

Market Reaction to Announcement of Enforcement Actions against Related Party Transaction Evidence from Chinese Listed Companies

Accounting
Master's thesis
Jie Ren
2015

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Master's Thesis
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Spring 2015
Accounting

Approved in the Department of Accounting ___ / ___20___ and awarded the grade



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Title of thesis Market Reaction to the Announcement of Enforcement Actions against Related Party Transaction: Evidence from Chinese Listed Companies

Degree Master of Science in Economics and Business Administration

Degree programme Master's Programme in Accounting

Thesis advisor(s) Dr. Yaping Mao

Year of approval 2015

Number of pages 87

Language English

Abstract

The main objective of this thesis is to investigate (1) whether the enforcement actions (EAs) against related party transaction (RPT) have a negative effect on the market reaction around announcement period, and (2) what specific factors affect the market reaction. The conjecture is driven by the agency theory regarding the opportunistic behavior via RPT. The result of the first research question is benchmarked against the market reaction for the public announcements (PAs) of RPT. The second question focuses on examining two specific factors that influence the announcement effect of RPT EAs, namely, the announcement type and the transaction type. The announcement type concerns whether the rectification action could reduce the negative announcement effect of EAs. The transaction type concerns whether the non-operating RPT yields significant announcement effect than other types do. Additionally, the market reaction for the corporate governance mechanism is discussed. It is hypothesized that the market would impose a governance discount to firms engaged in RPT.

Initially 84 target firms that undertook RPT between fiscal year 2000 and 2013 are selected from EAs released from January 2008 to July 2014. The matched-pair analysis is adopted for matching firms with RPT EAs to the same number of matched-pair firms with RPT PAs on one-to-one basis. Therefore, the total sample of the thesis consists of 168 Chinese publicly traded firms. The event study methodology is employed to calculate the announcement effect which is measured by the cumulative abnormal return (CAR). Quantitative methods are applied to explore the changes of CARs in response to the different factors.

The main conclusion is that the RPT EAs have a significant and negative impact on the stock returns of the target firm around announcement date. And the RPT PAs have a significant and positive announcement effect. Moreover, EAs that include the rectification actions have a weakly negative announcement effect. And EAs that target on non-operating RPT have a strongly negative announcement effect. In addition, firms with RPT EAs are negatively correlated with the CEO duality. This is in contrast to the firms with RPT PAs since these firms tend to be positively correlated with the CEO duality and larger board size. The difference of the market reactions for the CEO duality between two samples might arise from the investors' perception on the role that the dual CEO plays situated in different contexts.

Keywords Related party transaction (RPT), enforcement action (EA), cumulative abnormal return (CAR), rectification action, non-operating, corporate governance

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ABBREVIATIONS

AAER	Accounting and Auditing Enforcement Release
ADR	American Depository Receipt
ASC	Accounting Standards Codification
CAPM	Capital Assets Pricing Model
CAR	Cumulative abnormal return
CEO	Chief executive officer
CFO	Chief financial officer
CSMAR	China Stock Market and Accounting Research
CSRC	China Securities Regulatory Commission
CT	Connected transaction
EA	Enforcement action
EMH	Efficient market hypothesis
FAS	Financial Accounting Standards
FASB	Financial Accounting Standards Board
GAAP	Generally Accepted Accounting Principles
GEM	Growth Enterprise Market
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IASC	International Accounting Standards Council
MOF	Ministry of Finance
NYSE	New York Stock Exchange
OLS	Ordinary least squares
PA	Public announcement
PCAOB	Public Company Accounting Oversight Board
PRC	People's Republic of China
PT	Particular transfer
R&D	Research and development
RPT	Related party transaction
RMB	Renminbi (¥)
ROA	Return on assets

ROE	Return on equity
SAMB	State Assets Management Bureau
SASAC	State-owned Assets Supervision and Administration Commission
SEC	Securities and Exchange Commission
SEHK	Stock Exchange of Hong Kong
SHSE	Shanghai Stock Exchange
SME	Small and Medium Enterprise
SOE	State-owned enterprise
SOX	Sarbanes-Oxley Act
ST	Special treatment
SZSE	Shenzhen Stock Exchange
VIF	Variance inflation factor

1. INTRODUCTION

1.1. MOTIVATION

In 2014, the Public Company Accounting Oversight Board (PCAOB) adopted a new auditing standard and amendments to its auditing standards to strengthen auditor performance requirements in three critical areas that historically have represented increased risks of material misstatement in company financial statements (PCAOB Release No. 2014-002). The relationships and transactions with related parties are one of the “three critical areas¹”. In the PCAOB’s view, the related party transaction (RPT) has been an inseparable factor in numerous financial reporting frauds over the last several decades². According to the 2001 annual reports of all the public traded firms in China, 90% of them are involved in different degrees of RPT (Wong and Jian, 2003). The importance of clarifying RPT with accounting and auditing effort is thus indicated.

RPT has become an increasingly important issue in the world. It alerts the world since the Enron scandal where RPT is used to disguise the financial condition for years³. In China, the Zixin scandal has raised the investors’ vigilance in recent years. Jilin Zixin Pharmaceutical Industrial Co., Ltd. claimed that the company’s financial profits in 2010 had nearly doubled due to significant growth in sales of its ginseng products. Eventually it turned out that Jilin Zixin had inflated their earnings through illegal RPT and thus got sanctioned by the regulatory institutions. Prominent corporate scandals involving RPT undermined the investor confidence and resulted in the significant losses for investors.

RPTs are often diverse complex business transactions between a company and its man-

¹The rest are a company’s significant unusual transactions, and financial relationships and transactions with its executive officers. Significant unusual transactions are outside the normal course of business for the company or that otherwise appear to be unusual due to their timing, size, or nature.

²Such prominent corporate scandals include Enron Corporation, Tyco International, Ltd., Refco, Inc., and WorldCom, Inc.

³Enron Corporation categorized its RPTs into SPEs as off-balance sheet items through which 81% assets on its balance sheet was inflated. An SPE (special purposes entity) is an entity created by a sponsoring firm to carry out a specific purpose or activity, or a series of transactions directly related to a specific purpose. SPEs are often referred to as Structured Financing Vehicles, particularly when used to raise money or manage risk.

agers, directors, or controlling holders⁴. Generally, there are two strands of literature regarding RPT. On the one hand, the non-arm's length character of RPT makes it a possible tool for a controlling shareholder to use for personal benefits against the interests of minority shareholders (*conflict of interest hypothesis*). This perspective implies that it would be essential to curtail RPT and have it under rigorous control. On the other hand, the RPT is described as efficient instrument for fulfilling specific economic needs (Gordon et al., 2006), as it can compensate for market imperfection (*efficient transactions hypothesis*). Therefore, a move to limit RPT would possibly damage a company's financial performance by undermining its ability to undertake such a transaction. (Moscariello, 2012).

Even though both two sides of RPT have been exposed to the prior discussions, the majority of existing studies focus on looking for the evidence of RPT under the conflict of interest hypothesis. The regulators, market participants, and other corporate shareholders commonly view RPT as representing the potential conflict of interest that can compromise the management's agency responsibility to shareholders or a board of director's monitoring function, leading to the expropriation of minority shareholders (Gordon et al., 2006). Most of the earlier studies attempted to measure the potential expropriation of RPT indirectly (Wong and Jian, 2003; Cheung et al., 2006; Gordon et al., 2006; Chen and Chien, 2007; Jian and Wong, 2010; Peng et al., 2011). For instance, Gordon et al. (2006) examined the relationship between dollar amounts of RPT and corporate governance mechanisms. They considered weak corporate governance mechanism as one of the proxies indicating the likelihood of expropriation in RPT. Cheung et al. (2006) analyzed the value effects of the initial announcement of RPT and speculated that certain types of RPT are more likely to result in expropriation, considering the negative abnormal stock return as an indicator.

However, an RPT is not necessary as a mechanism for fraud, and its presence does not have to indicate fraudulent financial reporting (Henry et al., 2007). The indirect indicators (such as a weak corporate governance mechanism) uncovered previously do not necessar-

⁴A related party can also be a subsidiary, a joint venture partner, a family member or an entity who has control or significant influence over the company. Definitions and guidelines on RPT are summarized in section 2.1.

ily substantiate the existence of a harmful RPT. In spite of considerable anecdotal studies, there are few studies to date providing direct evidence on the benign nature of of RPT, or on the subsequent consequences following the execution of RPT. Therefore, there is sufficient ground for an implication that it is important for the researcher to conduct the hindsight analysis of RPT. In this way, reliable justifications can be made that whether an RPT ultimately serves the interest of the controlling shareholder, or serves the normal business operation of the company.

In contrast to previous studies, the purpose of this study is to attempt to fill in the gap by examining the market reaction toward the enforcement actions (EAs) that are imposed against RPT. This study provides direct evidence to the Chinese stock market on the specific features of RPT through which the expropriation actually occurs. It would be more persuasive to find the real purpose of an RPT afterwards from the description in the EA, rather than speculating beforehand.

1.2. RESEARCH QUESTIONS

This study raises two main questions regarding EAs against RPT: (1) what are the consequences on the stock value of target firms with EAs, and (2) what specific factors affect the investors in valuing the EA announcement for RPT? The purpose is to shed light upon whether the EAs against RPT have a value effect in Chinese stock market, and to investigate the determinants of the value effect. The value effect of firms with RPT EAs is compared to that of firms with RPT public announcements (PAs)⁵. To answer the second research question, the announcement effect of RPT EAs is decomposed into two components related to market reactions for the announcement type and the transaction type.

For the first research question, this study investigates whether the market reacts significantly and negatively to the announcement of EAs against RPT that is undertaken by the listed company in Chinese stock market. The research aims to give answers on how the

⁵The matched firms with PAs are defined in this study as having disclosed RPT publicly and carried it out legally as well as properly without being imposed with EAs, for the purpose to be contrasted to the firms with EAs.

investors evaluate the information release on RPT violations around the announcement period.

For the second research question, two factors are considered. The first factor concerns the role of announcement type which is exclusively investigated on firms with EAs. The announcement type classifies firms with EAs into two groups, i.e., EAs that include the rectification actions, and EAs that do not include. Few studies have examined the relationship between the market reaction and the rectification actions for EAs. It is expected that the presence of rectification actions weakens the negative value effect triggered by EAs.

The second factor pertains to the characteristics of RPT's transaction type. Conventionally, an RPT is classified according to its transaction format, such as purchase or sale of goods, acquisition or disposal of assets, and borrowing or lending of cash, etc ([Cheung et al., 2006](#); [Lei and Song, 2011](#)). In contrast to the conventional classification, RPT in this study primarily falls into two categories, i.e., "operating" and "non-operating". The purpose is to examine whether there are distinguished value effects relating to the defined transaction types. If the distinguished value effects exist, it is worth to further examine whether certain type of transaction has more severe value effect than others. The idea of examining non-operating RPT in this study is analogous to few earlier studies where operating and non-operating RPT are discussed ([Bertrand et al., 2002](#); [Kang et al., 2014](#)). Few studies in China have taken non-operating RPT into account, either. It is expected that the investors react more negatively to the non-operating RPT with EAs.

In addition, firm characteristics associated with RPT, such as corporate governance and ownership, are included in the analysis. Proxies of the CEO duality, board size and state ownership are chosen based on the previous discussions ([Gordon et al., 2006](#); [Jian and Wong, 2010](#); [Peng et al., 2011](#)) and the availability of proxy data in CSMAR database. The presence of these three elements are also considered affecting the composition of firms' CARs.

1.3. SAMPLE AND RESEARCH DESIGN

This study offers a unique dataset that is composed of 168 publicly traded companies in fiscal year from 2000-2013, a period that witnessed the China's economy transition. It begins with a sample of firms with RPT EAs (labelled as "treatment firm" or "treatment sample") released between January 2008 and July 2014. Then based on industry, firm size and performance indicators, the sample of firms with RPT EAs are matched to a sample of firms with RPT PAs (labelled as "control firm" or "control sample"). Control firms are the benchmark to highlight the announcement effect of treatment firms.

The information of PAs on RPT and the data of initial announcement dates of control firms are hand-collected from the company's website. Financial data is obtained from China Stock Market and Accounting Research (CSMAR) database, controlling for the availability of daily stock return data. A detailed description of these transactions is presented, including types, frequency and starting time.

The market reaction, or the announcement effect is measured by the cumulative abnormal return (CAR), which is calculated by the event study methodology. The differences between variables in the univariate tests are tested with the two-sample *t*-test. The multivariate tests are modelled using the ordinary least squares (OLS) methods.

The reason that the sample of RPT with EAs is collected starting from 2008 is to take the effect of the new accounting standards into consideration. A new set of accounting standards were issued by the Ministry of Finance (MOF), which is China's accounting standard setter, in February 2006 and effective from 1 January 2007. It is commonly known as the New People's Republic of China (PRC) Generally Accepted Accounting Principles (GAAP). The New PRC GAAP (see detail in section 2.2.1.) adds several new features to the scope of RPT and improves the regulation of RPT. Selecting EAs that were released from January 2008 makes sure that all the RPTs that are sanctioned under the new standards are included as the major components of the sample. Therefore, the up-to-date data of RPT violations in China is allowed to be examined.

Chinese listed companies provide abundant sources to the study on RPT. First, the explicit threshold for share issuance and delisting in China provides public companies with earnings management incentives. And RPT is one of the popular methods to achieve the earning target. Second, the business group structure of Chinese companies facilitates the implementation of RPT. Historically massive state-owned enterprises (SOEs) had been transferred to the group companies after the reform in 1990s. The inter-trading between related companies within the same group is easily undertaken. Third, the weak legal system in China is insufficient to regulate various forms of RPT and to protect the investors, hence RPT becomes prevalent. Finally, Chinese investors react actively to the released market information, therefore, a significant market reaction toward the announcement of RPT can be detected to support the hypotheses of this study.

1.4. FINDINGS

First, market reacts negatively to the announcements of EAs against RPT compared to the positive reaction toward RPT PAs. Approximately, CARs for EA announcements against RPT are $-1\% \sim -1.2\%$, while CARs for public disclosure of RPT are $1\% \sim 3.2\%$ with significant differences. This suggests that there are systematic discounts on firm value around announcement period if the firms are subject to RPT EAs. Publicly disclosed RPT is reviewed, approved and announced through rigorous screening procedures, and is under the oversight of all investors. That is why firms with RPT PAs do not cause negative market reactions.

Second, it is found that the correlation between CARs and EAs with rectification actions are less negative than the correlation between CARs and EAs without rectification actions. Market lowers the value of firms with EAs but will increase the evaluation by approximately 1.5% to 1.8% if the firm claims to rectify the situation referred in the EAs.

Third, among all the RPTs with EAs, non-operating RPTs account for a small percent (38%) but yield stronger negative CARs than those for operating RPTs (-4.3% versus -2.2%). This is coherent with the arguments of [Bertrand et al. \(2002\)](#) and [Kang et al. \(2014\)](#) that non-operating activities are perceived by the market as with more likelihood for tunneling. This finding also provides a new angle on the non-operating activities for

the academic studies about RPT in Chinese stock market.

In addition, on examination of corporate governance characteristics between two samples of firms, it is found that the market reactions for the CEO duality and board size are positive for firms with PAs in contrast with the negative reaction for firms with EAs. Specifically, CARs responding to RPT PAs are around 3% for CEO duality and 0.2% ~ 1.1% for larger board size, in comparison, CARs drop by around 3% for CEO duality of firms with EAs. This provides evidence that the RPT should be analyzed case by case under both the conflict of interest hypothesis, and the efficient transactions hypothesis. The above results are also consistent with the findings of [Gordon et al. \(2006\)](#), [Peng et al. \(2007\)](#) and [Lei and Song \(2011\)](#). Investors depreciate a firm that uses RPT to conduct expropriation, but appraise a firm that intends to use RPT fairly and legally to achieve normal operating target.

Taken together, the univariate results indicate that investors treat differently between RPT with EAs and RPT with PAs. Within the sample of firms with RPT EAs, it is found that the abnormal returns are less negatively related to the firms whose EAs include the rectification actions compared with the firms without the rectification actions. And the abnormal returns are more negatively related to firms whose EAs are targeted on the non-operating RPT than those related to firms with other types of RPT. It is interesting that firms with EAs are negatively correlated with the CEO duality, whereas firms with PAs tend to be positively correlated with the CEO duality and larger board size.

1.5. STRUCTURE OF THE STUDY

The remainder of the study proceeds as follows. Section 2 summarizes the institutional background of the Chinese stock market, definitions and legal framework of RPT. Section 3 discusses prior academic literature on RPT and research hypotheses. Section 4 describes the sample creation, data collection procedures and research methodology. Section 5 reports the results. The final section concludes the outcome of the study by highlighting its contributions, practical implications, limitations and by making suggestions for the future research.

2. BACKGROUND

This chapter introduces the institutional background of RPT. Section 2.1 assembles the definitions and the disclosure requirements for RPT from the sources of several major conceptual frameworks for financial reporting. The stipulations from IAS 24⁶, FAS 57⁷ and Chinese Accounting Standards for Enterprises⁸ are quoted. Section 2.2 illustrates the evolution of the regulatory framework of RPT in China, chronologically featured by the capstone events on RPT. Section 2.3 briefly introduces the Chinese stock market and explains the reasons that China is natural setting for the research on RPT issues.

2.1. CONCEPTUAL ISSUES

A *related party transaction* is generally defined as any transaction taken place between related parties, regardless of whether a price is charged. And a *related party* is a person or entity who has control or significant influence over the company (Henry et al., 2007).

