0.0037			0.0007		0.0021	
p-value	*0.3035*			*0.8349*		*0.5727*	
INDUSTRY*MTBV	0.0072			0.0052		0.0069	
p-value	*0.2339*			*0.4026*		*0.2657*	
INDUSTRY*PAYMENT	0.0273			0.0292		0.0251	
p-value	*0.0608*			*0.0259*		*0.0906*	
INDUSTRY*DIVERSE	0.0121			0.0114		0.0128	
p-value	*0.1553*			*0.1847*		*0.1514*	
NATION	0.0221				0.0190	0.0394	
p-value	*0.4262*				*0.5047*	*0.2006*	
NATION*VALUE	-0.1840				0.1573	-0.5012	
p-value	*0.3399*				*0.0533*	*0.0976*	
NATION*SIZE	-0.0055				-0.0026	-0.0065	
p-value	*0.4243*				*0.6924*	*0.3727*	
NATION*DEBT	0.0043				0.0037	0.0038	
p-value	*0.1925*				*0.2880*	*0.3532*	

	Regression Model with Transaction Value						
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
NATION*MTBV	-0.0017				0.0004	-0.0030	
p-value	*0.7609*				*0.9518*	*0.6204*	
NATION*PAYMENT	0.0031				-0.0083	-0.0070	
p-value	*0.8196*				*0.5603*	*0.6137*	
NATION*DIVERSE	0.0007				0.0005	-0.0034	
p-value	*0.9347*				*0.9512*	*0.7176*	
INDEX						-0.0028	-0.0088
p-value						*0.7129*	*0.1379*
INDEX*VALUE						-0.1528	-0.0613
p-value						*0.1599*	*0.0192*
INDEX*SIZE						-0.0008	0.0006
p-value						*0.6650*	*0.6592*
INDEX*DEBT						0.0004	-0.0004
p-value						*0.6825*	*0.5905*
INDEX*MTBV						0.0024	0.0019
p-value						*0.0588*	*0.1556*
INDEX*PAYMENT						0.0041	0.0039
p-value						*0.1764*	*0.1667*
INDEX*DIVERSE						0.0013	-0.0006
p-value						*0.5818*	*0.7687*
Intercept	0.0092	0.0289	0.0199	0.0506	0.0403	0.0334	0.0973
p-value	*0.6743*	*0.0554*	*0.1449*	*0.0041*	*0.0086*	*0.5298*	*0.0083*
Number of Observations	953	953	953	953	953	953	953
R^2	0.1540	0.1111	0.1317	0.0865	0.0746	0.1445	0.1091
Adjusted R^2	0.1227	0.0988	0.1197	0.0738	0.0618	0.1128	0.0968

The previous results present the correlation of the independent variable to cumulative abnormal returns without introducing the interaction terms. In this part, the study performs multi-variate tests on the determinants of acquirer's returns with the inclusion of interaction terms between interest variable and the controlled variables. In Table 11 presents the results of regressing the bidder's CARs on factors that may impact CARs by controlling the relative transaction value to bidder size resulting in total of 953 observations. As with all regressions (Model (1) – Model (7)) that explain returns to acquiring firms, the results should be carefully examined due to the low explanatory power of the regression with the adjusted-R^2 in the range of 0.0618 – 0.1227. Since the study has discussed on the evidence that state-agency tends to deviate from welfare

maximization manner, sold public assets at discounted price, in privatization depending on different deal-characteristics, so the regression is further examined by employing each interest variable separately. Noted, however, that there is overlap between the bidders in each separate regression, since same bidder may fall into more than one group of interest variable in each model.

In Table 11, the study interacts each interest variables with the controlled variables, namely VALUE, SIZE, DEBT, MTBV, PAYMNET, and DIVERSE. The hypothesis that higher relative transaction value of the acquisition to bidder size leads to larger abnormal returns to bidder of communist country privatizations predicts a positive coefficient of the interaction term between the communist countries target and relative transaction value to bidder size, which is consistent in the study with significant positive returns in model (2), only POLITIC variable is the controlled variable. The coefficient of VALUE variable itself is significantly negative, confirming the lower gains to bidder under non-communist country privatization. The coefficient of the communist country target itself is significantly positive, confirming the higher gains to bidders regardless of the relative transaction value to bidder size. The incorporation of the coefficients of the communist country target and its interaction with the relative transaction value to bidder size is significantly positive, suggesting that communist privatization explains the abnormal returns to bidder in privatization program. Moreover, the introduction term of politic dummy variable with the debt to total assets ratio also show significant positive correlation, confirming that the hypothesis regarding to higher gain in communist country privatization is valid.

In model (3) of Table 11, the interest variable of high corruption level also exhibit the explanatory power similarly to communist country target variable. The coefficient of high corruption level target solely is significant positive meaning that higher corruption level countries conducted the asset sales of SOEs generate higher returns to the acquirer. As a result, the sum of coefficients of the high corruption target and its interaction with the relative transaction value to bidder size is significantly

positive, proving that high corruption countries tend to privatize at a higher degree of price discounted on SOEs assets leading to higher gains for the acquirers.

In model (4) of Table 11, the interaction between regulated industry target and relative transaction value to bidder price confirms the explanatory power to bidder price confirms the explanatory power for cumulative abnormal returns to bidder as being hypothesized in earlier section. In addition to this, the worthiness empirical evidence of INDUSTRY dummy variable in explaining returns to bidders derives from the explanatory power that remains interact with the payment method. Thus, regulated industry privatization in robust test provides the evidence that privatization programs create gain to bidder in the regulated industry acquisition, despite controlling for other factors explaining the returns.

In model (5) of Table 11, the NATION dummy variable fails to explain bidder's abnormal return due to the poor explanatory power once there is incorporation of the other factors.

Table 12: Cross-Sectional regression of (-2, +2) cumulative abnormal returns without transaction value and with interaction terms

The table provides the results of regression where cumulative abnormal return (CAR), over the five-day window, (-2, +2), is the dependent variable. SIZE = log of bidder market value of equity prior year of the announcement; DEBT = Bidder total debt to total assets prior year of the announcement; MTBV = Bidder market to book value of equity prior year of the announcement; DIVERSE = dummy variable equal to 1 if the acquirer 2-digit SIC is same as the target; PAYMENT = dummy variable equal to 1 if the payment method is cash; POLITIC = dummy variable equal to 1 if the target is communist country; INDUSTRY = dummy variable equal to 1 if the target is in regulated industry; CORRUPT = dummy variable equal to 1 if the target country ranked as highly corrupted country level; NATION = dummy variable equal to 1 if the bidder is domestic nation; INDEX = corruption perception index of the target accumulated from International Country Risk Guide

		Regression Model with Transaction Value						
		(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
SIZE		-0.0054	-0.0176	-0.0140	-0.0279	-0.0186	-0.0151	-0.0428
	p-value	*0.6512*	*0.0241*	*0.0676*	*0.0006*	*0.0257*	*0.3813*	*0.0049*
DEBT		-0.0068	-0.0037	-0.0032	-0.0013	-0.0022	-0.0043	0.0054
	p-value	*0.0026*	*0.0093*	*0.0222*	*0.4540*	*0.2927*	*0.2699*	*0.1244*
MTBV		-0.0039	-0.0039	-0.0025	-0.0009	-0.0057	-0.0098	-0.0021
	p-value	*0.3108*	*0.1147*	*0.3179*	*0.8057*	*0.0850*	*0.1418*	*0.7896*
PAYMENT		0.0043	-0.0010	-0.0014	-0.0095	0.0010	-0.0042	-0.0287
	p-value	*0.4235*	*0.7594*	*0.6518*	*0.0324*	*0.8246*	*0.8355*	*0.1199*
DIVERSE		-0.0103	-0.0058	-0.0047	-0.0067	-0.0055	-0.0055	0.0186
	p-value	*0.0560*	*0.0908*	*0.1387*	*0.1401*	*0.2315*	*0.7793*	*0.3371*
POLITIC		0.0370	0.0721				0.0648	
	p-value	*0.1154*	*0.0034*				*0.0075*	
POLITIC*SIZE		-0.0133	-0.0311				-0.0295	
	p-value	*0.4269*	*0.0707*				*0.0803*	
POLITIC*DEBT		0.0079	0.0109				0.0099	
	p-value	*0.0260*	*0.0045*				*0.0084*	
POLITIC*MTBV		0.0041	0.0046				0.0058	
	p-value	*0.4686*	*0.5128*				*0.3485*	
POLITIC*PAYMENT		-0.0100	-0.0180				-0.0168	
	p-value	*0.1876*	*0.0341*				*0.0601*	
POLITIC*DIVERSE		0.0094	0.0101				0.0079	
	p-value	*0.2530*	*0.2731*				*0.3960*	
CORRUPT		0.0797		0.1058				
	p-value	*0.0044*		*0.0001*				

	Regression Model with Transaction Value						
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
CORRUPT*SIZE	-0.0375		-0.0494				
p-value	*0.0490*		*0.0037*				
CORRUPT*DEBT	0.0039		0.0088				
p-value	*0.2742*		*0.0160*				
CORRUPT*MTBV	-0.0085		-0.0038				
p-value	*0.1616*		*0.5876*				
CORRUPT*PAYMENT	-0.0175		-0.0246				
p-value	*0.0647*		*0.0172*				
CORRUPT*DIVERSE	-0.0048		0.0036				
p-value	*0.6184*		*0.7289*				
INDUSTRY	0.0090			0.0013		0.0126	
p-value	*0.6859*			*0.9528*		*0.5663*	
INDUSTRY*SIZE	-0.0051			-0.0006		-0.0074	
p-value	*0.7636*			*0.9711*		*0.6557*	
INDUSTRY*DEBT	0.0036			0.0017		0.0032	
p-value	*0.2081*			*0.5462*		*0.2504*	
INDUSTRY*MTBV	-0.0008			-0.0024		-0.0012	
p-value	*0.8719*			*0.6823*		*0.8048*	
INDUSTRY*PAYMENT	0.0078			0.0078		0.0064	
p-value	*0.2479*			*0.2327*		*0.3477*	
INDUSTRY*DIVERSE	0.0116			0.0119		0.0113	
p-value	*0.0798*			*0.0795*		*0.0921*	
NATION	0.0295				0.0245	0.0281	
p-value	*0.1283*				*0.1051*	*0.1770*	
NATION*SIZE	-0.0125				-0.0086	-0.0073	
p-value	*0.4164*				*0.4581*	*0.6479*	
NATION*DEBT	0.0035				0.0033	0.0042	
p-value	*0.1957*				*0.2690*	*0.1670*	
NATION*MTBV	0.0038				0.0062	0.0031	
p-value	*0.3889*				*0.1516*	*0.4780*	
NATION*PAYMENT	-0.0167				-0.0164	-0.0195	
p-value	*0.0164*				*0.0126*	*0.0111*	
NATION*DIVERSE	0.0045				0.0038	0.0034	
p-value	*0.5207*				*0.5706*	*0.6517*	
INDEX						-0.0211	-0.0489
p-value						*0.3062*	*0.0203*
INDEX*SIZE						0.0006	0.0026
p-value						*0.8010*	*0.3190*
INDEX*DEBT						-0.0004	-0.0011
p-value						*0.5340*	*0.0460*
INDEX*MTBV						0.0008	0.0000
p-value						*0.4349*	*0.9711*