According to IAS 24, an RPT is a transfer of resources, services or obligations between a reporting entity and a related party, regardless of whether a price is charged. A person or a close member of that person's family becomes a *related party* if that person is member of the key management personnel of the company or of a parent of the company. An entity is related to a company if that entity is in the same group with the company, it is an associate or joint venture of a member of a group where the company belongs to, or the entity is controlled by a related person, etc.

An entity shall disclose the parent-subsidiaries relationship irrespective of whether there have been transactions between them. It also shall disclose key management personnel

⁶International Accounting Standards (IAS) were issued by the antecedent International Accounting Standards Council (IASC), and endorsed and amended by the International Accounting Standards Board (IASB). IAS 24 *Related Party Disclosures* was reissued in November 2009 and applies to annual periods beginning on or after 1 January 2011.

⁷Financial Accounting Standards (FAS) 57 was issued in March 1982 for fiscal years ending after 15 June 1982 and superseded since the Accounting Standards Codification (ASC) became effective for interim and annual periods ending after 15 September 2009. Both of them were established by the Financial Accounting Standards Board (FASB).

⁸A new set of accounting standards were issued by the MOF in February 2006 and effective from 1 January 2007, commonly known as New PRC GAAP.

compensation both in total and by categories. If an entity has had RPT during the periods covered by the financial statements, it shall disclose the nature of the related party relationship as well as related information about those transactions, necessary for users to understand the potential effect of the relationship on the financial statements.

Related parties are defined to include: affiliates of the enterprise; entities for which investments are accounted for by the equity method by the enterprise; trusts for the benefit of employees; principal owners of the enterprise; its management; members of the immediate families of principal owners of the enterprise and its management. Affiliate is described as “a party that, directly or indirectly through one or more intermediaries, controls, is controlled by, or is under common control with an enterprise”. Examples of entities for which the enterprise uses the equity method to account for include subsidiaries of the enterprise or of the enterprise’s parent company. The management includes the three basic categories of individuals: board members, executives, and principal owners.

Transactions between related parties commonly occur in the normal course of business. FAS 57 had provided specific examples regarding the common types of RPT: sales, purchases, and transfers of realty and personal property; services received or furnished; use of property and equipment by lease or otherwise; borrowings and lendings; guarantees; intercompany billings based on allocations of common costs; and filings of consolidated tax returns. Transactions between related parties are considered to be RPT even though they may not be given accounting recognition.

Other than the similar disclosures requirements as stated in IAS 24, FAS 57 required that financial statements shall include disclosures of any material RPT. Moreover, it is also noted that RPT cannot be presumed to carried out on an arm’s length basis, as the requisite conditions of competitive, free-market dealings may not exist. This rule particularly prevents some enterprises from implying that their RPTs are consummated on terms equivalent to those normal business activities fairly traded in the market. Note that the Sarbanes-Oxley Act (SOX) (Section 402) now prohibits, in most cases, loans to directors and executives.

In China, it is the Accounting Standards for Enterprises No. 36 that regulates the disclosure of information about the related party relationships and transactions. It defines an RPT as an event whereby a transfer of resources, labor services or obligations takes place between affiliated parties, irrespective of whether money is charged. When a party controls, jointly controls or exercises significant influence over another party, or when two or more parties are under the control, joint control or significant influence of the same party, the related party relationships are constituted.

Holding the same disclosure requirements as other international standards, the Accounting Standards for Enterprises No. 36 regulates that an enterprise shall disclose the information about the parent company and subsidiaries, irrespective of whether there have been transactions between them; where there have been transactions between an enterprise and its affiliated parties, it shall disclose the nature of the related party relationships, the types of transactions and the elements of transaction in the annotations. No enterprise may disclose an RPT as a fair (arm's length) transaction unless it provides exact proof. Specifically, if a listed company engages in a transaction with the related natural persons of more than RMB 300,000 (EUR 32,550), and if a listed company engages in a transaction with the related legal persons of more than RMB 3 millions (EUR 325,000), which accounts for more than 0.5% of the absolute value of the latest audited net assets of the company, it shall disclose such RPTs promptly. It is not purely the "related party-ness" of a transaction that warrants particular attention, but rather the transaction's potential economic effect on the company (Henry et al., 2007).

The objective of above standards is to ensure that an entity's financial statements contain the disclosures necessary to draw attention to the possibility that its financial position and profit or loss may have been affected by the existence of related parties and by transactions and outstanding balances, with such parties.

There are several terminologies overlapping with the definition of RPT. "Connected transaction (CT)" or "affiliated party transaction" is often used in academic research as an equivalent term to RPT. Cheung et al. (2006) used the term "connected transaction" in describing in the context of Hong Kong market. the Accounting Standards for Enterprises

No. 36 actually uses “affiliated party transaction” in explaining RPT. However, the majority studies on RPT use the term “related party transaction” to refer to any transaction between a company and an affiliated entity, therefore, this study also uses RPT as the primary designation.

Some terms are beyond neutrality more with negative sense, such as “self dealing”, “insider trading”, “tunneling” or “propping”. [Shapiro \(1987\)](#) defined self-dealing as the exploitation of insider positions for personal benefit. [López de Silanes et al. \(2000\)](#) defined tunneling as the transfer of assets and profits out of firms for the benefit of their controlling shareholders, which are either undetected illegal fraud or transfer pricing advantageous to the controlling shareholder. [Wong and Jian \(2003\)](#) used propping to describe the scenario whereby a controlling owner uses its own resources to manage the listed related party’s earnings, which is different from accruals management in which the controlling owner or another related entity is not involved in the listed enterprise’s earnings management. The wide variety in terminologies describing RPT and the complex transaction structure highlight its role as a important subject in the main strand of business research.

2.2. REGULATORY FRAMEWORK OF RPT IN CHINA

2.2.1. Development of regulations and standards on RPT

China is a late starter in formulating the regulatory rules governing RPT compared to US and UK. During the recent decades the regulatory framework of RPT has experienced an actively improving process in the Chinese financial market. The evolution process can be generally divided into four stages⁹ marked by five significant promulgation or revisions of major accounting standards in China.

- *First stage: “1997 Disclosure Standard”*

Since 1997 the MOF required public firms to disclose related party relations and RPT to protect individual investors’ rights by promulgating the first detailed accounting standard on RPT known as *Accounting Standard for Business Enterprises:*

⁹The first three stages of evolution for the regulatory framework of RPT were firstly proposed by [Wang \(2003\)](#).

Disclosure of Related Party Relationships and Transactions (labeled as “1997 Disclosure Standard”). For the first time the scope of the related party was defined as to whether one party has the power to control, jointly control or exercise significant influence over the other party. The nature, type and other pertinent information of the transaction should be disclosed in the financial statements.

- *Second stage: “Debt Restructuring Standard” and “Non-monetary Transactions Standard” in 1999*

With the rapid development of capital market in the 1990s, non-monetary transaction and debt restructuring has become prevalent means for earnings manipulation, e.g., assets swap and equity transfer. The MOF promulgated two accounting standards to regulate these two types of accounting business, i.e., *Accounting Standard for Business Enterprises: Debt Restructuring* and *Accounting Standard for Business Enterprises: Non-monetary Transactions*. A common essential feature is that both of two standards have introduced the concept of fair-value measurement in recording the asset. Theoretically, fair-value measurement truly reflects the financial position and operating performance of a listed enterprise, and it also integrates with the international accounting practice. However, due to the lack of economic environment for promoting the fair-value measurement, it became another favorable means for earnings manipulation.

- *Third Stage: “2001 Provisional Regulation”*

Facing the deteriorated earnings manipulation behavior of RPT by taking advantage of “unfair” fair value, the MOF issued the *Provisional Regulations on the Accounting Treatments for Sale of Assets and other Transactions between Related Parties* on 21 December 2001 to fairly reflect RPT’s economic essence. It prescribes any excess “gain” arising as a result of an RPT, which would have been measured on the basis of the fair value of the goods or services sold, cannot be recognised as income and must be credited directly to equity, unless there is sufficient evidence to support that the transaction price is fair.

- *Fourth stage: “New Disclosure Standard”*

In February 2006, the MOF issued a new set of accounting standards, commonly

known as New PRC GAAP. The issuance of New PRC GAAP represents a milestone in domestic economic development and the international convergence of accounting standards (KPMG, 2011). New PRC GAAP has been adopted since 1 January 2007. The specific standard with regard to RPT is *Accounting Standards for Enterprises No.36: Related Party Disclosures*

The latest “New Disclosure Standard” has achieved a comprehensive development compared to the earliest “1997 Disclosure Standard” which was quite rudimentary and weak. There are three new features brought by the “New Disclosure Standard” (KPMG, 2011):

- *Definition of related party*

In the “1997 Disclosure Standard”, parties are regarded as related to each other if one party has the power to, directly or indirectly, control, jointly control or exercise significant influence over the other party, or if two or more parties are subject to control from the same party. The “New Disclosure Standard” expands the scope of related parties. For example, two or more parties, which are subject to joint control from the same party, are also regarded as related parties.

- *Parent company’s key management personnel and their close family members*

Parent company’s key management personnel and their close family members are not regarded as the related parties in the “1997 Disclosure Standard”, whereas such individuals are regarded as related parties in the “New Disclosure Standard”.

- *Disclosure of RPT in the financial statements of a parent company provided together with the consolidated financial statements*

The “1997 Disclosure Standard” does not require disclosure of RPT in the financial statements of a parent company, when these are provided together with the consolidated financial statements. The “New Disclosure Standard” has deleted the exemption, and therefore such disclosure is required.

The MOF is not the only regulatory body in China in issuing accounting rules governing RPT. RPT has been written into the *Company Law* and the *Securities Law* since 1999. In 1997 the CSRC required all publicly traded firms to disclose RPT in its circular *Content and Format Standards of Information Disclosure for Securities Issuing Companies No.7*

- *Announcement on Related Party Transactions*. In order to further regulate the fund flow between listed companies and their respective controlling shareholders or other associated parties, and effectively control the risks of listed companies in providing guarantee to any other party, the CSRC and the State-owned Assets Supervision and Administration Commission (SASAC)¹⁰ jointly issued the *Notice Concerning Some Issues on Regulating the Funds between Listed Companies and Associated Parties and Listed Companies' Provision of Guaranty to Other Parties* on 28 August 2003. It stipulates that the controlling shareholder and other associated parties shall not demand the listed company to advance such expenses as wages, welfares, insurance premiums, advertisement fees, etc; a listed company shall not provide an associated party with fund in any form, neither loans nor interest-free financial assistance.

Issued in 2002 by the CSRC, the *Guidelines for the Corporate Governance of Listed Companies* further concretizes RPT's legal existence by prescribing that written agreements shall be entered into for RPT between a listed company and its connected parties. Such agreements shall observe principles of equality, voluntariness, and making compensation for equal value. The contents of such agreements shall be specific and concrete. Matters such as the signing, amendment, termination and execution of such agreements shall be disclosed by the listed company in accordance with relevant regulations. The formulation of these regulatory rules has been pushing forward the conduction of RPT toward standardizing accounting practice and improving the quality of disclosure information.

2.2.2. CSRC's enforcement action

Immediately after China set up its two stock exchanges Shanghai Stock Exchange (SHSE), and Shenzhen Stock Exchange (SZSE) in the early 1990s, regulatory agencies were established to enforce laws and regulations that govern the functioning of the securities market. The CSRC is owning the comprehensive regulatory power over China's securities indus-

¹⁰The State-owned Assets Supervision and Administration Commission of the State Council (SASAC) is a special commission of the People's Republic of China, directly under the State Council. It was founded in 2003 through the consolidation of various other industry-specific ministries (Starr, 2010). As part of economic reform, nearly half of state-owned enterprises were sold off in the form of stocks. SASAC is responsible for managing the remaining SOEs, including appointing top executives and approving any mergers or sales of stock or assets, as well as drafting laws related to state-owned enterprises.

try. It performs a unified regulatory function over the securities and futures market of China, maintains an orderly securities and futures market order, and ensure a legal operation of the capital market. The two stock exchanges are delegated responsibilities by the CSRC to monitor and supervise listed firms, brokers, dealers, and other market participants under their jurisdiction.

The CSRC has regional offices as well as a central location in Beijing. The main duties of the CSRC are as follow¹¹.

- Develop and formulate the policies and regulations for the securities markets.
- Exercise a vertical administration over the domestic securities regulatory institutions.
- Supervise the issuance, listing and trading of domestic-based securities; monitor domestic enterprises listed overseas.
- Supervise the securities market behavior of the listed companies and their senior managerial personnel as well as shareholders who shall fulfill the relevant obligations according to the relevant laws and regulations
- Supervise the relevant institutions, including investment fund management companies, depository and clearing corporations, investment consulting institutions, and securities credit rating institutions. Work with the relevant authorities in regulating the accounting firms, the asset evaluation institutions, law firms, and their personnel.
- Investigate and penalize the activities in violation of the relevant securities and futures laws and regulations.
- Implement supervision on other financial products and services, including futures, bonds and credit-rating.

The *Securities Law* states that “any individual or institution is prohibited from making false, seriously misleading presentation or omission, or any other forms of false presentation or inducement, which will lead investors to make investment decisions without

¹¹Taken from the CSRC website (http://www.csrc.gov.cn/pub/csrc_en/about).

knowing the truth”. Enforcement is among the core missions of the CSRC, providing a fundamental guarantee in ensuring market transparency, fairness and justice, protecting investors and promoting sound development of capital markets. The collective action that the CSRC takes to make sure the securities market order are being followed is the CSRC’s enforcement action (EA). The CSRC’s EAs are made to investigate and penalize the violation activities of the relevant securities.

The process that the CSRC employs to investigate potential violations of securities laws and regulations is somewhat akin to that of the Securities and Exchange Commission (SEC) in the US (Feroz et al., 1991; Chen et al., 2005). The EA is made based on the investigation results by the CSRC and other cooperating regulatory bodies. And the investigation is initiated based on a number of leads. A CSRC’s news release¹² reported that the two major sources of leads have been stock exchanges (SHSE and SZSES) and reporting from the public, respectively, accounting for 54% and 25% of all leads reported. Meanwhile, a significantly higher number of leads were referred to the CSRC by administrations in charge of routine supervision. Specifically, according to Chen et al. (2005), these leads include complaints from investors, information from insiders or former employees of firms, newspaper articles, analyses of annual reports and other corporate disclosures, referrals from the stock exchanges, legal disputes, and police investigations.

The CSRC or one of the two stock exchanges will start investigations following the leads. The initial investigation activities are kept private. Should the evidence of wrong-doing be uncovered, the CSRC can prescribe a series of rectification actions and make the results public. The results can be published by the CSRC, other regulatory agencies, or the company. It is possible that the result is not released publicly if a violation is deemed to be very minor then the CSRC will give an internal warning to the company and there will be no public disclosure of either the investigation or its outcome.

Public EA includes public criticism, official warning, public censure, monetary fines, or-

¹²General Enforcement Overview in the Securities and Futures Markets between January and October 2013, published on 22 November 2013 (http://www.csrc.gov.cn/pub/csrc_en/newsfacts/release/201402/t20140213_243771.html).

der to cancel business permit and close down, and banning on the responsible parties from market entry. Public criticism and official warning are the two mildest forms of EA, and ban of market entry is the most severe. Normally multiple actions are collectively enforced for the company involved . The amount of fines generally ranges from RMB 100,000 to 600,000 at the corporate level, and between 30,000 to 300,000 RMB at the individual level. For individuals who commit the most severe violations of the regulations, the CSRC uses market exclusion as the toughest sanction, thus, prohibiting the individuals from holding positions such as top management executives or board directors for 3 years, even a life time (Firth et al., 2014). For the most serious offenses, a criminal prosecution may be imposed.

The laws and regulations actually provide a range of private rights of action for compensation in the event of non-compliance causing damage to investors, but the legal system and the effect of market discipline provided by institutional investors and other participants on corporate governance is not as significant in China as in other jurisdictions (Fund, 2012). Therefore, though private EA can supplement and support the CSRC's supervision and regulation, it is not a substitute for public EA.

Improvement is still needed for the CSRC on establishing precise rules of EA disclosure. Observing from the sample of current study, the content, publisher and releasing time vary significantly for the CSRC's EA. First, there is considerable detail in depicting the case file from the specific violation behavior to the punishment, however, few details of the investigation process are disclosed. Second, the publishers of EA are not uniform. Some EAs are published by the CSRC or stock exchanges, some are announced by the company. No explicit rules are found to clearly state under what circumstances should EA be reported by which party or both. Third, the releasing time of EA is not consistent with the case's closure time. Some cases had been closed several years long before EA is disclosed. And occasionally the contents of EA are known to the public a few days before the official announcement by the CSRC. These advance disclosures are made by the companies involved or by the news media.

Given that these observed inconsistencies tend to reduce the value effect of EA announce-

ment, finding a significantly negative market reaction to EAs against RPT would provide compelling evidence for the importance of RPT in Chinese stock market.

2.3. CHINA STOCK MARKET AS RESEARCH SETTING

2.3.1. Chinese financial market

The Chinese government has implemented a series of reforms in SOEs since 1978, and the objective of these reforms is to improve operating performance, raise capital, decentralize decision making and increase productivity (Peng et al., 2011). Due to historical reasons, however, there were few outright privatizations because the state still retained shareholdings in most companies and a large number of non-tradable shares exist in the Chinese stock market. Typically, there are five types of Chinese shares:

- government shares, which are held by the State Assets Management Bureau (SAMB);
- legal entity shares (or C-shares), which are held by other SOEs;
- employee shares, which are held by managers and employees;
- ordinary domestic individual shares (or A-shares), which can be purchased only by Chinese citizens on the SHSE or the SZSE;
- foreign shares, which can be purchased only by foreign investors in mainland China (B-share), in Hong Kong (H-share), or in the US (N-share).