	Regression Model with Transaction Value						
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
INDEX*PAYMENT						0.0046	0.0122
p-value						*0.6529*	*0.2038*
INDEX*DIVERSE						-0.0026	-0.0118
p-value						*0.8003*	*0.2340*
Intercept	-0.0015	0.0249	0.0204	0.0462	0.0299	0.0471	0.1362
p-value	*0.9271*	*0.0139*	*0.0372*	*0.0000*	*0.0091*	*0.2344*	*0.0007*
Number of Observations	1469	1469	1469	1469	1469	1469	1469
R^2	0.0829	0.0531	0.0645	0.0268	0.0311	0.0706	0.0401
Adjusted R^2	0.0644	0.0460	0.0574	0.0195	0.0237	0.0518	0.0328

For Table 12, the overall results tend to be different as compare to the result presented in the earlier table in terms of correlation explanatory power of the interest dummy variable. This table excluded VALUE factor in order to obtain a larger sample size.

In model (2) of Table 12, the hypothesis that small bidders experiencing higher abnormal returns of communist country targets predicts a positive coefficient of the interaction term between the communist country and bidder size. However, the result is inconsistent in this study due to significant negative correlations with the cumulative abnormal returns. The coefficient of SIZE variable itself is significantly negative, suggesting the lower gains to bidder under non-communist country privatization. For independent communist variable, the coefficient is significantly positive reflecting higher gains to bidder under the communist system regime. Surprisingly, the interaction between communist target and bidders' size is significantly negative, which suggests the degree of gain in significantly negative, which suggests the degree of gains in communist privatization does not outweigh the negative correlations of bidder size.

Thus, the regression result does not support the hypothesis developed. However, the other regression models tend to provide that communist country privatization do explain the bidders' return in a positive direction, despite interaction with other controlled variables. The interesting point of model (2) is that the result for POLITIC

dummy variable seems to be mixed since the interaction of this interest variable with the total debt to total asset ratio provides significant positive correlation, suggesting that communist targets' privatization programs generate higher returns to the acquirer. From these two conflicting results, the conclusion from this model for political system dummy variable is ambiguous.

From model (3) in Table 12, the conclusion follows the same pattern as model (2), conflicting results. The corruption level dummy variable by itself is significantly positive confirming that high corruption level provides higher abnormal returns to bidder, consistent with what the study has hypothesized. However, once introducing the interaction terms of the controlled variables with high corruption level dummy variable, the explanatory power of the variable provides a mix correlation, both positive and negative, in explaining CARs.

CHAPTER VI

CONCLUSION

This study examines cumulative abnormal returns to bidder under the privatization policy in state-owned assets through asset sales method, the sale of public enterprises to private investors in exchange for ownership claim and management control. If the privatization programs generate gains to the acquirer, this means that SOEs assets are sold at a discounted price that may translate into private benefits obtained by the policy-makers as the information can be revealed after the completion of the deal.

The privatization program became an important policy for government across nations in order to promote efficiency or allowing private investors to take part in. Most of the earlier studies mainly focus on the shares issue privatization where this study put interest towards asset sales of SOEs method. The asset sales method is interesting to study as the information available in public are more limited than the assets offered through initial public offerings. Thus, the asset price sold with the related terms and conditions are often subject to government decisions.

From the findings of this study, bidder abnormal returns in privatization programs across the worldwide market evidenced the significant positive returns for both mean returns and median. In addition, classifying the samples into different groups to reflect any private incentives or deviation from fair value sale also evidenced significant abnormal returns to acquirer in communist countries target, high corruption level countries target, regulated industry target, local bidder, and post-reformation of china privatization. The study also documented that cross-sectional test suggests that the cumulative abnormal returns are more favorable for communist countries target and high corruption level targets for the exclusion of interaction terms model. Despite the mix result for regression model with inclusive of transaction value to bidder size variable, under the introduction of interaction terms framework, the model without such

transaction value variable confirms the explanatory of the interest variable in communist targets and high corruption level.

The overall of the study suggests that privatization programs are not conducted in a Pareto efficient manner since there existence abnormal returns to bidder from the SOEs assets sold at a discounted price relative to its fair value, indicating potential private benefits by the political parties in power. Nevertheless, these findings can also be further extended for future research. Given that privatization of public assets generates abnormal returns to the bidder, it could also be compared to bidders' return under acquiring of privately-held unlisted targets for additional insights. Moreover, this study provides the opportunity to further examine the public welfare outcomes under privatization policies.