The first three types of shares are not tradable on the official exchanges, although employee shares are allowed to be listed three years after the initial public offerings (IPOs). These non-tradable shares cause severe agency problems. In 2005, the CSRC launched a split-share structure resolution aimed at eliminating all non-tradable shares and transferring non-tradable shares into tradable shares. To exchange the rights for non-tradable shares to become tradable, the holders of non-tradable shares will give part of their shares free of charge to the holders of the corresponding tradable shares. A typical holder of non-tradable shares will receive 2-3 shares for every 10 shares. Under this framework, non-tradable shares eventually became tradable on the secondary market. This institutional change has resulted in significant changes in ownership concentration, firm liquidity and corporate governance (Luo and Jackson, 2012).

By law, all shares in China have the same voting and cash-flow rights. Since May 2004, SZSE has formally established a Small and Medium Enterprise (SME) board for growing firms. Meanwhile, the Chinese stock market was made partially accessible to foreign investors. A-shares are available exclusively to Chinese domestic investors and are denominated in the Chinese currency, the RMB. B-shares were initially only available for purchase by non-residents but were later made available to domestic individuals in 2001. H-shares are the Chinese stocks that list on the Stock Exchange of Hong Kong (SEHK). SEHK provides a main board for major companies as well as a Growth Enterprise Market (GEM) for growing firms that was established on November 25, 1999. Since 1993, there has been a growing body of N-shares that list in the forms of stocks or American Depositary Receipts (ADRs) on the US exchanges, including AMEX, NYSE, and NASDAQ. The A-shares and B-shares are subject to the listing requirements by the CSRC, while H-shares are subject to stricter listing requirements on SEHK, and N-shares are subjected to the disclosure requirements of SEC. Since October 2009, SZSE also launched a GEM board (commonly known as ChiNext) to attract innovative and fast-growing enterprises, especially high-tech firms. ChiNext's listing standards are less stringent than those of the Main and SME Boards of the SZSE.

As of 15 April 2015, there are totally 2,683 firms and 2,766 securities listed in mainland China, of which 1,030 firms listed on SHSE and 1,653 listed on the SZSE. Specifically, there are 1,489 A-share stocks, 104 B-share stocks, 744 SME stocks and 429 ChiNext stocks. Classifications of Chinese listed companies roughly fall into industrial, commercial real estate, public utilities and conglomerates sectors.

2.3.2. Why Chinese data applies to this study?

A. Unique rules for share issuance and delisting RPT tends to be utilized for earnings manipulation for the purpose of maintaining listing status. In China, a listed company faces two types of risks after successfully listing: delisting and loss of the right to issue new offerings (Wong and Jian, 2003; Jian and Wong, 2010; Peng et al., 2011). The Chi-

nese *Company Law, Securities Law* and regulations¹³ mandate that, if a listed firm sustains losses for three consecutive years, it will be temporarily delisted by the CSRC and subject to “particular transfer (PT)” and other transfer constraints. Specifically, according to the guidelines introduced by the CSRC in 1999, a firm will have special treatment (ST) prefixed to its name as a warning and will face various trading and financial restrictions if it reports a net loss for two consecutive years (return on equity (ROE) is less than 0%). An ST firm’s daily stock price movement is restricted to be no more than 5% price change in either direction compared with a 10% for a normal stock. Additionally, its midterm financial reports must be audited. If the firm continues to suffer a net loss for one more year, it will be designated as a PT firm, entailing virtual suspension of trading. A PT firm can only be traded on Friday, with a maximum 5% upside limit to last Friday’s close, but no restriction on the downside. Further, a PT firm will be completely delisted if it cannot become profitable in the following year¹⁴.

The rationale of making delisting decisions based on accounting earnings seems reasonable because it can restrict firms that are in poor performance and thereby protect investor interest. However, unlike China, exchanges around the world normally set minimum price, minimum market capitalization, and/or minimum asset/revenue criteria for firms to continue being listed. [Jiang and Wang \(2008\)](#) argued that the earnings-based delisting system is misconstrued since such policies drive financially healthy firms out of stock market, and induce listed firms to engage in rampant earnings manipulation in order to avoid delisting.

¹³The *Suspending and Terminating the Listings of Loss-making Listed Companies Implementing Procedures (Revised)* was issued by the CSRC on 30 November 2001, in which Article 5 stated that if a company posts consecutive losses for the most recent three years, the stock exchange shall render a decision to suspend the listing of the company’s shares within 10 working days of the date of disclosure of the company’s annual report; Article 10 stated that after the listing of shares has been suspended, a company may apply to the stock exchange for the restoration of its listing if its interim financial report shows that the company is making a profit. Since the delisting scheme was formally introduced, however, only 78 companies have been actually pulled from the stock market. Recently on 17 November 2014 a guideline, *Several Opinions of the China Securities Regulatory Commission on Reform, Improvement, and Strict Implementation of the Delisting Rules for Listed Companies* was released to tighten delisting rules in a bid to expel unqualified companies from the equity market. According to the guideline, companies will be removed from the SHSE and SZSE for major legal violations; Share trading of a company will be suspended after it is caught cheating in share issuance or information disclosure; those who release false information can resume share trading after taking remedial actions, but those who commit fraud in share issuance will not be absolved.

¹⁴From 2002, the CSRC cancelled the PT designation and introduced a new designation called *ST, which is similar to ST but without the transition PT period.

The other risk a listed firm faces is losing the right to issue new equities. Required by the CSRC, a listed firm has to maintain a minimum ROE of 6% for three consecutive years in order to be eligible for rights issue. In addition, the average ROE over these three years must be kept at minimum 10%. Since a rights issue offering is an important source of funds for listed firms after IPO, controlling shareholders would suffer a huge loss of the private benefits of control from delisting or from the loss of the right to issue new equities (Peng et al., 2011).

Therefore, the controlling shareholders have strong incentives to prop up the listed firm to reach the earnings threshold. Even for the SOEs, government as the ultimate controlling owner has strong incentives to help listed firms maintain their listing status. Other than solely for profit maximization, the SOEs have other objectives such as to maintain employment and to control industries that are strategically important. Jian and Wong (2010) provided evidence that Chinese listed firms use RPT to increase related sales and thus boost earnings when they are in poor financial condition.

B. Business group The business group structure formulated in the reform during 1990s facilitates the formation of RPT. A business group is “a set of firms, which, though legally independent, are bound together by a constellation of formal and informal ties and are accustomed to taking coordinated action” (Khanna and Rivkin, 2001). Such groups take names like *grupos* or *grupo economicos* in Latin America, *mining houses* in South Africa, *family holdings* in Turkey, and *trading houses* in India. The structure of this constellation differs across countries and areas, with differences defined both by formal ownership links, including the ownership roles of banks, families, the state, and other companies, and by differences in the nature and strength of informal social networks (Morck et al., 2005).

Business groups in Korea are known as *chaebol*, a collection of both public and private companies in a pyramidal and circular ownership structure, that are typically controlled by members of a founding family (Kang et al., 2014). Japanese *keiretsu* are defined by multiple corporate owners, often centred on a lead bank (Gedajlovic and Shapiro, 2002). Chinese business group (*qiyejituan*) are characterized by a core or parent firm that partly

or wholly owns legally independent entities which are registered as affiliated firms of that parent firm (Ma and Lu, 2005).

Beginning in 1987, the formation of business groups in the state-owned sector had been promoted by the China's reformers. Most of SOEs were transferred into business groups. A number of private enterprises later emerged in the tide of reform also adopted a business group structure. With the encouragement and assistance of the state, business group in various scales and scopes proliferated rapidly in the 1990s in all sectors of the economy, resulting in a dramatic growth in the number of business groups.

Business group structure generates group affiliations. And the group affiliation is conducive to interactions within the network of affiliated entities. Therefore, group firms are more likely to undertake RPT that can help member firms to reduce transactions costs and overcome the difficulties in enforcing property rights and contract (Wong and Jian, 2003; Fisman and Khanna, 2004). The other reason that RPT is frequent with business group is that around 80% of the listed firms in China were previously production units that had been separated from their parent SOEs, which serve as the controlling owners after the listing. After the separation and IPO, the listed subsidiaries continue to engage in frequent RPT with their parent SOEs (Aharony et al., 2000).

Due to the information asymmetry in the market, finding reliable trading partners become a key concern for a company. As China's enterprise managers gained autonomy, they faced decisions about with whom to trade for the first time (Naughton, 1996). Keister (2000) argued that managers responded to the uncertainties of imperfect markets by forming stable relations with business partners who could credibly assure the provision of critical resources. To identify credible partners, managers relied upon their contacts and prior social/personal relations with former bureaucrats or peers within the group. Therefore, RPT (such as trade and loans) can be performed with reliable related parties aiming to reduce the potential risk.

C. Weak legal system The weak legal and market institutions in China imply a higher likelihood of undertaking RPT (Cheung et al., 2006). In particular, laws governing in-

vestor protection, the quality of enforcement of regulations, and ownership concentration in Chinese market make it vulnerable to the disturbance of RPT.

[López de Silanes et al. \(1998\)](#) found that countries whose legal rules originate in the common law traditions tend to protect investors relatively better than the countries whose laws originate from the civil law. For instance, minority shareholders in common law countries (e.g., Australia) are allowed to vote by mail when they cannot show up in person and can trade their shares during a shareholders' meeting. They are protected from certain expropriations by directors, and need to have only 5% of share capital to call an extraordinary meeting. In contrast, minority shareholders in civil law countries (e.g., Italy) cannot vote by mail and their shares are blocked during the shareholder meeting. They need to have 20% of share capital to call for an extraordinary meeting. Therefore, investors in civil law countries are less protected from the potential expropriation. The legal system in China is similar to civil laws that give investors weaker legal rights than common laws do ([Luo and Jackson, 2012](#)).

High ownership concentration is pervasive among Chinese public firms. Due to the fact in China that only around 30% of listed companies' shares are publicly tradable, and that the controlling shareholders, on average, hold more than 40% of total shares, they are rarely challenged by the minority shareholders, particularly in a state-controlled enterprises.

The ruling system is very weak since the CSRC is short of necessary investigative and prosecuting power or resources. Because of the involvement of institutional and retail shareholders in corporate governance is less well developed, more of the burden of dealing with regulatory breaches falls onto the CSRC than in jurisdictions with easier access to litigation to resolve disputes ([Fund, 2012](#)). Moreover, due to the high cost and complexity involved in civil law system, minority investors usually find that it is difficult to sue in courts for suspected violations. Although China is emerging as a significant economic power, the role of legal system in minority shareholders' protection is still very weak ([Luo and Jackson, 2012](#)).

D. Market reaction Chinese stock market responds actively to the information release on RPT (Wong and Jian, 2003; Cheung et al., 2006; Lei and Song, 2011; Peng et al., 2011). Fama (1970) in his classical study developed the efficient market hypothesis (EMH) which argues that there are three versions of EMH reflecting the market efficiency: *weak form*, *semi-strong form* and *strong form*. The weak-form EMH claims that stock prices can only reflect historical prices. The semi-strong form of the EMH assumes that stock prices fully reflect all publicly available information (e.g., earnings announcements, stock splits, etc.). The strong-form EMH concerns about whether investors have instant access to any information relevant for the price, even hidden or insider information.

The event study, which is employed in this study, is based on the event test of the semi-strong form of the EMH. The semi-strong form assumes that the market is reflective of all publicly available information. Under such hypothesis, the event study methodology can be used to investigate the effects of public company news (MacKinlay, 1997). However, the Chinese market is far from being semi strong (Hamid et al., 2010; Nisar and Hanif, 2012).

Nisar and Hanif (2012) used runs test and variance ratio test to examine the weak-form EMH on seven major stock exchanges Asia-Pacific, among which data of Shanghai Composite is included representing China. They found that China market is not weak-form EMH since it exhibited considerable serial correlation and non-random walk of price trends. Based on that the Chinese market is considered inefficient. Hamid et al. (2010) also conducted test on the weak-form EMH of 14 countries and areas in the Asia-Pacific region using monthly data from 2004 to 2009. After applying several statistical tests, they got the same conclusion that China is not weak-form efficient.

Although numerous studies have suggested that Chinese market is weak-form efficient or inefficient, the event study has still been adopted extensively on Chinese data to examine the market reaction toward the announcement of major information release. Excess return is generated and the valuation effect is quite strong (e.g., Chen et al., 2000; Barnes and Ma, 2002; Peng et al., 2011). Chen et al. (2000) found significantly negative association between modified audit opinions and abnormal stock return in China. Barnes and

Ma (2002) applied the event study to investigate stock price reaction to the announcement of bonus issues in China, and the results indicate positive returns for both A-share and B-share holders. The B-share market even displays stronger evidence of semi-strong form market efficiency than the A-share market. Peng et al. (2011) found strong market reaction for the announcement of RPT, as well as for the specific characteristics including transaction types and political connection. Additionally, Chinese traders are the most active in the world and they are willing to take a short term view and trade regularly¹⁵. Chinese investors are more likely to take a quick response to the investing news.

To sum up, China has four characteristics that make it well suited for this study. First, the earning-based rules for share issuance and delisting in China provide public companies with earnings management incentives. With the clear earnings targets set by the CSRC, higher frequency of propping is expected. Second, as a result of the reform in 1990s, numbers of SOEs were restructured to be business groups which is often composed of several listed firms. The structure of business groups is tempted for RPT to be undertaken between listed subsidiaries, parent company and controlling shareholders. Furthermore, previous SOEs are supervised or managed by the bureaucrats who are appointed by the government and are well acquainted or even related as well. The personal relationship among the management easily leads to interest issue when RPT takes place. Third, the imperfect legal system and market institutions are insufficient to regulate various forms of RPT. Fourth, prior literatures indicate that the Chinese market is sensitive to the important announcements so that the event study is feasible. Moreover, there is significant variation in the degree of market development of the geographical area of listed companies across China's different provinces, autonomous regions and municipalities, which make the control over RPT even harder.

¹⁵In a report by US, the results of State Street's survey showed that 81% of retail investors in China surveyed said they trade at least once a month.

3. THEORY REVIEWS ON RPT AND HYPOTHESIS DEVELOPMENT

There are two main streams of prior studies about RPT concerning its role in a company's business activities. The first stream argues that RPT is the consequence of agency problem between management and shareholders, or between majority shareholders and minority shareholders. This view is referred to as the *conflict of interest hypothesis*. The second stream considers RPT efficiently meet underlying economic needs of the company. This view is commonly referred to as the *efficient transactions hypothesis*. This chapter elaborates the theoretical background of RPT in these two streams, and reviews relevant factors that are associated with RPT in previous discussions. Before getting the answers to the research questions, several hypothetical assumptions are made in light of the literature review.

3.1. CONFLICT OF INTEREST HYPOTHESIS

[Jensen and Meckling \(1976\)](#) developed a theory to explain the agency conflict between the listed firm's owner-manager and outside shareholders as deriving from the manager's tendency to expropriate from the firm's resources for personal benefit. An agency relationship is defined as a contract under which the principal engages the agent to perform some service on his behalf which involves delegating some decision making authority to the agent. If both parties are rational people who are utility maximizers, the agent might not act in the best interests of the principal. In such case, there will be divergence between the agent and the principal who both want to make decisions that would maximize the welfare of their own, and the conflict of interest thus rises.

The degree of ownership concentration affects the nature of contract that creates agency problems ([Jensen and Meckling, 1976](#)). When ownership is diffused, agency problems arise from the conflict of interests between top managers and outside shareholders. When ownership is concentrated in few hands, the nature of agency problem shifts to the conflict between the large shareholders and minority shareholders. Highly concentrated ownership represents the dominance in the control rights, which gives large shareholders more dis-

cretionary powers of using firm's resources to serve their own benefit at the expense of other minority shareholders. Therefore, RPT raises concerns of agency problems from the perspective of conflicts between controlling shareholders and minority shareholders (Kohlbeck and Mayhew, 2004). The controlling shareholders can take advantage of the controlling power, engaging in RPT in order to expropriate wealth of minority shareholders. In very few cases RPT leads to misstatement of financial reports if it is off the book and intendeds to cover its substance to deceive investors (e.g., Zixin scandal).

RPT can also be used as a means for earnings management, such as to prop up the revenues above the minimum criteria of listing requirement so that the listing status is maintained. "Propping" actually is under the efficient transaction hypothesis since it is beneficial in the sense that it aims to avoid the substantial loss for both firms and stakeholder, such as fund injection from controlling shareholder (Friedman et al., 2003). But it also may hurt the interest of shareholders of the firm whom the funds transfer from, if the financial support for a listed subsidiary is allocated from another listed subsidiary¹⁶. In this case, RPT brings the conflict between the management and outside shareholders.

A. Earnings management As the agent who has been empowered by shareholders to make decisions, a manager has the tendency to have personal goals that different from those of shareholders (Jensen and Meckling, 1976). The conflict interest, thus, leads to potential agency costs. Earnings management can be a type of agency cost if managers release financial reports that do not present an accurate economic picture of the firm, and shareholders make non-optimal investment decisions as a result (Davidson et al., 2004). Therefore, earnings management is related to the agency conflict between managers and shareholders.