References

Ades A., Di Tella R., 1999. Rents, Competition, and Corruption. The American Economic Review 89, p. 982-993

Aghion P., Blanchard O.J., 1998. On Privatization Methods in Eastern Europe and their Implications. Economics of Transition 6, p. 87-99

Asquith P., 1983. Merger Bids, Uncertainty, and Stockholder Returns. Journal of Financial Economics 11, p. 51-83

Beatty R.P., Ritter J.R., 1986. Investment Banking, Reputation, and the Underpricing of Initial Public Offerings. Journal of Financial Economics 15, p. 213-232

Becher D.A., 2000. The Valuation Effects of Bank Mergers. Journal of Corporate Finance 6, p. 189-214

Biais, B., Perotti, E.C. 2002. Machiavellian Privatization. American Economic Review 92, p. 240-258.

Bjorvatn K., Soreide T. 2005. Corruption and Privatization. European Journal of Political Economy 21, p. 903-914

Boubakri N., Cosset J., 1998. The Financial and Operating Performance of Newly Privatized Firms: Evidence from Developing Countries. Journal of Finance 53, p. 1081-1110

Bortolotti B., Fantini M., Siniscalco D., 2003. Privatisation Around The World: Evidence From Panel Data. Journal of Public Economics 88, p. 305-332

Brada, J.C., 1996. "Privatization Is Transition or Is It?" Journal of Economic Perspectives 10, p. 67- 86.

Brandt L., Hsieh C., Zhu X., China's Great Economic Transformation (Cambridge: Cambridge University Press, 2008), p. 1

Brown S. J., Warner J. B., 1985. Using Daily Stock Returns: The Case of Event Studies. Journal of Financial Economics 14, p. 3-31

Campa, J. M., Hernando I., 2004. Shareholder Value Creation in European M&As. European Financial Management, p. 47-81.

Celarier M., 1997. Privatization: A Case Study in Corruption. Journal of International Affairs 50, p. 531-543

Chan L.K.C., Hamao Y., Lakonishok J., 1991. Fundamentals and Stock Returns in Japan. Journal of Finance 46, p. 1739-1764

Chowdhry B., Sherman A. , 1996. International Differences in Oversubscription and Underpricing of IPOs. Journal of Corporate Finance 2, p. 359–381

De Castro J. O., Uhlenbruck K., 1997. Characteristics of Privatization: Evidence from Developed, Less-developed, and Former Communist Countries. Journal of International Business Studies 28, p. 123-143

Denis D.J., Denis D. K., Yost K., Global Diversification, Industrial Diversification, and Firm Value. Journal of Finance 57, p. 1951-1979

Dewenter, K.L., Malatesta, P.H., 1997. Public offerings of state-owned and privately-owned enterprises: An international comparison. Journal of Finance 52, p. 1659–1679.

Djankov S., Murrell P., 2002. Enterprise Restructuring in Transition: A Quantitative Survey. Journal of Economic Literature 40, p. 739-792

Domberger S., Piggott J., 1986. Privatization Policies and Public Enterprise: A survey. Economic Record 62, p. 145-162

Doukas J.A., Holmen M., Travlos N.G., 2002. Diversification, Ownership and Control of Swedish Corporations. European Financial Management 8, p. 281-314

Draper P., Paudyal K., 1999. Corporate Takeovers: Mode of Payment, Returns and Trading Activity. Journal of Business Finance and Accounting 26, p. 521-588

Draper P., Paudyal K., 2006. Acquisitions: Private vs. Public. European Financial Management 12, p. 57-80

Faccio M., McConnell J.J., Stolin D., 2006. Returns to Acquirers of Listed and Unlisted Targets. Journal of Financial and Quantitative Analysis 41, p. 197-220

Fama E.F., French K.R., 1992. The Cross-Section of Expected Stock Returns. Journal of Finance 47, p. 427-465

Fuller, K., Netter, J., Stegemoller, M., 2002. What do returns to acquiring firms tell us? Evidence from firms that make many acquisitions. Journal of Finance 57, p. 1763–1794.

Glambosky M. C., Gleason K. C., Madura J., 2010. Political Risk and Purchases of Privatized State-Owned Enterprises. The Financial Review 45, p. 873-889

Gleason K., McNulty J.E., Pennathur A.K., 2005. Returns to Acquirers of Privatizing Financial Services Firms: An International Examination. Journal of Banking and Finance 29. p. 2043–2065

Hansen R.G., 1987. A Theory for the Choice of Exchange Medium in Mergers and Acquisitions. Journal of Business 60, p. 75-95

Ibbotson R. G., 1975. Price Performance of Common Stock New Issues. Journal of Financial Economics 2, p. 235-272

Ibbotson, R. G., Sindelar J.L., and Ritter J.R., 1988, Initial Public Offerings. Journal of Applied corporate Finance 1, p. 37-45

Jacquillat, B., 1987, Nationalization and Privatization in Contemporary France, Government Union Review 8, p. 21-50.

Jenkinson T., Mayer C., 1988. The Privatization Process in France and the U.K. European Economic Review 32. p. 465-472

Jones, S.L., Megginson, W.L., Nash, R.C., Netter, J.M., 1999. Share issue privatizations as financial means to political and economic ends. Journal of Financial Economics 53, p. 215–253.