Gordon et al. (2006) probed the hypothesis of interest conflict with a sample containing 878 RPTs of 112 companies with both 2000 and 2001 financial information. They

¹⁶The Salim group injected funds from a publicly listed Hong Kong company into a publicly listed Indonesian company for bailout. Some minority shareholders of the Hong Kong company have complained that this transaction amounts to expropriating them in order to prop up the Indonesian company. The Salim Group is Indonesia's biggest conglomerate with assets including Indofood Sukses Makmur, the world's largest instant noodle producer, and Bogasari, a large flour-milling operation.

examined relations between RPT and corporate governance mechanisms, as well as relations between firm's industry-adjusted returns and dollar amount of RPT. They found that some RPTs are to the detriment of shareholders and there are conflicts of interest between managers/board members and their shareholders. This evidence supports the hypothesis of interest conflict. [Gordon and Henry \(2005\)](#) examined 331 US-listed firms' RPT disclosures in fiscal years 2000 and 2001 in the aftermath of the Enron crash unfolding in 2000 to investigate whether RPT is associated with earnings management. They found that earnings management only has limited connection with certain types of transactions such as those involving fixed-rate financing from related parties.

It appears that concerns about RPT as a factor associated with earnings management are warranted, but the mere presence of RPT is not necessarily an indication that a firm is likely to engage in greater earnings management. It is the involved parties' type and incentive that decide the potential chance of earnings management. If the involved party is an executive who is closely tied to the company, he has less incentive to engage in risk-taking behavior such as earnings management. Also any benefits accruing directly to the related party as a result of the RPT could mitigate incentive to manage earnings for the purpose of increasing wealth, for example through bonuses or other compensation tied to earnings.

[Wong and Jian \(2003\)](#) examined 131 Chinese listed firms in materials industry and found that firms that are controlled by corporate group engage in more RPTs than firms that are not. Group-controlled firms report abnormally high levels of related party sales mainly to their controlling shareholders when they have incentives to inflate earnings prior to issuing new equity or to avoid being delisted. [Jian and Wong \(2010\)](#) also stated that controlling owners of Chinese listed firms engage in propping through related sales. The increase in related sales are used to restrain negative industry earnings shocks when listed firms have incentives to manage earnings. By using such inter-company trades to meet securities regulators' earnings targets, the controlling owners help the listed firms maintain their listing status or qualify for rights issues. The negative stock returns indicate that investors perceive those RPTs as opportunistic and consider the earnings from RPT are less credible than from arm's length transactions. Firm value is also negatively associated with RPT.

B. Expropriation Since RPT is frequently utilized for the expropriation of minority shareholders, it leads to the major concern about the agency conflict between controlling shareholders and minority shareholders.

[López de Silanes et al. \(2000\)](#) used the term “tunnelling” to characterize the expropriation of wealth by controlling shareholders of a company from the minority shareholders. They argued that a controlling shareholder can simply divert resources from the firm for his own benefit through RPT. Such transactions include illegal outright theft or fraud, asset sales, transfer pricing favoring the controlling shareholder, excessive executive compensation, loan guarantees, expropriation of corporate opportunities, and so on. Some tunnelling, especially theft or fraud, tends to be undertaken in emerging markets. [Peng et al. \(2011\)](#) used CT data from China covering 1998 through 2004 to test the possibility of Chinese companies engaging in tunnelling under certain circumstance. They argued that controlling shareholders are more likely to use CT to tunnel from the listed firm to benefit other member firms when the listed firm is in sound financial condition. They also found that there is not much difference among different transaction types, suggesting that all of those transaction types can be used for tunnelling depending on the financial situation of the firms.

Furthermore, [Chen and Chien \(2007\)](#) examined a large set of sample of listed companies in Taiwan and found that RPT produces more negative impact on performance in companies with unitary leadership, and in companies with over 40% divergence between controlling rights and cash flow rights, than those with a dual leadership and those with a below 40% divergence. Unitary leadership means that the positions of board chairman and CEO are held by same individual. If a firm adopts unitary leadership structure, the independence and power of the board may be compromised ([Fama and Jensen, 1983](#)). However [Peng et al. \(2011\)](#) did not find significant impact on the announcement effect of CT from the divergence between control rights and ownership. Empirical relationship between RPT and firm-specific characteristics are reviewed in section 3.3.

In auditing research, failure to identify RPT is found to be one of the top ten audit deficiencies in a study of enforcement actions by the SEC against auditors ([Beasley et al.](#),

2001). Recent years quite a few large-scale corporations' accounting scandals (e.g., Enron scandal) show the involvement of RPT as a approach to disguise company's financial conditions. This phenomenon has raised considerable concern among market participates and regulators on undisclosed or undetected RPT. Shareholders are likely to suffer substantial loss from the stock price decline of the invested companies resulted from bankruptcy, or from public release concerning the undisclosed events, such as EAs by the regulatory body. Enron's share price dropped from a high of \$83.13 on 31 December 2000 to less than a dollar by the end of November 2001 (Bratton, 2001). In China, Jilin Zixin's stock value fell by 7.29% right after the investigation on the undisclosed related trading was revealed to the public¹⁷.

According to the collected EAs' samples, RPT is sanctioned due to nondisclosure or fabrication with intentions to cover up the real purposes that may be disadvantageous to minority shareholders and investors. Therefore it is expected that market reacts unfavorably to the RPT with EAs. The expectation is formalized in H_{1a} :

H_{1a} . The announcement of EAs against RPT would have a significantly negative effect on the stock performance of the target company.

3.2. EFFICIENT TRANSACTIONS HYPOTHESIS

In contrast with the first view, the efficient transaction hypothesis assumes that RPT involves sound business exchanges, efficiently fulfilling economic needs of a company (Gordon et al., 2006). Therefore, it does not harm the interests of shareholders and emerges as an efficient contracting arrangement in the market where information is incomplete and asymmetric (Pizzo, 2013). RPT acts as a form of internal dealing which is able to reduce transaction costs and increase efficiency through the creation of an internal market within the group-affiliated corporation, especially in less-developed regions (Fisman and Khanna, 2004).

¹⁷Taken from the website of China News Service (<http://finance.chinanews.com/cj/2013/09-04/5242029.shtml>).

A. Propping Friedman et al. (2003) assembled several cases showing RPT playing a strategic role in transferring private resources from entrepreneurs into firms that have minority shareholders in the backwash of the Asian financial crisis of 1997 and 1998. Lee Kun Hee, Chairman of Samsung Group, donated some his personal wealth to pay off the debts of Samsung Motors Inc. which was a subsidiary on the verge of bankruptcy in 1999. The controlling shareholders in the Charoen Pokphand Group¹⁸ sold assets in Thailand and China in order to inject cash into publicly listed Thai companies. The Salim group sold privately held assets in Netherlands to bail out publicly listed operations in both Philippines and Indonesia.

Besides presenting that RPT can provide temporary support to a firm that is in trouble, Friedman et al. (2003) developed a model arguing that it is optimal for entrepreneurs to prop when there is a moderate adverse shock, so that the firm stays in business. They also argued that Asian firms in pyramids are more prone to propping, which is consistent with the impetus of this study choosing Chinese public company as a research setting.

B. Resource allocation Fisman and Khanna (2004) conducted a series of interviews of Indian managers and executive from group-affiliated companies to analyze edges of RPT in a business group. They argued that a key role of RPT is to create an internal market and to facilitate the operation of entire group. Company usually faces two difficulties in choosing suppliers, which are either in bad quality or located distantly. Things get worse when a potential producer is located in less-developed areas where there is insufficient demand to stimulate the development of supporting industries. The basic inputs and repair services must therefore have to be sourced from relatively remote suppliers. Group corporations, by contrast, already have well-established supplier networks, and are able to coordinate the delivery of materials through a centralized bureaucracy. Thus RPT often exists wherein suppliers come from a company which itself is a group-affiliate. Finally company obtains financial support more easily from group than from bank in terms of lower interest rates or even free interests.

¹⁸The Charoen Pokphand Group is Thailand's largest private company, and is one of Asia's largest conglomerates.

Pizzo (2013) held the same view as Friedman et al. (2003) that RPT may provide a better allocation of financial resources, economies of scale, easier access to finance and more opportunities in an institution which is short of efficient capital, labour and product markets. This argument applies to some developing countries or areas where exist information problems, agency problems, and market imperfections that may increase the risks associated to firm activities.

C. Knowledge sharing Fisman and Khanna (2004) also argued that one of the advantages of RPT lies in the human resource in that it secures in-depth skills and expertise. For example, a company is looking for a provider of legal service and there happens to be a non-executive director who possesses legal expertise that the company demands. In this case, hiring the director (engaging an RPT) could be more effective and less risky than hiring an outsider to participate the negotiation on contract. Because that director possesses an extensive knowledge of the firm, thus reducing the information asymmetries and enhancing the contract. Not only does the company acquire the needed services, but engaging the director to provide the services can solidify the director's economic bond to company and escalate the director's commitment.

D. Coordination Pizzo (2013) concluded that RPT helps to unite a business group for better coordination. First, contracting parties' representatives appointed as board members facilitate the achievement of better coordination of different activities, quicker feedback or more insights. Second, deeper reciprocal knowledge as well as greater familiarity can justify transactions that are not feasible at arm's length or create more convenient terms and conditions for both parties. Third, hold up problem may be mitigated. Finally, these transactions may also supplement CEO and director with cash remuneration or compensate them for increased risk.

A presumed efficient RPT has to be disclosed to be "approved" by the investors ultimately. Whether the transaction is discloseable or not affects investor's reaction. Lei and Song (2011) analyzed CTs of 181 China-affiliated companies listed on the SEHK before 31 October 2004. Transactions included in their study are CTs with disclosure exemptions and CTs that are discloseable. They found that the market reacts negatively to CTs

with disclosure exemptions but positively to connected and discloseable transactions. A possible reason is that firms are prone to using smaller CTs with disclosure exemptions to tunnel since small-sized CTs do not require independent shareholders' approval or the distribution of circulars according to Hong Kong's legal settings. In contrast, larger-sized CTs are subject to more stringent and more detailed disclosure requirement, and independent shareholders can intervene in the transactions.

Under the efficient transaction hypothesis RPT would not have adverse impact on shareholders. Moreover, disclosed RPT represents the fact that the transaction has been scrutinized beforehand and is under monitoring by regulatory institutions, which results additional information and procedures that are of some value to investors. Therefore, it is expected that the CARs of firms with RPT PAs are higher than those of firms with RPT EAs. The expectations are formalized in H_{1b} :

H_{1b} . The market would react positively to the disclosed RPT with PAs.

3.3. OTHER FINDINGS

3.3.1. Announcement types

Chen et al. (2005) categorized EAs types into public criticism, public condemnation, warning and fines, and tested CARs associated with the severity of the penalty. They found that the public condemnations and warnings are associated with more negative reactions than the public criticisms have. Public condemnations and warnings attract more severe price reactions than fines do. Firth et al. (2014) constructed a severity score by taking into consideration the existence of multiple sanctions rather than merely using the most serious sanction.

However, few discussions have attempted to look into the relationship between reification actions and EAs. According to a CSRC Announcement issued in 2008¹⁹, listed companies shall make explanations on the issues under rectification in their rectification reports

¹⁹http://www.csrc.gov.cn/pub/csrc_en/laws/overRule/Announcement/200807/t20080724_71014.html

and disclose publicly on the websites designated by the CSRC. The rectification report shall include specific contents, such as whether the rectification can be completed in the prescribed time or not, and the rectification effect of problems under continuous improvement and further improvement plan. This leads to a speculation that whether the investors would become less unpleasant about the RPT with EAs when they see the rectification measures have or will be taken to fix the problems.

Feroz et al. (1991) analysed the impact of corrections required by the SEC on the declines in enforcement targets' market returns. Using 224 AAERs issued between 1982 and 1989 which describe allegations of financial disclosure violations by 188 firms, they examined the financial and market impact of the SEC enforcement program which consists of a series of legal actions. The legal actions include investigations, subsequent injunctive actions, and administrative proceedings against offending registrants and auditors. One of the main findings is that the abnormal returns relative to the first disclosure of the alleged violations are negatively associated with the correction consequences. It means that the sanctioned companies' corrective actions have narrowed the gap of abnormal returns surrounding the disclosure days and gradually improve the investors' confidence. Therefore the inclusion of rectification actions is assumed to reduce the weak stock returns induced by EAs. The following hypothesis is made:

H_{2a}. Market would react less negatively to the announcement of RPT EAs with rectification actions than those without rectification.

3.3.2. Transaction types

Companies intending to tunnel may employ any type of RPT. In practice, however, only certain types of RPT are used frequently to facilitate the expropriation of minority shareholders, and investors may anticipate the expropriation by discounting the company's stock price. Cheung et al. (2006) classified CTs into three broad categories: transactions that are *a priori* likely to lead to expropriation (asset acquisitions, asset sales, equity sales, trading relationships, and cash payments to connected parties), transactions that are likely to benefit the listed firm (cash receipts and subsidiary relationships) and transactions that may have been motivated by the strategic rationale (takeover offers and joint

ventures, joint venture stake acquisitions and sales). After examining a sample of 328 filings of CTs between Hong Kong listed companies and their controlling shareholders during 1998-2000, they found that for the first category of CTs considerable shareholder value is undermined both during the initial announcement of the transaction and during the 12-month period following the announcement. [Kohlbeck and Mayhew \(2004\)](#) classified ten types of RPT, and found that the most common types of transaction are related business activities and loans to related parties; the least common transactions are borrowings from related parties.

Consistent with Kohlbeck and Mayhew's finding, [Henry et al. \(2007\)](#) got similar results by examining the role of RPT in 83 SEC Accounting and Auditing Enforcement Releases (AAER) which share similar features as the CSRC EAs in this study. It was concluded that loans to related parties are the most frequent type of RPT in the enforcement cases examined, and most of them in nature are the transfer of wealth to controlling shareholders because loans are lent to a related party at below-market interest rates. The next most frequent type of RPT is the purchase (sale) of goods or services from (to) related parties, where the transaction is either undisclosed, unapproved or non-existent. Non-reported purchases from a related party understate expense and thus overstate income. Purchases from a related party of non-existent or unnecessary goods or services, or purchases at above-market prices can transfer wealth to the related party. Fictitious sales to a related party could be used to inflate reported income. To distinguish the impact of certain type of RPT on CARs, it is expected that some transactions are perceived to be beyond the normal nature of operating activities and the CARs will be lower.

[Lei and Song \(2011\)](#) also intended to find out what kind of transactions are viewed as facilitating tunnelings by examining CARs and firm value, and classified RPT according to the transaction format. The authors created "Continuing" category to contain small-value transactions which are carried out on a continuing basis, such as sale and purchase of goods and services, or tenancy agreements. The "Contractual Agreement" category contains one-off payment projects, such as building of factories, vessels. "Placement" includes the increase of registered capital or capital injection into the company. The rest are the same as other studies' classification: acquisition and disposal of assets, acquisition

and disposal of interests, and loan and guarantee.

Similar to [Cheung et al. \(2006\)](#) and [Lei and Song \(2011\)](#), most of prior studies split RPT into very specific types based on the superficial transaction format. However, few studies have explored its nature, which is what the transaction is used for, i.e., improving recurring operating performance, or facilitating non-operating activities. In the current study most of the selected announcements for firms with RPT EAs put emphasis on describing violations without revealing the format of RPT in detail (sale or purchase, assets or goods, loans or guarantee). Therefore, it is impractical to simply classify the RPT in the way that previous research did. It is more practical to track the origins as to whether the transaction serves the company's core business by interpreting it from the context. Generally non-operating transactions with related parties are often the sales/purchases of property, plants, and equipment (PPE) and investment assets. An example of classification is illustrated in Appendix A.

[Bertrand et al. \(2002\)](#) examined the mechanisms of tunneling in Indian groups, which appear to tunnel by manipulating non-operating components of profits, such as miscellaneous and non-recurring items. They also found that non-operating losses and gains are used to offset real profit shocks or divert cash from other firms. The findings indicate that transfer pricing which would affect operating profits is not a primary source of tunneling in India. Using firm-level data from publicly traded firms in Korea, [Kang et al. \(2014\)](#) investigated whether the RPT is used as a mechanism for tunneling among firms belonging to large business groups in Korea, proxied by the control–ownership wedge. While significant positive association is found both between the control–ownership wedge and operating RPT, and between the control–ownership wedge and non-operating RPT, only none top-tier firms use non-operating RPT.

This study attempts to look at the RPT types from a new perspective with regards to the relationship between market reactions and non-operating RPT:

H_{2b}. Market would react more negatively to the non-operating RPT than to other types of RPT.

3.3.3. Corporate governance mechanisms

Corporate governance has been frequently examined in prior studies as an inseparable mechanism breeding RPT. [Gordon et al. \(2006\)](#) investigated the relationship between RPT and the corporate governance mechanisms (such as board characteristics, CEO pay-performance sensitivity, and outside monitors), they generally found weaker corporate governance mechanisms associated with higher dollar amounts of RPT.

CEO duality Several studies have proved the disadvantages of the duality of CEO and chairman, postulating that agency problems are higher when the same person holds both positions, as the concept “unitary leadership structure” referred in section 3.1. [Yermack \(1996\)](#) used 452 companies drawn from the annual *Forbes* magazine rankings of the 500 largest US public corporations between 1984 and 1991, and found that firms are valued more highly when the CEO and chairman positions are separated. [Brown and Caylor \(2006\)](#) created a broad measure of corporate governance, Gov-Score, and related it to the operating performance and valuation for 2,327 firms. They found that firms are more valuable when the CEO and board chair positions are separate.