Kikeri, S., Nellis, J., 2004. Privatization in Competitive Sectors: The Record so Far. The World Bank Research Observer 19, p. 87–118.

Laffont J., Tirole J., 1991. Privatization and Incentives. Journal of Law, Economics, & Organization 7, p. 84-105

Lambsdorff J.G., 2008. The Methodology of the Corruption Perception Index. Transparency International and University of Passau

La Porta R., Lopez-de-Silanes F., Shleifer A., Vishny R.W., 1998. Law and Finance. Journal of Political Economy 106. p. 1113-1155

La Porta R., Lopez-de-Silanes F., Shleifer A., Vishny R.W., 1999. The Quality of Government. Journal of Law Economics & Organization 15, p. 222-278

La Porta R., Lopez-de-Silanes F., Shleifer A., 2002. Government Ownership of Banks. Journal of Finance 57, p. 265-301

Lenway S.A., Murtha T.P., 1994. Country Capabilities and the Strategic State: How National Political Institutions affect Multinational Corporations' Strategies. Strategic Management Journal 15, p. 113-129

Li S., Vertinsky I., Zhou D., 2004. The Emergence of Private Ownership in China. Journal of Business Research 57, p. 1145-1152

Lopez-De-Silanes F., 1997. Determinants of Privatization Prices. Quarterly Journal of Economics 112, p. 965-1025

Logue D.E., 1973. On the Pricing of Unseasoned Equity Issues: 1965-1969. Journal of Financial and Quantitative Analysis 8, p. 91-103

Loughran T., Ritter J.R., Rydqvist K., 1994. Initial public offerings: International insights. Pacific-Basin Finance Journal 2, p. 165-199

Maloney M.T., McCormick R.E., Mitchell M.L., 1993. Managerial Decision Making and Capital Structure. Journal of Business 66, p. 189-217

Maquieira C. P., Megginson W.L., Nail L., 1998. Wealth creation versus wealth redistributions in pure stock-for-stock mergers. Journal of Financial Economics 48, p. 3-33

Masulis R., Wang C., Xie F. 2007. Corporate Governance and Acquirers Returns. Journal of Finance 62, p. 1851-1889

McDonald J.G., Fisher A.K., 1972. New-Issue Stock Price Behavior. Journal of Finance 27, p. 97-102

Megginson, W.L., 2005. The Economics of Bank privatization. Journal of Banking & Finance 29, p. 1931-1980

Megginson, W.L., Netter, J.M., 2001. From state to market: a survey of empirical studies of privatization. Journal of Economic Literature 39, p. 321–389.

Megginson, W.L., Nash, R.C., Netter, J.M., Schwartz, A.L., 2000. The Long-Run Return to Investors in Share Issue Privatization. Financial Management 29, p. 67-77

Moeller S. B., Schlingemann F.P., 2005. Global Diversification and Bidder Gains: A Comparison between Cross-border and Domestic Acquisitions. Journal of Banking & Finance 29, p. 533-564

Moeller S. B., Schlingemann F.P., Stulz R.M., 2004. Firm size and the gains from acquisitions. Journal of Financial Economics 73, p. 201-228

Mulherin J.H., Boone A.L., 2000. Comparing Acquisitions and Divestures. Journal of Corporate Finance 6, p. 117-139

Myers S.C., Majluf N.S., 1984. Corporate Financing and Investment Decisions when Firms have Information that Investors do not have. Journal of Financial Economics 13, p. 187-221

Nankani H.B., 1990. Lessons of Privatization in Developing Countries. Finance and Development 27, p. 43-45

Netter J., Stegemoller M., Wintoki M.B., 2011. Implications of Data Screens on Merger and Acquisition Analysis: A Large Sample Study of Mergers and Acquisitions from 1992 to 2009, Review of Financial Studies 24, p. 2316-2357

Perotti E.C., 1995. Credible privatization. American Economic Review 85, p. 847–859.

Perotti E.C., Guney, S.E., 1993. The structure of privatization plans. Financial Management 22, p. 84–98.

Ritter J.R., 1984, The 'Hot Issue' Market of 1980, Journal of Business 57, p. 215-240.

Ritter J.R., 1991. The Long-Run Performance of Initial Public Offerings. Journal of Finance 46, p. 3-27

Rock K., 1986. Why New Issues are Underpriced. Journal of Financial Economics 15, p. 187-212

Rose-Ackerman S., Corruption and Government: Causes, Consequences, and Reform (Cambridge: The Press Syndicate of The University of Cambridge, 1999) p. 36

Shleifer A., 2005. Understanding Regulation. European Financial Management 11, p. 439-451

Shleifer A., Vishney R.W., 1994. Politician and Firms. Quarterly Journal of Economics 109, p. 995-1025

Stigler G. J., 1971. The Theory of Economic Regulation. The Bell Journal of Economics and Management Science 2, p. 3-21

Stiglitz J., 1998. The Private Uses of Public Interests: Incentives and Institutions. Journal of Economic Perspective 12 (2), p. 3-22

Stulz R.M., 2005. The limits of Financial Globalization. Journal of Finance 60, p. 1595-1638

Vickers J., Yarrow G., 1988. Regulation of Privatized Firms in Britain. European Economic Review 32. p. 465-472

Vickers J., Yarrow G., 1991. Economic Perspectives on Privatization. Journal of Economic Perspectives 5. p. 111-132

Young P., 1987. Privatization around the World. Proceedings of the Academy of Political Science 36, p. 190-206

APPENDICES

APPENDIX A

Table 13: Table of average cumulative returns by year and sample classifications. The first row refers to 5-day window and second row refers to 21-day window.

Year	Total Sample Group	Communist	Non-Communist	Regulated	Non-Regulated	Domestic Acquirer	Foreign Acquirer	Low CPI	High CPI
1990	-0.020%	0.390%	0.307%	0.672%	0.180%	-0.214%	0.842%	N/A	0.542%
	-0.190%	-0.043%	0.353%	1.080%	0.532%	-0.464%	0.940%	N/A	0.687%
1991	0.917%	-0.145%	0.632%	0.580%	0.718%	0.278%	0.247%	-1.341%	0.322%
	1.134%	1.836%	1.654%	-1.250%	0.895%	0.159%	0.130%	4.212%	0.335%
1992	1.171%	-0.100%	0.764%	0.339%	1.074%	-0.120%	-0.052%	0.999%	0.730%
	1.193%	-1.840%	2.643%	2.003%	1.825%	-1.576%	1.377%	-1.610%	-0.232%
1993	1.356%	0.715%	-0.031%	3.423%	0.091%	0.750%	1.855%	-0.834%	-0.633%
	2.943%	2.154%	1.371%	3.640%	3.649%	3.713%	0.647%	0.253%	1.849%
1994	3.526%	-0.218%	-0.065%	1.523%	-0.140%	2.148%	0.339%	0.466%	2.039%
	5.141%	-0.061%	0.301%	2.188%	1.051%	3.432%	2.979%	-6.165%	1.973%
1995	2.350%	0.179%	0.631%	1.903%	0.929%	-0.982%	0.782%	N/A	1.382%
	1.405%	-0.337%	1.076%	3.088%	2.403%	-0.863%	3.477%	N/A	-0.624%
1996	0.291%	1.533%	1.009%	2.177%	-1.067%	2.665%	0.333%	N/A	0.559%
	2.623%	2.756%	1.804%	3.810%	-1.740%	4.626%	2.151%	N/A	3.583%
1997	0.251%	1.676%	-0.392%	1.461%	0.366%	1.578%	-0.467%	3.784%	-0.658%
	0.698%	3.345%	3.942%	2.930%	0.507%	2.331%	2.662%	4.490%	3.105%

Year	Total Sample Group	Communist	Non-Communist	Regulated	Non-Regulated	Domestic Acquirer	Foreign Acquirer	Low CPI	High CPI
1998	-0.515%	2.625%	-0.549%	2.955%	0.904%	0.326%	1.245%	4.973%	2.068%
	-0.173%	-0.473%	-0.395%	10.423%	2.740%	0.572%	-0.557%	1.557%	-0.630%
1999	0.858%	0.757%	1.168%	-0.101%	2.065%	2.851%	-1.009%	0.074%	3.942%
	1.267%	3.573%	1.556%	-1.372%	2.574%	6.617%	0.051%	0.209%	-0.710%
2000	0.788%	0.065%	1.442%	0.269%	-0.578%	-1.692%	1.704%	-3.939%	-0.566%
	1.879%	0.793%	2.787%	3.637%	-0.621%	2.300%	4.361%	-4.187%	3.257%
2001	0.972%	2.171%	2.042%	-0.117%	1.547%	3.336%	-0.385%	N/A	-0.096%
	2.486%	-1.768%	3.218%	-1.609%	3.907%	10.142%	-1.152%	N/A	9.552%
2002	-0.417%	1.382%	2.900%	1.734%	1.877%	-1.966%	0.172%	N/A	-3.049%
	4.532%	2.375%	3.529%	0.358%	3.157%	-2.065%	-1.805%	N/A	-4.983%
2003	0.013%	1.138%	1.176%	-0.460%	0.917%	-0.107%	0.312%	-5.599%	-1.697%
	0.688%	0.514%	3.487%	-0.870%	2.179%	-1.746%	-1.341%	-5.627%	1.759%
2004	-0.458%	1.871%	2.475%	1.019%	1.710%	1.180%	-0.181%	N/A	-1.629%
	0.886%	0.653%	9.376%	0.976%	-0.232%	4.507%	4.188%	N/A	19.865%
2005	1.482%	-0.079%	0.367%	-0.202%	0.550%	-1.602%	1.326%	2.052%	6.705%
	2.160%	0.101%	0.855%	-1.735%	3.447%	2.596%	4.784%	2.052%	9.419%
2006	1.854%	1.510%	0.815%	0.975%	-0.577%	0.137%	1.890%	3.939%	-0.870%
	4.361%	5.523%	0.624%	3.159%	4.058%	0.884%	4.851%	3.939%	-0.444%
2007	1.234%	4.445%	-0.017%	0.594%	-0.116%	-0.493%	-0.577%	-8.276%	0.731%
	2.830%	12.532%	0.312%	3.531%	1.156%	0.872%	-0.885%	-4.189%	-3.268%