[Hopt and Leyens \(2004\)](#) contributed to the discussion on the tendency in Europe toward the efficient internal management control by quoting the board models in Germany, UK, France and Italy. They showed a striking convergence in the awareness of the distinction between management and control which encourages the separation of CEO and board chairman. [Henry et al. \(2012\)](#) investigated how the quantitative and qualitative impacts collectively differ between RPT frauds and non-RPT frauds using a logistic regression. It is indicated that RPT fraud cases are more likely to involve the CEO and/or CFO than are non-RPT frauds. Therefore, it is expected that CARs reduce when the company’s CEO and chairman are the same person.

Opposited to the agency theory about CEO duality, stewardship theory argues that CEO duality may be good for performance due to the unity of command it presents ([Peng et al., 2007](#)). [Peng et al. \(2007\)](#) examined 403 firms listed on the SHSE and SZSE and found stronger support for stewardship theory which argues that CEO duality is good for firm performance due to the unity of command it presents. Such a positive impact is especially

likely to be profound for firms confronting problems associated with resource scarcity and environmental dynamism.

Board size There are mixed views on whether companies should keep larger or smaller board size. Proponents of smaller board size argue that limiting board size is believed to improve firm performance because the benefits by larger boards of increased monitoring are outweighed by the poorer communication and decision-making of larger groups. [Lipton and Lorsch \(1992\)](#) stated that “the norms of behavior in most boardrooms are dysfunctional” because directors rarely criticize the policies of top managers or hold straightforward opinions about corporate performance. Considering that these problems increase with the number of directors, Lipton and Lorsch recommended a preferred board size of eight or nine, and proposed that a “lead director” be selected from this group to consult with the CEO about the board’s agenda, membership, and operation.

[Jensen \(1993\)](#) took up this theme by holding same ideas that keeping boards small can help improve their performance. When boards get beyond seven or eight people they are less likely to function effectively and are easier for the CEO to control. He conjectured that there is a possibility that the animosity and retribution originating from the human nature of CEO is too great, thus it is almost impossible for those who report directly to the CEO to participate openly and critically in effective evaluation and monitoring of the CEO. Therefore, the only inside board member should be the CEO. Jensen pushed Lipton and Lorsch’s proposals further, arguing that all directors except the CEO should come from outside a company, and that the CEO should be prohibited from serving as chairman of the board. Using 1,261 firms included in the S&P 1500 in 2001, [Kohlbeck and Mayhew \(2004\)](#) developed a logit estimation model to examine potential determinants of RPT. In terms of monitoring mechanisms, the multivariate results showed that board size is positively associated with the probability of RPT, namely larger board size increases the likelihood of RPT.

Opponents believe that larger board size is not a big issue. [Klein \(2002\)](#) collected data about boards and board audit committees from SEC-filed proxy statements including 803 firm-year observations, and found that audit committee independence increases with board

size and board independence. Using a sample of 252 industrial firms from the Lehman Brothers Fixed Income database and the S&P 500, [Anderson et al. \(2004\)](#) found a negative relation between board size and the cost of debt financing. Specifically, they found that an additional board member is associated with about a 10 basis point lower cost of debt financing, presumably because creditors view these firms as having more effective monitors of their financial accounting processes. [Brown and Caylor \(2006\)](#) showed that firms with board sizes of between six and fifteen have higher returns on equity and higher net profit margins than do firms with other board sizes.

[Adams and Mehran \(2005\)](#) examined the relation between board structure (size and composition) and firm performance using a sample of banking firms during 1959-1999. Contrary to the evidence for non-financial firms, they found that banking firms with larger boards do not underperform their peers in terms of Tobin's Q. Their findings suggested that constraints on board size in the banking industry may be counter-productive. Inspired by this study, [Chen \(2014\)](#) investigated how board structure impacts firm performance that are unique in China. Using a World Bank survey of 2,400 public and private firms across 18 Chinese cities, he found evidence that when firms operate in a weak property rights environment more outsiders improve performance. Thus listed firms with larger board and more outsider directors have better performance in China.

Directors Compensation The compensation of directors has also been found to be correlated with firm performance, with a larger proportion of the pay-performance sensitivity coming from share and option ownership. [Yermack \(2004\)](#) found that the wealth of outside directors changes by 6.1 cents for a \$1,000 increase in shareholder wealth (out of a total pay-performance sensitivity of 11 cents). [Gordon et al. \(2006\)](#) discovered that there are more RPTs when more annual remuneration is paid to board executive members and company gives stock and options to directors. The following hypothesis based on these expectations can be made:

H_{2c}. The market would impose a governance discount to firms engaged in RPT. And the stock reaction to the corporate governance characteristics of firms with RPT EAs would be lower.

4. SAMPLE AND METHODOLOGY

This chapter describes the sources of data, methods of data selection, and defines the variables used in the empirical analysis. In order to capture the market reaction, the event study methodology is employed to test the impact of announcement effect of RPT on the magnitude of abnormal stock performance around announcement period.

4.1. DATA SELECTION

4.1.1. Selection of treatment firms

Totally 1,607 EAs of publicly traded companies listed on the SHSE and SZSE are searched initially between January 2008 and July 2014. They are obtained from CSMAR's Enforcement Actions Research Database developed by Shenzhen GTA Information Technology Co., Ltd. Out of the 1,607 issuances, 185 EAs (of 150 companies) are filtered using search term "related" or "related party". Although 185 EAs include one or more of the search terms, only 151 observations use the terms in the context of describing a violation event concerning RPT. After excluding 34 EAs with loose connection to the target research question and 28 with insufficient stock data around announcement period, 123 EAs of 118 companies in the treatment sample are available for further analysis (see Table 1).

There are two reasons for the sample of EAs to be collected starting from 2008. First, the New PRC GAAP, effective from 2007, improves the regulation of RPT. Selecting EAs that were released after 2008 makes sure that all the RPTs that are sanctioned under the new standards are included as the major components of the sample. So that the up-to-date feature of RPT violations in China is allowed to be examined.

Second, the 2008 financial crisis led to a declining economy where companies had penchant for using RPT to overcome difficulties and survive, as RPT observed during in the Asian financial crisis of 1997-1998 (Wong and Jian, 2003; Wilson et al., 2013). The RPT was primarily undertaken for solving financial difficulties (e.g. financing and propping). But it was exploited by opportunistic managers or large shareholders to manipulate earnings or divert resources away from their companies. Therefore, growing numbers of RPT are allowed to be witnessed after 2008.

Table 1: Selection of Treatment Firms

This table presents the selection procedures for the sample of treatment firms. Totally 1,607 EAs of firms listed on the SHSE and SZSE from 2000-2013 are identified from CSMAR database. EAs are released from January 2008 to July 2014. The identified RPT is undertaken with the initial time from 2000-2013. The initial public announcement date of EAs is obtained from CSMAR database. There are 185 EAs that mention of any the search terms “related” or “related party”. 34 EAs are excluded from the full set of 185 EAs due to irrelevancy, overlapping and foreign share. 151 EAs of 142 firms are left for further matching. There are also 28 EAs having missing daily stock returns around the announcement date. Thus, 123 EAs of 118 treatment firms are remained in the preliminary treatment sample.

Panel A: Sample selection		
	EAs	Firms
Total EAs searched	185	150
Less irrelevant EAs	-8	-
Total RPT-mention EAs	177	-
Less overlapping EAs	-15	-
Less EAs on the same declaring day	-10	-
Less B share	-1	-
Total EAs	151	142
		(matching base)
Less EAs with insufficient stock returns	-28	24
Total	123	118
Panel B: Distribution of frequency		
	EAs	Firms
Once	113	113
Twice in one year	2	1
Twice in two years	8	4
Total	123	118

The amount of originally searched EAs (185) is reduced to 151 by eliminating 34 EAs as shown in Table 1. Detailed explanations for the exclusion are listed as below.

- There are 8 EAs that are irrelevant and not involving any of the RPT cases in spite of the key word “related”. One example is that Boyun New Materials Co., Ltd. was alleged to commit insider trading since two “related” persons made profit by trading company’s stocks in blackout period.
- There are 15 overlapping EAs filed for actions targeting on the same RPT of a single company. Because they are released by different regulatory institutions including the CSRC, SHSE and SZSE at national level, and various securities regulatory bureaus of provincial capital at regional level. For examples, a public censure was made by SHSE on Yaxing Chemical Co., Ltd. in 2012 for undisclosed material RPT, however, an administrative punishment was issued by the CSRC later in 2013 for the

same violation. In this case, there are two EAs collected but only keeping the EAs released earlier in the sample.

- There are 10 EAs possessing the same declaring date for those companies who have more than one EAs announced in the same day. It happens when some EAs are private warnings sent by regulatory institutions and the company later announces them all to the public in a same day. For example, Dongfang Energy Co., Ltd. received 6 EAs in 2009, 2010, 2011 and 2013 yet did not have them announced until 2013 in a composed file.
- One B-share company is removed from the sample because this study only focuses on A-share (see the introduction on Chinese shares of stock market in section 2.3) company.

4.1.2. Selection of control firms

To study the difference of announcement effect between the sanctioned RPT and the normally disclosed RPT which is compliant with the related trading rules, I adopt the matched-pair methodology, which is to match firms with RPT EAs (treatment firms) to firms with RPT PAs (control firms) based on specified firm characteristics.

The matching approach follows [Barber and Lyon \(1997\)](#), who used comparable listed companies in the same industry with most similar size and book-to-market ratio. Barber and Lyon discussed three different reference benchmarks of identifying a control firm: matching a treatment firm to a control firm with closest size (measured by the market value of a firm), with closest book-to-market ratio, and with both similar size and book-to-market ratio. They argued that filtering on size and then matching on the book-to-market ratio yields test statistics that are well specified in all sampling situations that they analysed. The procedure is described as follows.

Step 1. Identify the pre-event year of treatment firms. Pre-event year is the last clean year before the violation year when the sanctioned RPT was taken place. For example, if a treatment firm's EA is against an undisclosed RPT initiated in 2012, then 2011 is the pre-event year. The pre-event years of treatment firms cover from 1999 to 2012.

- Step 2.** Select all available listed firms in each pre-event year. They shall issue A-share stocks in mainland China and having complete financial data.
- Step 3.** In each year, group all the firms into 90 sub-industries of 19 major industries following the *Guidelines for the Industry Classification of Listed Companies* issued by the SRC in 2012.
- Step 4.** Within the industry match a treatment firm to a control firm with closest firm size²⁰ and book-to-market ratio²¹. Specifically, first identify the firms into a portfolio with a size between 70% and 130% of the size of the treatment firm. Next from the portfolio, choose the one with the book-to-market ratio closest to that of the treatment firm.
- Step 5.** If no firm is distributed into portfolio (70% ~ 130%), a firm with the closest size is selected. If a matched firm coincidentally happens to be a treatment firm, it is replaced with a firm from the same portfolio that has the next closest book-to-market ratio.
- Step 6.** After firm matching is done, select comparable disclosures of RPT of a control firm which are disclosed in an public announcement same as or close to the time when the treatment firm should have disclosed its sanctioned RPT. If a treatment firm's violation time is 2012, an RPT with a close discolour timing in 2012 is selected from the control firm.

An example is followed to illustrate the selection procedure of control firms. Dongfang Energy Co., Ltd. (hereafter referred to as Dongfang Energy) is subject to an EA for the undisclosed related trading taken place in 2012 (hence 2011 is the pre-event year). (1) Extract all the A-share firms in 2011 from CSMAR database with information of industry classification, firm size and book-to-market ratio. (2) Knowing Dongfang Energy is in the electric and heat industry (industry code: D44), select all the firms with code D44 in 2011. (3) Calculate the figures equivalent to 70% and 130% of Dongfang Energy's firm size (RMB 2,485.44 million), which is RMB 1,739.81 million and RMB 3,231.08 million,

²⁰Firm size is defined as the market value of the company which is equivalent to the sum of market value of equity and book value of total liabilities.

²¹Book-to-market ratio is defined as the book value of total assets divided by the firm's market value.

respectively. (4) Within the portfolio of firms with code D44, select firms with firm size between RMB 1,739.81 million and RMB 3,231.08 million. From this set of firms, choose the one with the closest book-to-market ratio to that of Dongfang Energy (0.57). It turns out that Binhai Energy & Development Co., Ltd. has the closest ratio 0.56, entitling it to be the control firm that matches to the treatment firm Dongfang Energy. (5) Finally, select all the comparable RPT disclosures of Binhai Energy & Development Co., Ltd. disclosed in 2012.

With one treatment firm unpaired, 141 control firms with PAs are matched to 141 treatment firms with EAs, one-to-one. However, there are 33 control firms that have no RPT PAs and 13 are with missing stock data, leaving 117 RPT PAs of 95 firms in the sample (see Table 2).

Table 2: Selection of Control Firms

This table presents the selection procedures for the sample of control firms. One treatment firm fails to be matched. 141 firms listed on the SHSE and SZSE from 2000-2013 are matched to 141 treatment firms, one-on-one, based on industry, size and book-to-market ratio. RPT with PAs undertaken by the control firms and the initial PA date of the transaction are obtained from company's online report. 33 firms are excluded with no RPT PAs found. 13 firms lack of stock returns around the announcement date. Thus, 95 control firms with 115 RPT PAs are remained in the preliminary control sample.

Panel A: Sample selection		
	PAs	Firms
Total control firms	-	141
Less firms with no PAs found	-	-33
Control firms with RPT PAs	-	108
Less firms with insufficient stock returns	-	-13
Total	115	95
Panel B: Distribution of frequency		
	PAs	Firms
Once	78	78
Twice in one year	12	6
Twice in two years	16	8
Three times in one year	3	1
Three times in two years	3	1
Three times in three years	3	1
Total	115	95

4.1.3. Final sample

To achieve the purpose of matched-pair design and make two samples are statistically comparable on one-to-one basis, only mutually matched firms are supposed to be included in the final sample. After a second round of filtering, 34 treatment firms are removed as their matched firms are absent from the sample of control firms; 11 control firms are removed as their respective treatment firms have been eliminated due to insufficient stock data. There are still 4 treatment firms that have more than one EAs since they are sanctioned twice in two years. In order to be matched to the 84 PAs of control firms, 4 EAs released in later years are removed from treatment firms. Finally, there are 84 RPT observations of 84 firms in each sample making totally 168 observations in the final pool (see Table 3).

Table 3: Selection of Final Sample

This table presents the selection procedures for the treatment firms and control firms in the final sample. 34 treatment firms are removed as their matched firms are absent from the control sample. 11 control firms are removed as their respective treatment firms have been eliminated due to insufficient stock data. 4 extra RPT EAs of treatment firms are further removed. The final sample comprises 84 treatment firms and 84 control firms.

Panel A: Sample selection		
	Treatment sample	Control sample
Full samples	118	95
Less firms	-34	-11
Final sample	84	84
Panel B: Distribution of frequency		
	Treatment observations	Control observations
Once	80	84
Twice in two years	8	-
less observations	-4	-
Final sample	84	84

Table 4 presents the distribution of firms across industries, and initial years of RPT over time. The distribution is the same for both treatment firm and control firm because control firms matches to the treatment firms based on industry and pre-event year (the year before initial year).

Panel A of Table 4 shows the industry distribution of treatment firms by the CSRC major industry division. Consistent with the pattern in this study, prior research has shown similar industry concentration in manufacturing industry. In the research about identifying RPT's role in fraud cases, 83 SEC's Accounting and Auditing Enforcements in [Henry](#)

Table 4: Distribution of Firms by Industry and Initial Year

This table reports the distribution of RPT by industry (panel A) and by initial fiscal year (panel B) during 2000-2013. The distribution of industry and initial fiscal year is identical for both treatment and control samples of 84 listed firms, respectively. The industry category follows the one-digit CSRC industry classification.

Panel A: Firm industry

Industry	Number	Percentage (%)
Agriculture	3	3.6
Mining	2	2.4
Manufacturing	58	69.0
Power	4	4.8
Construction	1	1.2
Wholesale and Retail	4	4.8
Transportation	3	3.6
Information technology	2	2.4
Real estate	3	3.6
Leasing and Commercial service	1	1.2
Resident and Repair service	1	1.2
Others	2	2.4
Total	84	100.0

Panel B: Initial year of transactions

Year	Number	Percentage (%)
2000	1	1.2
2001	2	2.4
2002	2	2.4
2003	2	2.4
2005	1	1.2
2006	6	7.1
2007	5	6.0
2008	8	9.5
2009	11	13.1
2010	8	9.5
2011	16	19.0
2012	15	17.9
2013	7	8.3
Total	84	100.0

[et al. \(2007\)](#) showed an industry concentration both in manufacturing and business services industry. [Jian and Wong \(2010\)](#) collected more than 5000 Chinese listed firms in the period from 1998 to 2002, in which manufacturing industry accounts for a significant proportion. The sample of [Peng et al. \(2011\)](#) comprised 787 firms listed in China during 1998-2004 and also showed a similar concentration in the manufacturing industry. Overall, the data suggests that the sample of this study is representative and the industry distribution is comparable to the prior research.

Panel B shows the distribution of RPT's initial years over time. Since each transaction's duration is different ranging from several months to many years, only the starting point could be portrayed across transactions. Panel B shows that the number of RPT has risen since 2006 and peaks around 2011-2012.

Table 5 presents the data comparison for the selected financial statement items between treatment and control firms. Financial data are obtained from the last clean financial statement of the company in pre-event year. Since control firms are matched to treatment firms on one-to-one basis, two samples of firms are supposed to share statistically similar financial characteristics. The statistical significance of the differences in these averages was assessed using a two-tailed *t*-test (*p*-values are shown in parentheses). The *p*-values for the mean difference of each item are large implying that there is a low probability of falsely rejecting the true null hypothesis. The null hypothesis is that the mean difference is small between the treatment and control sample. Therefore, good matched pairs are believed to be constructed.