Year	Total Sample Group	Communist	Non-Communist	Regulated	Non-Regulated	Domestic Acquirer	Foreign Acquirer	Low CPI	High CPI
2008	0.228%	0.914%	1.076%	2.384%	0.003%	0.020%	-0.655%	N/A	-4.703%
	-0.532%	2.144%	3.100%	0.848%	0.417%	-0.638%	-1.659%	N/A	-2.639%
2009	1.190%	6.206%	1.890%	1.322%	-1.049%	-1.276%	-6.783%	N/A	4.869%
	2.634%	2.586%	2.292%	5.253%	2.117%	2.792%	-8.821%	N/A	21.232%
All	1.060%	1.989%	0.701%	1.196%	0.321%	0.347%	0.295%	0.402%	0.502%
	2.011%	2.429%	1.849%	2.275%	1.522%	1.771%	1.273%	-0.040%	1.844%

APPENDIX B

Table 14 (Panel A): Test of median cumulative abnormal returns in all samples. The table shows median CARs of each sample classification, as well as the Wilcoxon signed-rank test on the significance of the difference between median cumulative abnormal returns.

	$CAR_{(-2,+2)}$	$CAR_{(-10,+10)}$
Full Sample		
Median	0.31%	0.85%
Wilcoxon signed rank	5.362	5.507
Number of Observations	1832	1832
Deal Value Disclose		
Median	0.92%	0.13%
Wilcoxon signed rank	4.977	2.094
Number of Observations	1165	1165
Deal Value Not Disclose		
Median	0.22%	0.70%
Wilcoxon signed rank	2.809	3.358
Number of Observations	667	667

APPENDIX B

Table 14 (Panel B): Test of median cumulative abnormal returns in political system samples based on $CAR_{(-2,+2)}$. The table shows median CARs and median difference test of each sample classification. Wilcoxon Rank-sum test is applied on the significance of the difference between median cumulative abnormal returns.

	$CAR_{(-2,+2)}$		
	Communist	Non-Communist	Median Difference
Full Sample			
Median	0.67%	0.16%	
Wilcoxon signed rank	5.447	2.820	
Number of Observations	551	1321	
Wilcoxon/Mann-Whitney			3.350
Deal Value Disclose			
Median	0.92%	0.13%	
Wilcoxon signed rank	4.977	2.094	
Number of Observations	340	825	
Wilcoxon/Mann-Whitney			3.312
Deal Value Not Disclose			
Median	0.34%	0.20%	
Wilcoxon signed rank	2.356	1.868	
Number of Observations	171	496	
Wilcoxon/Mann-Whitney			1.208

APPENDIX B

Table 14 (Panel C): Test of median cumulative abnormal returns in political system samples based on CAR $_{(-10,+10)}$. The table shows median CARs and median difference test of each sample classification. Wilcoxon Rank-sum test is applied on the significance of the difference between median cumulative abnormal returns.

	CAR $_{(-10,+10)}$		
	Communist	Non-Communist	Median Difference
Full Sample			
Median	0.80%	0.86%	
Wilcoxon signed rank	3.197	4.494	
Number of Observations	551	1321	
Wilcoxon/Mann-Whitney			0.506
Deal Value Disclose			
Median	0.79%	1.01%	
Wilcoxon signed rank	2.416	3.606	
Number of Observations	340	825	
Wilcoxon/Mann-Whitney			0.221
Deal Value Not Disclose			
Median	0.81%	0.67%	
Wilcoxon signed rank	2.08	2.657	
Number of Observations	171	496	
Wilcoxon/Mann-Whitney			0.540

APPENDIX B

Table 14 (Panel D): Test of median cumulative abnormal returns in corruption level samples based on CAR $_{(-2,+2)}$. The table shows median CARs and median difference test of each sample classification. Wilcoxon Rank-sum test is applied on the significance of the difference between median cumulative abnormal returns.

	CAR $_{(-2,+2)}$		
	High Corruption	Low Corruption	Median Difference
Full Sample			
Median	0.88%	0.32%	
Wilcoxon signed rank	4.871	2.795	
Number of Observations	440	808	
Wilcoxon/Mann-Whitney			2.700
Deal Value Disclose			
Median	1.12%	0.18%	
Wilcoxon signed rank	4.944	1.626	
Number of Observations	301	471	
Wilcoxon/Mann-Whitney			3.268
Deal Value Not Disclose			
Median	0.20%	0.48%	
Wilcoxon signed rank	1.300	2.393	
Number of Observations	139	337	
Wilcoxon/Mann-Whitney			0.081

APPENDIX B

Table 14 (Panel E): Test of median cumulative abnormal returns in corruption level samples based on $CAR_{(-10,+10)}$. The table shows median CARs and median difference test of each sample classification. Wilcoxon Rank-sum test is applied on the significance of the difference between median cumulative abnormal returns.

	$CAR_{(-10,+10)}$		
	High Corruption	Low Corruption	Median Difference
Full Sample			
Median	0.64%	1.02%	
Wilcoxon signed rank	2.686	3.846	
Number of Observations	440	808	
Wilcoxon/Mann-Whitney			0.206
Deal Value Disclose			
Median	0.86%	1.36%	
Wilcoxon signed rank	2.300	3.115	
Number of Observations	301	471	
Wilcoxon/Mann-Whitney			0.135
Deal Value Not Disclose			
Median	0.64%	0.69%	
Wilcoxon signed rank	1.363	2.237	
Number of Observations	139	337	
Wilcoxon/Mann-Whitney			0.076

APPENDIX B

Table 14 (Panel F): Test of median cumulative abnormal returns in industry type samples based on $CAR_{(-2,+2)}$. The table shows median CARs and median difference test of each sample classification. Wilcoxon Rank-sum test is applied on the significance of the difference between median cumulative abnormal returns.