Table 5: Comparison on Financial Profile for Treatment and Control Firms (RMB million)

This table presents the comparison on the descriptive statistics of financial characteristics for 168 firms listed on the SHSE and SZSE during 2000-2013. Financial data are based on the last financial statements prior to the transaction period and are obtained from CSMAR database. Revenue is the total operating revenue which is the sum of all revenue arising from operating business of the company. Total asset is the sum of all asset items. Total shareholders' equity is the sum of all shareholders' equity items. Size is the sum of the market value of equity and the book value of total liabilities. The paired *t*-test is employed to test the differences in mean. One-tailed *p*-values are reported in parentheses. No statistically significant differences for any item between two samples are reported.

	<i>n</i> =84	Mean	Std.Dev	Min.	25 percentile	Median	75 percentile	Max.	Mean difference
Revenues	Treatment sample	2,376	4,957	33	417	1,070	2,235	38,414	-61
	Control sample	2,437	5,257	1	493	813	1,908	30,289	(0.939)
Total Assets	Treatment sample	3,486	5,811	88	959	1,558	2,962	28,953	-14
	Control sample	3,500	6,059	305	884	1,482	2,624	28,725	(0.988)
Total Shareholders' Equity	Treatment sample	1,558	2,548	-698	451	900	1,348	15,851	-229
	Control sample	1,787	2,861	51	524	840	1,553	12,656	(0.585)
Size	Treatment sample	5,629	9,438	467	1,611	2,530	4,962	61,661	296
	Control sample	5,333	9,386	380	1,551	2,542	4,664	50,269	(0.839)

For treatment firms, the revenues, total assets, and stockholders' equity averaged RMB 2,376 million, RMB 3,486 million and RMB 1,558 million. However, these mean values are skewed by some large companies in the sample. Whereas the median values are fairly

comparable to those of prior results. The median values of the revenues, total assets, and stockholders' equity are RMB 1,070 million, RMB 1,558 million and RMB 900 million (around \$128 million, \$186 million and \$108 million). They are comparable to the median values of financial statistics in the 1999-2006 RPT sample of [Henry et al. \(2012\)](#), where the median values of the companies' revenues, total assets, and stockholders' equity are \$100 million, \$84 million and \$41 million, respectively. The median values of [Henry et al. \(2012\)](#) are proportionally smaller since their sample size is 52, approximately two fifths of the sample size of the current study with 84 firms.

4.2. MEASUREMENT OF MARKET REACTION

4.2.1. Event study

In this thesis the event study methodology is employed to test the impact of announcement effect of RPT on the magnitude of abnormal stock performance around announcement period. Event study is a successful empirical technique to date for isolating the price impact of the information content of corporate actions ([Kothari and Warner, 2007](#)). It is a useful tool to assess the extent to which security price performance at the time of an event has been abnormal, that is, the extent to which security returns were different from those which would have been appropriate ([Brown and Warner, 1980](#)). To construct an event study, the *event*, *event time*, *event window*, *estimation window* and *estimation model* should be determined, following the approach proposed by [Brown and Warner \(1980, 1985\)](#).

- The *event* conveys information that potentially influences the security prices. The event defined for this study is the EA announcement issued by the regulatory institutions against an RPT for the treatment firm, and the PAs released by the control firm to enter into an RPT. The former shows a sign that a firm is against the market rule, and the latter indicates the firm is compliant the rule.
- An *event time* is the announcement date expressed as "0". The announcement dates of both RPT EAs and PAs in the sample do not overlap with other substantial events (e.g., earnings announcement at the end of fiscal year) so that the confounding effects are excluded.

- An *event window* is a period over which the security prices of the firms involved in this event will be examined, generally with the days preceding and succeeding the announcement day. In this study three short event windows are used, which are $[0$ through $+1]$, $[-1$ through $+1]$, and $[-5$ through $+5]$.

It has been empirically demonstrated that a short event window usually captures the significant effect of an event (McWilliams and Siegel, 1997). With a short event window, one can be reasonably confident that an abnormal return is ascribed to an event, because it is relatively easy to identify confounding effects. Moreover, due to the concern that there is a leakage of information, some time prior to the announcement of RPT (such as “-1” and “-5” in the event windows) is included to capture abnormal returns associated with the leakage.

- An *estimation window* is a period over which parameters are estimated. Brown and Warner (1985) used a maximum of 250 daily return observations for the period around an event, starting at day -244 and ending at day +5 relative to the event. The first 239 days in this period from the day -244 to the day -6 before the announcement date 0 is designated the “estimation window”. For a security to be included in a sample, it must have at least 30 daily returns in the entire 250 day period, and no missing return data in the last 20 days. Fig. 1 shows the chronology of the event study estimation.
- Three *estimation models* are used to estimate the abnormal return: mean adjusted returns model, risk adjusted returns model and market adjusted model.

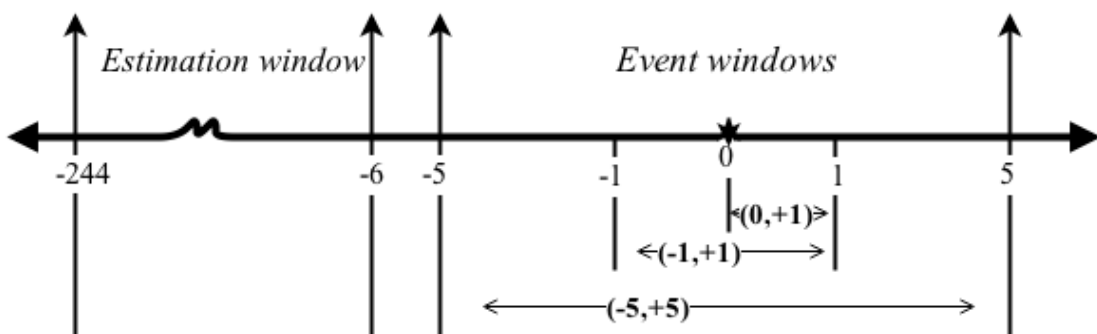


Figure 1: Timeline of Event Study

4.2.2. Abnormal return measures

A security's price performance can only be considered "abnormal" related to a particular benchmark, which arises from the difference between the security's actual *ex post* return and its *ex ante* expected "normal" return. The *ex ante* expected "normal" return is usually predicted under assumed pricing models (e.g., Capital Assets Pricing Model (CAPM)). Abnormal returns are based on three models. Let $R_{i,t}$ designates the observed arithmetic return for security i at date t . Specifically, $R_{i,t}$ represents the daily return with cash dividend reinvested in A-share market in mainland China. Define $AR_{i,T}$ as the abnormal return for security i at date T . t is the day relative to the event time "0", and $-244 \leq t \leq +5$. T only refers to the relative date constrained in the event window, and $-5 \leq T \leq +5$. The estimating procedures are as follows. The event window $[-1,+1]$ is used to illustrate.

Step 1. Choose an estimation model to estimate the daily abnormal return $AR_{i,T}$.

- *Mean Adjusted Returns Model*

$$AR_{i,T} = R_{i,T} - \bar{R}_i, \quad (4.1)$$

where

$$\bar{R}_i = \frac{1}{239} \sum_{t=-244}^{-6} R_{i,t}, \quad (4.2)$$

and where $R_{i,t}$ is the simple average daily returns of security i within the $[-244, -6]$ estimation window. The mean adjusted returns model assumes that the *ex ante* expected return for a given security i is equal to a constant: $E(\tilde{R}_{i,T}) = \bar{R}_i$. Thus the abnormal return $AR_{i,T}$ is given by the difference between the observed return, $R_{i,T}$ and the predicted return, \bar{R}_i .

For $AR_{i,T}$ of a selected security i , there are three ARs for each day included in the event window $[-1,+1]$,

$$\begin{aligned} AR_{i,-1} &= R_{i,-1} - \bar{R}_i \\ AR_{i,0} &= R_{i,0} - \bar{R}_i \\ AR_{i,1} &= R_{i,1} - \bar{R}_i. \end{aligned} \quad (4.3)$$

- *Risk Adjusted Returns Model*

$$AR_{i,T} = R_{i,T} - \hat{a}_i - \hat{\beta}_i R_{m,T}, \quad (4.4)$$

where \hat{a}_i and $\hat{\beta}_i$ are the OLS estimates of the intercept and slope, respectively, of the market model regression from the estimation window. This model takes risk factors into account and presumes that the *ex ante* expected returns are generated by the CAPM model developed by Black (1972): $E(\tilde{R}_{i,T}) = \hat{a}_i + \hat{\beta}_i R_{m,T}$, where $R_{m,T}$ is the return on the market portfolio. This study uses the equally weighted daily aggregated market return from CSAMR as the proxy for $R_{m,t}$ at day t .

Software STATA (Stata Statistical Software: STATA Corp., College Station, TX) is used to produce \hat{a}_i and $\hat{\beta}_i$ by regressing $R_{i,t}$ on $R_{m,t}$ for $-244 \leq t \leq -6$. For example,

$$\begin{aligned} AR_{i,-1} &= R_{i,-1} - \hat{a}_i - \hat{\beta}_i R_{m,-1} \\ AR_{i,0} &= R_{i,0} - \hat{a}_i - \hat{\beta}_i R_{m,0} \\ AR_{i,1} &= R_{i,1} - \hat{a}_i - \hat{\beta}_i R_{m,1}. \end{aligned} \quad (4.5)$$

- *Market Adjusted Returns Model*

$$AR_{i,T} = R_{i,T} - R_{m,T}, \quad (4.6)$$

where $R_{m,T}$ is the same market index as that of equation 4.4. This model can be viewed as a restricted market model with $\hat{a}_i = 0$ and $\hat{\beta}_i = 1$ for each security (MacKinlay, 1997). Since the market portfolio is a linear combination of all securities in the market, it follows that for security i , $E(\tilde{R}_{i,t}) = E(\tilde{R}_{m,t}) = R_{m,t}$. The estimation window is not necessary for this model since the parameters are predefined. Thus the *ex post* abnormal return on any security i is equal to the difference

between its return, $R_{i,t}$ and that on the market portfolio, $R_{m,t}$. For example,

$$\begin{aligned} AR_{i,-1} &= R_{i,-1} - R_{m,-1} \\ AR_{i,0} &= R_{i,0} - R_{m,0} \\ AR_{i,1} &= R_{i,1} - R_{m,1}. \end{aligned} \tag{4.7}$$

Step 2. Calculate CAR.

CARs for security i over an event window of days T_1 through T_2 are:

$$CAR_{i,(T_1,T_2)} = \sum_{T=T_1}^{T_2} AR_{i,T}. \tag{4.8}$$

Accordingly, CARs of security i over the event window $[-1,+1]$ are calculated as follows.

$$\begin{aligned} CAR_{i,(-1,1)} &= AR_{i,-1} + AR_{i,0} + AR_{i,1} \\ \text{Average } CAR_{i,(-1,1)} &= \frac{1}{3} \sum_{T=-1}^1 AR_{i,T}. \end{aligned} \tag{4.9}$$

4.3. UNIVARIATE TESTS

The main motivation of this study is to address the research questions reflected in the hypotheses H_{1a} , H_{1b} , H_{2a} and H_{2b} . It is of primary interest to investigate the abnormal returns of firms with RPT EAs compared those of firms with RPT PAs. Particular attention is put on the treatment sample (firms with RPT EAs) as to find whether CAR variations are dependent on the inclusion of rectification actions, or on the engagement of non-operating RPT.

The first univariate test is conducted on CARs of both treatment firms and control firms. The mean difference is run using two-sample t -test. CARs results provided by the three estimation models for three event windows are all included in the univariate test.

The second univariate test analyzes CARs of 37 treatment firms with rectification actions. The value and significance are compared with CARs of the rest of treatment firms which

did not announce rectification measures.

The third univariate test is also conducted for treatment firms. It aims to compare the CARs of 32 treatment firms undertaking non-operating RPT to those of the treatment firms undertaking other types of RPT.

It is expected that there are negative CARs for treatment firms (H_{1a}), and positive CARs for control firms (H_{1b}). The CARs of treatment firms that have announced rectification actions are less negative (H_{2a}). The CARs of treatment firms undertaking non-operating RPT are more negative (H_{2b}).

4.4. MULTIVARIATE TESTS

Driven by the previous discussions, it is hypothesized that CARs can be characterized as a joint function of announcement types, transaction types, corporate governance, and control variables. Accordingly, based on the hypotheses to be examined, the following general function is presented:

$$\text{CAR} = f(\text{announcement types} + \text{transaction types} + \text{corporate governance} + \text{control variables}) + \text{error} \quad (4.10)$$

Regression models are built to get statistical inferences of correlations on announcement types and transaction types. The presence of features of corporate governance is also seen as possible explanations for the announcement effect of RPT measured by the magnitude of abnormal returns.

4.4.1. Research variables

Dependent variables [Brown and Warner \(1985\)](#) in their study used simulation methods with actual data to address how OLS market model (also risk adjusted returns model in current study) copes with a variety of issues arising from the particular characteristics of daily stock returns. The OLS market model prevails under several circumstances, including non-normality of returns and excess returns, bias parameters in the presence of non-synchronous trading, autocorrelation in daily excess returns and event-date cluster-

ing. They highly appreciated the OLS model that “there is no evidence that procedures other than OLS improve either the specification or the power of the tests.”

MacKinlay (1997) also pointed out that the risk adjusted returns model is more precise than other statistical models in calculating the abnormal return of a given security. Therefore CARs which are estimated by the risk adjusted returns model for three different event windows are used as dependent variables.

Announcement type According to the discussion in section 3.3.1, dummy variable *Rectification* is used to proxy treatment firms with rectification measures embedded in the EA announcements. It is predicted that the coefficient on *Rectification* is positive.

Transaction type In this study an RPT is classified into one of four below categories on a case by case basis. Individual transaction is identified as either (1) operating, or (2) non-operating activity. (3) Transactions who are described generally with regulatory rules or whose nature cannot be traced are marked with “General” tag. (4) Transactions of a company that comprise more than one type from the first three categories are tagged with “Combine”. *NOP* is a dummy variable equal to 1 if a treatment firm’s RPT is the non-operating activity. *OP* is a dummy variable equal to 1 if a firm’s RPT is the operating activity. Same arrangements go for *Combine* and *General*. Higher negative correlation is predicted between CARs and non-operating RPT.

Corporate governance and ownership variables To test H_{2c} , two explanatory variables are considered representing the corporate governance: the CEO/chairman duality (unitary leadership) and the board size. A board that has a CEO who is also the chairman is viewed as less independent and as a weaker monitor (Yermack, 1996; Brown and Caylor, 2006; Henry et al., 2012). Smaller boards are believed to be more effective for decision-making because having fewer people enhances the group’s collection, sharing and processing of information (Lipton and Lorsch, 1992; Jensen, 1993; Kohlbeck and Mayhew, 2004). Whereas larger board size is also viewed as a positive sign for increased auditing independence, low cost of debt financing and better performance in China (Klein, 2002; Anderson et al., 2004; Adams and Mehran, 2005; Brown and Caylor, 2006; Chen, 2014).

The era of planned economy brought China many SOEs that are under tight control by the government. Even though reforms have been carried out to transfer from state ownership to shareholding system the state still, directly or indirectly holds various level of control over certain enterprises (especially sensitive industries, or politically motivated enterprises) through central government, local government or a central holding company known as SASAC (Clarke, 2003; Lin and Milhaupt, 2013). Zheng et al. (1998), Xu and Wang (1997), and Bai et al. (2004) all investigated the impact of the state ownership on enterprise performance. Based on the samples in China during 1986–1990, Zheng et al. (1998) found that SOEs are less efficient than other ownership categories in terms of technical efficiency, which is measured as the ratio of observed output to output on the production frontier. Xu and Wang (1997) argued that the state ownership is inefficient and weakens the labor productivity. Bai et al. (2004) showed that state-controlled firms tend to have lower valuation. Thus as a dummy variable indicating whether the company's ultimate controller is traced to the government, the ownership variable is predicted to be negatively correlated with CARs.

It is predicted that the CARs be negative when the company's ultimate controller is government (*State*) and the same person holds the position of chairman of the board and chief executive (*Dual*). Since there are mixed views on the issue of board size and whether the effect of board size on RPT is positive or negative has not be quite clear, the association between boards size (*B_Size*) and the CARs remains unpredicted.

Control variables Return on assets (*ROA*) and the debt-to-equity ratio (*Leverage*) are included in the regression model to control for firm performance. ROA indicates the profitability of the firm before the transaction takes place. The leverage proxies for the riskiness of debt or default risk (Dhaliwal et al., 1991). The higher the leverage, the higher the default risk the firm has, and the lower the investors confidence might be.

The book-to-market ratio (*BM*) and firm size (*Size*) are also incorporated in the model as control variables. Fama and French (1992) suggested that firm size, either proxied by natural logarithm of book value of assets or market value of equity, offer a simple and

powerful characterization of the cross-section of average stock returns, so does the book-to-market ratio. Collins and Kothari (1989) implied that growth opportunities, which can be measured by the market-to-book ratio, are likely to be positively associated with future earnings levels and earnings persistence. Hence the higher the book-to-market ratio, the lower the expected earnings growth and earnings persistence. In addition, book-to-market ratio may also reflect the firm risk, which weakens the earnings-return association. The year and industry fixed-effects are also controlled. There is no expectation on the signs of control variables.