	$CAR_{(-2,+2)}$		
	Regulated	Non-Regulated	Median Difference
Full Sample			
Median	0.43%	0.20%	
Wilcoxon signed rank	4.573	3.206	
Number of Observations	737	1095	
Wilcoxon/Mann-Whitney			1.456
Deal Value Disclose			
Median	0.32%	0.36%	
Wilcoxon signed rank	3.322	3.12	
Number of Observations	518	647	
Wilcoxon/Mann-Whitney			0.283
Deal Value Not Disclose			
Median	0.69%	0.05%	
Wilcoxon signed rank	3.205	1.178	
Number of Observations	219	448	
Wilcoxon/Mann-Whitney			2.010

APPENDIX B

Table 14 (Panel G): Test of median cumulative abnormal returns in industry type samples based on $CAR_{(-10,+10)}$. The table shows median CARs and median difference test of each sample classification. Wilcoxon Rank-sum test is applied on the significance of the difference between median cumulative abnormal returns.

	$CAR_{(-10,+10)}$		
	Regulated	Non-Regulated	Median Difference
Full Sample			
Median	1.01%	0.64%	
Wilcoxon signed rank	4.165	3.711	
Number of Observations	737	1095	
Wilcoxon/Mann-Whitney			0.788
Deal Value Disclose			
Median	1.02%	0.83%	
Wilcoxon signed rank	3.043	3.12	
Number of Observations	518	647	
Wilcoxon/Mann-Whitney			0.021
Deal Value Not Disclose			
Median	0.86%	0.56%	
Wilcoxon signed rank	2.936	2.041	
Number of Observations	219	448	
Wilcoxon/Mann-Whitney			1.372

APPENDIX B

Table 14 (Panel H): Test of median cumulative abnormal returns in bidder nation samples based on $CAR_{(-2,+2)}$. The table shows median CARs and median difference test of each sample classification. Wilcoxon Rank-sum test is applied on the significance of the difference between median cumulative abnormal returns.

	$CAR_{(-2,+2)}$		
	Local Bidder	Foreign Bidder	Median Difference
Full Sample			
Median	0.43%	0.18%	
Wilcoxon signed rank	4.493	3.126	
Number of Observations	834	998	
Wilcoxon/Mann-Whitney			1.567
Deal Value Disclose			
Median	0.41%	0.29%	
Wilcoxon signed rank	3.191	3.301	
Number of Observations	528	637	
Wilcoxon/Mann-Whitney			0.574
Deal Value Not Disclose			
Median	0.54%	0.05%	
Wilcoxon signed rank	3.234	0.784	
Number of Observations	306	361	
Wilcoxon/Mann-Whitney			1.916

APPENDIX B

Table 14 (Panel I): Test of median cumulative abnormal returns in bidder nation samples based on $CAR_{(-10,+10)}$. The table shows median CARs and median difference test of each sample classification. Wilcoxon Rank-sum test is applied on the significance of the difference between median cumulative abnormal returns.

	$CAR_{(-10,+10)}$		
	Local Bidder	Foreign Bidder	Median Difference
Full Sample			
Median	0.98%	0.77%	
Wilcoxon signed rank	3.790	4.107	
Number of Observations	834	998	
Wilcoxon/Mann-Whitney			0.512
Deal Value Disclose			
Median	0.92%	0.99%	
Wilcoxon signed rank	2.336	3.990	
Number of Observations	528	637	
Wilcoxon/Mann-Whitney			0.461
Deal Value Not Disclose			
Median	1.05%	0.44%	
Wilcoxon signed rank	3.230	1.533	
Number of Observations	306	361	
Wilcoxon/Mann-Whitney			1.489

APPENDIX B

Table 14 (Panel J): Test of median cumulative abnormal returns in bidder nation samples based on $CAR_{(-2,+2)}$ and $CAR_{(-10,+10)}$.. The table shows median CARs and median difference test of each sample classification. Wilcoxon Rank-sum test is applied on the significance of the difference between median cumulative abnormal returns.

	$CAR_{(-2,+2)}$	$CAR_{(-10,+10)}$
Full Sample		
Mean	0.017%	0.003%
Wilcoxon Signed-Rank	4.685	1.899
Number of Observations	211	211
Pre-Reformation: Period 1990 - 1999 (a)		
Mean	0.004%	-0.010%
Wilcoxon Signed-Rank	0.653	0.304
Number of Observations	18	18
Post-Reformation: Period 2000 - 2009 (b)		
Mean	0.019%	0.003%
Wilcoxon Signed-Rank	4.737	1.860
Number of Observations	193	193
Mean Difference: (a) vs.(b)		
Wilcoxon Rank-sum	1.144	0.200

VITAE

Pimchanok Yooprot was born in Bangkok, Thailand. After completing her school at Satri Withaya School, she entered Thammasat University, Bangkok, Thailand. At Thammasat University, she studied Bachelor of Arts in Economics in International Program and received the degree in December 2007. In 2009, she entered to Master of Science in Finance International Program at Chulalongkorn University,