4.4.2. Descriptive summary

Summary statistics for the independent variables are provided in Table 6. Control firms have slightly higher ROA than that of treatment firms, and have smaller leverage ratio, both indicating that the treatment firms' performance are lower. Nevertheless firms of two samples are shown to have quite similar characteristics in terms of board size with 9 members on average. Treatment firms are associated with a big portion of operating RPT (45% versus 26%), and control firms engage in more non-operating transactions (67% versus 38%). CEO/chairman duality is much higher in treatment firms than in control firms (29% versus 17%). Corporate ownership does not differ significantly between treatment firms and control firms. Within the treatment sample, those which have announced rectification actions account for 44%.

Table 6: Descriptive Statistics

This table presents the descriptive statistics of independent variables for the total sample and subsamples of firms listed on the SHSE and SZSE during 2000-2013. Data of continuous variables are based on the last financial statements prior to the transaction period and are obtained from CSMAR database. *B_Size* is the number of board members. *Size* is the natural logarithm of the sum of market value of equity and book value of total liabilities. *BM* is book-to-market ratio. *ROA* is the ratio of EBIT to total assets. *Leverage* is debt-to-equity ratio. *OP* is a dummy variable indicating that the firm has undertaken an operating transaction. *NOP* is a dummy variable indicating that the firm has undertaken a non-operating transaction. *Combine* is a dummy variable indicating that the firm has undertaken transactions with more than one type. *Dual* is a dummy variable indicating that the same person holds the positions of CEO and chairman of the board. *State* is a dummy variable indicating that the company's ultimate controller is government. *Rectification* is a dummy variable indicating the inclusion of rectification actions in an EA announcement.

Variable	Total sample (n=168)		Treatment sample (n=84)		Control sample (n=84)	
	Mean	Median	Mean	Median	Mean	Median
Continuous variables						
<i>B_Size</i>	9.113	9.000	9.083	9.000	9.143	9.000
<i>Size</i>	21.822	21.656	21.855	21.651	21.789	21.656
<i>BM</i>	0.652	0.653	0.642	0.664	0.662	0.641
<i>ROA</i>	0.036	0.046	0.030	0.046	0.042	0.050
<i>Leverage</i>	1.170	0.858	1.225	0.928	1.116	0.813
Discrete variables						
	Yes	No	Yes	No	Yes	No
<i>OP</i>	60 (35.71%)	108 (64.29%)	38 (45.24%)	46 (54.76%)	22 (26.19%)	62 (73.81%)
<i>NOP</i>	88 (52.38%)	80 (47.62%)	32 (38.10%)	52 (61.90%)	56 (66.67%)	28 (33.33%)
<i>Combine</i>	6 (7.14%)	162 (92.86%)	6 (7.14%)	78 (92.86%)	0 (0.00%)	84 (100.00%)
<i>Dual</i>	38 (22.62%)	130 (77.38%)	24 (28.57%)	60 (71.43%)	14 (16.67%)	70 (83.33%)
<i>State</i>	82 (48.81%)	86 (51.19%)	40 (47.62%)	44 (52.38%)	42 (50.00%)	42 (50.00%)
<i>Rectification</i>			37 (44.05%)	47 (55.95%)		

Table 7: Correlation Matrix for Independent Variables (sample size $n=168$)

This table presents the Pearson correlation matrix of independent variables for the total sample of 168 firms listed on the SHSE and SZSE during 2000-2013. *Treatment* is a dummy variable indicating that the firm belongs to the treatment sample (firm with RPT EAs). *OP* is a dummy variable indicating that the firm has undertaken an operating transaction. *NOP* is a dummy variable indicating that the firm has undertaken a non-operating transaction. *Combine* is a dummy variable indicating that the firm has undertaken transactions with more than one type. *Dual* is a dummy variable indicating that the same person holds the positions of CEO and chairman of the board. *State* is a dummy variable indicating that the company's ultimate controller is government. *B_Size* is the number of board members. *Size* is the natural logarithm of the sum of market value of equity and book value of total liabilities. *BM* is book-to-market ratio. *ROA* is the ratio of EBIT to total assets. *Leverage* is debt-to-equity ratio. *Rectification* is a dummy variable indicating the inclusion of rectification actions in an EA announcement. ***, ** and * denote statistical significance at the 1%, 5%, and 10% level, respectively.

	1	2	3	4	5	6	7	8	9	10	11
(1) <i>Treatment</i>	1.000										
(2) <i>OP</i>	0.199***	1.000									
(3) <i>NOP</i>	-0.286***	-0.782***	1.000								
(4) <i>Combine</i>	0.192**	-0.143*	-0.202***	1.000							
(5) <i>Dual</i>	0.142**	-0.017	0.088	-0.104	1.000						
(6) <i>State</i>	-0.024	0.018	0.049	0.069	-0.186**	1.000					
(7) <i>B_Size</i>	-0.018	-0.067	0.029	0.085	-0.168**	0.246***	1.000				
(8) <i>Size</i>	0.035	-0.052	0.054	-0.106	-0.089	0.106	0.257***	1.000			
(9) <i>BM</i>	-0.043	0.016	-0.042	0.156**	0.048	0.255***	0.160**	-0.080	1.000		
(10) <i>ROA</i>	-0.073	-0.109	0.096	-0.053	0.045	-0.068	0.127*	0.225***	-0.046	1.000	
(11) <i>Leverage</i>	0.023	-0.085	0.060	0.143*	0.072	0.010	-0.036	0.050	0.157**	-0.198***	1.000

Table 7 reports the correlations between all the independent variables for the total sample. The dummy variables representing transaction types are significantly correlated to the treatment firms. *Dual* is positively correlated with treatment firms as expected. It is interesting to notice that there is a significant positive correlation between board size (*B_Size*) and control variables (*Size*, *BM*, *ROA*). This implies that the number of board member relates to the firm performance but does not suggest any causal relation.

4.4.3. Empirical models

As explained in the prior paragraphs, the effects of selected determinants on the CARs of a firm in the sample can be estimated by the following regression models:

$$\begin{aligned}
 CAR_i = & \beta_0 + \delta_0 Rectification_i \\
 & + \beta_1 Size_i + \beta_2 BM_i + \beta_3 ROA_i + \beta_4 Leverage_i \\
 & + YearFixedeffects + IndustryFixedeffects + \varepsilon_i
 \end{aligned} \tag{4.11}$$

$$\begin{aligned}
 CAR_i = & \beta_0 + \delta_0 Treatment_i + \delta_1 OP_i + \delta_2 NOP_i + \delta_3 Combine_i \\
 & + \delta_4 OP_i \times Treatment + \delta_5 NOP_i \times Treatment + \delta_6 Combine_i \times Treatment \\
 & + \beta_1 ROA_i + \beta_2 Leverage_i \\
 & + YearFixedeffects + IndustryFixedeffects + \varepsilon_i
 \end{aligned} \tag{4.12}$$

$$\begin{aligned}
 CAR_i = & \beta_0 + \delta_0 Treatment_i + \delta_1 Dual_i + \delta_2 State_i + \beta_1 B_Size_i \\
 & + \delta_3 Dual_i \times Treatment + \delta_4 State_i \times Treatment + \delta_5 B_Size_i \times Treatment \\
 & + \beta_2 ROA_i + \beta_3 Leverage_i \\
 & + YearFixedeffects + IndustryFixedeffects + \varepsilon_i
 \end{aligned} \tag{4.13}$$

$$\begin{aligned}
 CAR_i = & \beta_0 + \delta_0 Treatment_i + \delta_1 OP_i + \delta_2 NOP_i + \delta_3 Combine_i \\
 & + \delta_4 Dual_i + \delta_5 State_i + \beta_1 B_Size_i \\
 & + \delta_6 OP_i \times Treatment + \delta_7 NOP_i \times Treatment + \delta_8 Combine_i \times Treatment \\
 & + \delta_9 Dual_i \times Treatment + \delta_{10} State_i \times Treatment + \delta_{11} B_Size_i \times Treatment \\
 & + \beta_2 ROA_i + \beta_3 Leverage_i \\
 & + YearFixedeffects + IndustryFixedeffects + \varepsilon_i
 \end{aligned} \tag{4.14}$$

where:

- Treatment* = a dummy variable equal to 1 if the firm is a treatment firm (firm with RPT EAs), 0 otherwise;
- OP* = a dummy variable equal to 1 if a firm's RPT is the operating activity, 0 otherwise;
- NOP* = a dummy variable equal to 1 if a firm's RPT is the non-operating activity, 0 otherwise;
- Combine* = a dummy variable equal to 1 if a firm's RPT comprises more than one type transactions (operating, non-operating or general), 0 otherwise;

Rectification = a dummy variable equal to 1 if the RPT is announced with rectification actions, 0 otherwise;
Dual = a dummy variable equal to 1 if the chairman is also an executive of the company, 0 otherwise;
State = a dummy variable equal to 1 if the company's ultimate controller is government, 0 otherwise;
B_Size = the number of board members;
Size = natural logarithm of the sum of market value of equity and book value of total liabilities;
BM = the book-to-market ratio;
ROA = the ratio of EBIT to total assets;
Leverage = the debt-to-equity ratio.

Model 1 (equation 4.11) aims to detect how announcement types influence the CARs based on the observed types of announcements among the treatment firms. [Chen et al. \(2005\)](#) mentioned that punishment for firms which violate information disclosure regulations includes correcting the situation, internal criticism, public criticism in newspapers and on websites, etc. The “correcting the situation” part refers to certain corrective actions (rectification actions) such as replacing the auditor and the CEO in the personnel level, or amending firm-level rules. It is expected that $\delta_0 > 0$.

Since variables *Size* and *BM* are the criteria of the matched-pair design, they are similar for a treatment firm with its corresponding control firm. Therefore, they might not be good controllers in the total sample and only used exclusively in Model 1. Hence Model 1 is only run on the treatment sample (sample size $n=84$). The remaining three models are all run on the total sample (sample size $n=168$).

Model 2 (equation 4.12) compares the difference of CARs incurred by the different types of transactions of treatment firms to that of control firms by adding interaction terms. It is expected that $\delta_5 < \delta_4 < 0$.

Model 3 (equation 4.13) aims to capture the potential effect of the presence of certain corporate governance features on the CARs. The interactions terms also examine the

marginal difference incurred by the treatment firms. The choice of corporate governance variables is affected by the previous studies on RPT (Gordon et al., 2006; Lei and Song, 2011; Henry et al., 2012). It is predicted that both coefficients of $Dual \times Treatment$ and $State \times Treatment$ are negative: $\delta_3 < 0$, $\delta_4 < 0$. No prediction is made for the coefficient on $B_Size \times Treatment$.

Including all the independent variables and interaction terms, Model 4 (equation 4.14) intends to test whether the captured effects from the former models will change in the full equation.

This chapter discusses the sample collection and research design. The event study methodology constructs the theoretical foundation. Three specific estimation models are presented and illustrated to show how CARs for a security are calculated. Univariate analysis is illustrated to test the main hypotheses of the study, followed by the multivariate models. Next chapter reports the tests results.

5. RESULTS

5.1. UNIVARIATE RESULTS

5.1.1. CARs comparison for treatment and control firms

If a company is sanctioned for RPT that has been undertaken against the accounting standards or information disclosure framework, it is expected that the market will react negatively to reflect the loss of value related to expropriating activities. Likewise if a company abides by the regulatory rules and discloses the RPT in PAs that has been scrutinized and approved by regulatory institutions, the investors are assumed to show a positive expectation that the disclosed RPT will have a favorable effect on company's development.

Table 8 displays the average CARs relative to the announcement date for treatment firms and control firms in three different window lengths $[0,+1]$, $[-1,+1]$ and $[-5,+5]$, respectively. Three methods are employed to compute CARs: mean adjusted returns model (Panel A), risk adjusted returns model (Panel B) and market adjusted returns model (Panel C). Parameters in the former two models are estimated with 239 daily stock returns from the day -244 to the day -6 before the announcement date. The interpretation focuses on risk adjusted abnormal returns in order to highlight the priority and save space. Results based on the alternative approaches are qualitatively similar.

The finding is in line with the hypothesis H_{1a} and H_{1b} . Treatment firms with EAs earn significantly negative abnormal returns in nearly all the windows while the control firms earn significantly positively abnormal returns in all the windows. The p -values also indicate the existence of significant difference in CARs between two samples. Specifically, CARs for the treatment sample have the most significance over the shortest period in $[0,+1]$ window (-1% , $p=0.004$). Their significance decrease as the window lengths extend. This is similar to the tendency detected by [Lei and Song \(2011\)](#) in which the CARs of CT with disclosure exemptions are more negative and significant in event window $[0,+1]$ than those in $[-5,+5]$. It implies that the market responses rather rapidly to the negative news.

CARs of control sample, by contrast, are very significant in all three event window. It

Table 8: Average CARs around Announcement Date for Treatment and Control Firms

This table reports the CARs in three event windows for 84 treatment firms and control firms listed on the SHSE and SZSE during 2000-2013. CAR denotes the cumulative abnormal return. CARs are computed using three models presented in three panels. Models are estimated by using 250 trading days of return data ending 6 days before the announcement date. AD denotes the initial announcement date. The two-sample t -test is employed to test the differences in mean. One-tailed p -values are reported in parentheses. ***, ** and * denote statistical significance at the 1%, 5%, and 10% level, respectively.

Event windows	Treatment sample ($n=84$)	Control sample ($n=84$)	Difference
Panel A: Mean Adjusted Returns Model			
[AD, AD+1]	-0.011*** (0.007)	0.011** (0.027)	0.021*** (0.0003)
[AD-1, AD+1]	-0.012** (0.022)	0.018*** (0.006)	0.030*** (0.0002)
[AD-5, AD+5]	-0.011 (0.264)	0.037*** (0.001)	0.048*** (0.0006)
Panel B: Risk Adjusted Returns Model			
[AD, AD+1]	-0.010*** (0.004)	0.010*** (0.010)	0.020*** (0.0001)
[AD-1, AD+1]	-0.011*** (0.010)	0.017*** (0.000)	0.027*** (0.0000)
[AD-5, AD+5]	-0.012* (0.095)	0.032*** (0.000)	0.046*** (0.0000)
Panel C: Market Adjusted Returns Model			
[AD, AD+1]	-0.009*** (0.006)	0.010*** (0.009)	0.019*** (0.0001)
[AD-1, AD+1]	-0.010** (0.011)	0.017*** (0.001)	0.027*** (0.0000)
[AD-5, AD+5]	-0.012* (0.071)	0.027*** (0.001)	0.039*** (0.0001)

become strongest over the longer period [-5,+5] (3.2%, $p=0.000$). The long-lasting positive response might be due to the strict disclosure requirement and the profound effect of the large numbers of strategic transactions.

5.1.2. CARs comparison for treatment firms on announcement types

The relationship between CARs and rectification actions is important in addressing what specific factors affect the market reaction to RPT EAs. Very few direct evidence is available for the discussion related to rectification or corrective actions. Only [Feroz et al. \(1991\)](#) has provided indirect evidence that the sanctioned companies' rectification actions are helpful to weaken the negative market reaction. Therefore, it should be borne in mind that it is unlikely that a package of rectification actions turns CARs from negative to be positive overnight. What rectification actions play a part here is to gradually reduce the

stock shock.

Table 9 reports the univariate results for treatment firms who announce rectification actions and who have not. There are 37 treatment firms whose RPT EAs include a rectification announcement, and 47 treatment firms whose EAs did not include the implementation measures. For CARs calculated by the mean adjusted returns model, though not significant, a trend of positive excess returns are demonstrated for firms with rectification announcement, approximately ranging from 0.0% to 1.2%. For firms without rectification announcement, CARs keep significantly negative around -2%.

Table 9: CAR Comparison for Treatment Firms With and Without Rectification Announcement

This table reports the CARs for 37 firms announcing rectification actions versus 47 firms not announcing rectification actions in EAs. There are 84 treatment firms listed on the SHSE and SZSE during 2000-2013. CAR denotes the cumulative abnormal return. CARs are computed using three models presented in three panels. Models are estimated by using 250 trading days of return data ending 6 days before the announcement date. AD denotes the initial announcement date. The two-sample *t*-test is employed to test the differences in mean. One-tailed *p*-values are reported in parentheses. ***, ** and * denote statistical significance at the 1%, 5%, and 10% level, respectively.

Event windows	<i>Rectification</i> (<i>n</i> =37)	<i>Without Rectification</i> (<i>n</i> =47)	Difference
Panel A: Mean Adjusted Returns Model			
[AD, AD+1]	0.000 (0.920)	-0.019*** (0.001)	0.020*** (0.005)
[AD-1, AD+1]	0.001 (0.889)	-0.021*** (0.005)	0.022** (0.013)
[AD-5, AD+5]	0.012 (0.319)	-0.030** (0.043)	0.042** (0.017)
Panel B: Risk Adjusted Returns Model			
[AD, AD+1]	-0.002 (0.677)	-0.016*** (0.002)	0.015** (0.015)
[AD-1, AD+1]	-0.002 (0.764)	-0.018*** (0.004)	0.016** (0.024)
[AD-5, AD+5]	-0.001 (0.916)	-0.021** (0.027)	0.020* (0.090)
Panel C: Market Adjusted Returns Model			
[AD, AD+1]	-0.002 (0.671)	-0.014*** (0.002)	0.013** (0.022)
[AD-1, AD+1]	-0.002 (0.719)	-0.016*** (0.004)	0.014** (0.031)
[AD-5, AD+5]	-0.002 (0.846)	-0.021** (0.028)	0.019* (0.087)

CARs that are calculated by the rest of models are all negative but insignificant for firms with rectification announcement. The negative average CARs are quite small and close

to zero. CARs of firms without rectification announcement are all negative and significant.

The differences in mean CARs between two groups are significant indicating that rectification actions do incur a change of abnormal returns. Therefore, the findings conform to the H_{2a} that market would react less negatively to the announcement of RPT EAs with rectification actions than EAs without rectification.

5.1.3. CARs comparison for treatment firms on transaction types

The relationship between CARs and RPT types is another important research problem to be addressed concerning the influential factors. In contrast to previous classification methods of RPT (Kohlbeck and Mayhew, 2004; Cheung et al., 2006; Henry et al., 2007; Lei and Song, 2011), this study focuses on RPT that is not used for the prosperity of company's main business operations.

Table 10 reports CARs for firms undertaking non-operating transactions versus firms undertaking other types of RPT. Nearly all CARs calculated by three models in three event windows show significantly negative values for treatment firms that undertake non-operating transactions. The CARs approximately range from -1.4% to -2.8%. The longer the window length, the more CARs become negative. In contrast, firms with other types of RPT show CARs that are less negative and less significant. The differences between two groups are mostly significant at 10% level.

There are 32 firms undertaking non-operating RPT which are fewer than the amount of rest of firms ($n=52$). However, smaller sample still yields significant results, indicating the confirmation of H_{2b} that market would react more negatively to non-operating RPT than to other types of RPT.

Overall, the univariate results meet the expectations of H_{1a} , H_{1b} , H_{2a} and H_{2b} . Market reacts negatively to firms with RPT EAs, contrary to the firms with RPT PAs. Moreover, investors react less negatively to EA announcements with rectification actions, whereas more negatively to non-operating RPT with EAs.

Table 10: CAR Comparison for Treatment Firms With and Without Non-operating RPT

This table reports the CARs for 32 firms undertaking non-operating transactions versus 52 firms undertaking other types of RPT. There are 84 treatment firms listed on the SHSE and SZSE during 2000-2013. CAR denotes the cumulative abnormal return. CARs are computed using three models presented in three panels. Models are estimated by using 250 trading days of return data ending 6 days before the announcement date. AD denotes the initial announcement date. The two-sample *t*-test is employed to test the differences in mean. One-tailed *p*-values are reported in parentheses. ***, ** and * denote statistical significance at the 1%, 5%, and 10% level, respectively.

Event windows	<i>NOP</i> (<i>n</i> =32)	Other types (<i>n</i> =52)	Difference
Panel A: Mean Adjusted Returns Model			
[AD, AD+1]	-0.017*** (0.010)	-0.006 (0.189)	-0.011* (0.087)
[AD-1, AD+1]	-0.021** (0.031)	-0.006 (0.293)	-0.015* (0.071)
[AD-5, AD+5]	-0.028 (0.123)	-0.001 (0.955)	-0.027* (0.089)
Panel B: Risk Adjusted Returns Model			
[AD, AD+1]	-0.016*** (0.002)	-0.006 (0.171)	-0.009* (0.094)
[AD-1, AD+1]	-0.019*** (0.004)	-0.006 (0.281)	-0.013* (0.066)
[AD-5, AD+5]	-0.025** (0.022)	-0.004 (0.653)	-0.021* (0.085)
Panel C: Market Adjusted Returns Model			
[AD, AD+1]	-0.014*** (0.001)	-0.006 (0.171)	-0.007 (0.139)
[AD-1, AD+1]	-0.016*** (0.002)	-0.006 (0.281)	-0.010* (0.091)
[AD-5, AD+5]	-0.021** (0.036)	-0.004 (0.653)	-0.017 (0.128)

5.2. MULTIVARIATE RESULTS

Model 1 Table 11 presents the results of the regression Model 1 (equation 4.11) where the CARs are positively influenced by the inclusion of the rectification action in the EA announcement. The announcement of EAs can be released either by the CSRC, stock exchange, financial press or the company itself (Chen et al., 2005). When some companies make the first disclosure of EA, they tend to propose the improvement measures that have been done or yet to be done to rectify the violations. The rectification is expected to increase the CARs. The regression is performed on the treatment sample.

As expected, the coefficient on *Rectification* is positive and significant in both [0,+1] (0.015, $p=0.053$) and [-1,+1] (0.018, $p=0.081$). This suggests that when a company announces the rectification actions along with EAs, CARs will increase significantly by 1.5%

Table 11: Regression of CARs on Announcement Types (sample size $n=84$)

This table reports the regression results of CARs in three event windows on the announcement type for treatment sample estimated by Model 1 (equation 4.11). There are 84 treatment firms listed on the SHSE and SZSE during 2000-2013. CAR denotes the cumulative abnormal return. CARs are computed using risk adjusted returns model. *Rectification* is a dummy variable indicating the inclusion of rectification actions in an EA announcement. *Size* is the natural logarithm of the sum of market value of equity and book value of total liabilities. *BM* is book-to-market ratio. *ROA* is the ratio of EBIT to total assets. *Leverage* is debt-to-equity ratio. *p*-values are reported in parentheses. ***, ** and * denote statistical significance at the 1%, 5%, and 10% level, respectively.

	Predicted sign	CAR [0,+1]	CAR [-1,+1]	CAR [-5,+5]
<i>Rectification</i>	+	0.015* (0.053)	0.018* (0.081)	0.020 (0.184)
<i>Size</i>	?	0.005 (0.198)	0.003 (0.619)	0.008 (0.266)
<i>BM</i>	?	0.032 (0.127)	0.030 (0.253)	0.025 (0.415)
<i>ROA</i>	?	-0.033 (0.427)	-0.099*** (0.007)	-0.104* (0.054)
<i>Leverage</i>	?	-0.001 (0.388)	-0.001 (0.375)	-0.003 (0.111)
Constant		-0.118 (0.187)	-0.084 (0.510)	-0.257 (0.124)
Year Fixed effects		Yes	Yes	Yes
Industry Fixed effects		Yes	Yes	Yes
Adjusted R^2		0.046	-0.101	0.294
Robust F		10.900	1.910	171.960

to 1.8% within a short time. They become larger but less significant in [-5,+5]. Although the coefficient on *Rectification* is not as significant as those in the other two windows when the model has CAR [-5,+5] to be the dependent variable, the model does demonstrate a good explanatory power with the value of the adjusted R square (0.294) and a rather large *F*-statistic (171) in [-5,+5]. The positive coefficient on *Rectification* does not conflict with the negative CARs in univariate tests, since CARs are the joint contribution of both *Rectification* and other independent variables.

The significantly negative coefficient on *ROA* suggests that when the market learns that the company is in sound financial condition priori to the RPT is undertaken, its reaction toward the announcement decreases strongly since investors perceive the controlling shareholder' motive as for tunneling (Peng et al., 2011). The negative effect of *Leverage* on CARs is not significant and very weak. It may be the case that the investors put less intention on the debt structure or the variable is overwhelmed by other variables.

Model 2 The regression results of the CARs on the transaction types are estimated by Model 2 (equation 4.12) and are displayed in Table 12. This regression is performed to examine whether investors differentiate the non-operating transactions from other types of transactions facing that the companies are imposed by EAs. It is able to estimate the correlation between CARs and different transaction types for control firms when $Treatment=0$. By adding two interaction terms $OP \times Treatment$ and $NOP \times Treatment$, it is also able to estimate the marginal difference of CARs incurred by the treatment firms over control firms ($Treatment=1$). The interaction variable $Combine \times Treatment$ is omitted to avoid multicollinearity. It is also omitted in Model 4.

Table 12: Regression of CARs on Transaction Types (sample size $n=168$)

This table reports the regression results of CARs in three event windows on the transaction types for the total sample estimated by Model 2 (equation 4.12). Total sample contains 168 firms (84 treatment firms and 84 control firms) listed on the SHSE and SZSE during 2000-2013. CAR denotes the cumulative abnormal return. CARs are computed using risk adjusted returns model. *Treatment* is a dummy variable indicating that the firm belongs to the treatment sample (firm with RPT EAs). *OP* is a dummy variable indicating that the firm has undertaken an operating transaction. *NOP* is a dummy variable indicating that the firm has undertaken a non-operating transaction. *Combine* is a dummy variable indicating that the firm has undertaken transactions with more than one type. *ROA* is the ratio of EBIT to total assets. *Leverage* is debt-to-equity ratio. *p*-values are reported in parentheses. ***, ** and * denote statistical significance at the 1%, 5%, and 10% level, respectively.

	Predicted sign	CAR [0,+1]	CAR [-1,+1]	CAR [-5,+5]
<i>Treatment</i>	–	-0.004 (0.786)	-0.005 (0.795)	0.001 (0.960)
<i>OP</i>	?	0.017 (0.199)	0.019 (0.263)	0.025 (0.415)
<i>NOP</i>	?	0.011 (0.388)	0.021 (0.261)	0.015 (0.533)
<i>Combine</i>	?	0.017 (0.481)	0.026 (0.378)	0.019 (0.561)
$OP \times Treatment$	–	-0.016 (0.323)	-0.015 (0.476)	-0.047 (0.203)
$NOP \times Treatment$	–	-0.022 (0.202)	-0.032 (0.177)	-0.058* (0.090)
<i>ROA</i>	?	-0.000 (0.995)	-0.060* (0.065)	-0.092* (0.070)
<i>Leverage</i>	?	0.000 (0.723)	0.000 (0.842)	-0.001 (0.249)
Constant		-0.035 (0.048)	-0.026 (0.379)	0.019 (0.708)
Year Fixed effects		Yes	Yes	Yes
Industry Fixed effects		Yes	Yes	Yes
Adjusted R^2		0.089	0.061	0.072
Robust F		7.610	11.570	4.420

The coefficients on both interaction terms are negative and the one on $NOP \times Treatment$ is

more negative and more significant over period $[-5,+5]$ ($-0.058, p=0.090$). It has two fold implications. First, it means that CARs drop by 5.8% for a *NOP* which is undertaken by the treatment firms compared with those of control firms. Second, it means that CARs are much lower for a sanctioned *NOP* than those for a sanctioned *OP*, even though the proportion of *NOP* is 38% within the treatment sample, less than that of *OP* (45%) (shown in Table 6). Collected samples show that when a non-operating RPT is involved, it always gives rise to the funds occupation by the controlling shareholder, so the market likely view this type as a negative signal. This supports the conjecture that market reacts unfavorably to the non-operating RPT as a way in facilitating the expropriation of minority shareholders' interest. The results are consistent with the findings from [Bertrand et al. \(2002\)](#) and [Kang et al. \(2014\)](#) that the non-operating RPT is typically viewed as a primary means of tunneling.

It is worth noting that *NOP* and *OP* are significantly correlated with each other shown in the correlation matrix (Table 7), therefore, the multicollinearity must be checked on *NOP* and *OP*. Using STATA, the VIF (variance inflation factor) value for *NOP* and *OP* is 7.76 and 8.20, respectively. The VIF values are smaller than 10, thus the multicollinearity is eliminated. The regression results for the treatment firms with RPT EAs meet the expectation of H_{2b} .

Model 3 Table 13 reports the regression of CARs on proxies for the ownership structure and corporate governance. Surprisingly the coefficient on *Dual* differs from the preceding speculation that the CARs are negative when the same person holds the position of chairman of the board and chief executive. The coefficients for *Dual* are 0.031 ($p=0.015$) in $[0,+1]$ and 0.030 ($p=0.039$) with high significance indicating that the control firms' characterisers of CEO duality contributes around 3% positive excess returns to their CARs.

It is not the first time that the speculation on CEO duality fails to be proved ([Cheung et al., 2006](#); [Lei and Song, 2011](#)). [Lei and Song \(2011\)](#) argued that the market noise may contaminate the market impact of CT announcements since in their sample there are many small transactions and the direct effect of governance discount is relatively small. The governance discount may be imposed by the market over a period of time when investors

Table 13: Regression of CARs on Firm Characteristics (sample size $n=168$)

This table reports regression results of CARs in three event windows on the firm characteristics for the total sample estimated by Model 3 (equation 4.13). Total sample contains 168 firms (84 treatment firms and 84 control firms) listed on the SHSE and SZSE during 2000-2013. CARs are computed using risk adjusted returns model. CAR denotes cumulative abnormal return. *Treatment* is a dummy variable indicating that the firm belongs to the treatment sample (firm with RPT EAs). *Dual* is a dummy variable indicating that the same person holds the positions of CEO and chairman of the board. *State* is a dummy variable indicating that the company's ultimate controller is government. *B_Size* is the number of board members. *ROA* is the ratio of EBIT to total assets. *Leverage* is debt-to-equity ratio. *p*-values are reported in parentheses. ***, ** and * denote statistical significance at the 1%, 5%, and 10% level, respectively.

	Predicted sign	CAR [0,+1]	CAR [-1,+1]	CAR [-5,+5]
<i>Treatment</i>	—	-0.015 (0.660)	-0.023 (0.601)	0.018 (0.818)
<i>Dual</i>	—	0.031 ** (0.015)	0.030 ** (0.039)	0.005 (0.822)
<i>State</i>	—	0.003 (0.741)	-0.003 (0.738)	-0.024 (0.241)
<i>B_Size</i>	?	0.002 (0.232)	-0.001 (0.764)	0.011 *** (0.005)
<i>Dual</i> × <i>Treatment</i>	—	-0.032 ** (0.033)	-0.035 * (0.056)	-0.018 (0.520)
<i>State</i> × <i>Treatment</i>	—	0.003 (0.765)	0.011 (0.435)	0.008 (0.748)
<i>B_Size</i> × <i>Treatment</i>	?	0.000 (0.961)	-0.000 (0.991)	-0.007 (0.435)
<i>ROA</i>	?	-0.006 (0.871)	-0.057 ** (0.028)	-0.102 ** (0.042)
<i>Leverage</i>	?	0.001 (0.513)	0.001 (0.526)	-0.002 (0.444)
Constant		-0.032 (0.035)	0.005 (0.865)	-0.065 (0.188)
Year Fixed effects		Yes	Yes	Yes
Industry Fixed effects		Yes	Yes	Yes
Adjusted R^2		0.113	0.062	0.082
Robust F		10.340	10.690	4.460

start to perceive the poor corporate governance. However in the current study the opposite sign is significant which eliminates the explanation given by [Lei and Song \(2011\)](#).

The results for CEO duality could be interpreted by the argument of [Peng et al. \(2007\)](#) that the positive impact of CEO duality is likely to be profound for firms “confronting problems associated with resource scarcity and environmental dynamism”. It conforms to the control firms because most of them undertake RPT to facilitate resource allocation strategically.

The coefficients for *State* is positive in [-1,+1] and [-5,+5] but not statistically signifi-

cant. The coefficient on B_Size is significantly positive in $[-5,+5]$ ($0.011, p=0.005$). It implies that larger board size is viewed as a positive sign for better performance. This finding backs up the larger board size effect and provides evidence on the previous relevant debate.

The coefficient on the interaction term $Dual \times Treatment$ is -0.032 ($p=0.033$) in $[0,+1]$ and -0.035 ($p=0.056$) in $[-1,+1]$ as predicted. The CARs drop by 3.2% to 3.5% when the treatment firm's CEO also acts as the chairman of the board. This finding does not collide with the discovery of Peng et al. (2007) since they also stated that the effect of CEO duality should be evaluated under contingencies predictions, rather being regarded as uniformly good or bad. Since the RPT undertaken by the treatment firms involves disadvantageous actions toward shareholders' wealth and is concealed from the investors, CEO duality is perceived as a weak monitor. Therefore, the significantly negative correlation between treatment firm's CARs and CEO duality is consistent with previous studies (Yermack, 1996; Brown and Caylor, 2006; Henry et al., 2012). The same interpretation is also feasible on the negative coefficient on $B_Size \times Treatment$. The coefficient on ROA remains significantly negative. Therefore, the expectation of H_{2c} is only plausible for treatment firms with RPT EAs.

Model 4 Table 14 displays the regression results of CARs on all the independent variables as well as the interaction terms. The results further concrete the statistical correlations on selected variables that are yielded from the preceding estimation models.

For treatment firms, the non-operating activities and the CEO/chairman duality have significantly negative effect on CARs, respectively. For control firms, the board size and the CEO/chairman duality have significantly positive correlations with CARs, respectively. The former findings verify the hypotheses, and the latter findings extend the discovery of the current study.

In this study, firms with EAs are differentiated from firms with PAs. Firms are also differentiated with different types of transactions. In summary, the univariate and empirical analysis show that (1) firms with RPT EAs are associated with negative and significantly

Table 14: Regression of Full Model (sample size $n=168$)

This table reports the regression results of CARs in three event windows on all variables of transaction types and firm characteristics for the total sample estimated by Model 4 (equation 4.14). CAR denotes the cumulative abnormal return. CARs are computed using risk adjusted returns model. Total sample contains 168 firms (84 treatment firms and 84 control firms) listed on the SHSE and SZSE during 2000-2013. *Treatment* is a dummy variable indicating that the firm belongs to the treatment sample (firm with RPT EAs). *OP* is a dummy variable indicating that the firm has undertaken an operating transaction. *NOP* is a dummy variable indicating that the firm has undertaken a non-operating transaction. *Combine* is a dummy variable indicating that the firm has undertaken transactions with more than one type. *Dual* is a dummy variable indicating that the same person holds the positions of CEO and chairman of the board. *State* is a dummy variable indicating that the company's ultimate controller is government. *B_Size* is the number of board members. *ROA* is the ratio of EBIT to total assets. *Leverage* is debt-to-equity ratio. *p*-values are reported in parentheses. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level, respectively.

	Predicted sign	CAR [0,+1]	CAR [-1,+1]	CAR [-5,+5]
<i>Treatment</i>	—	0.008 (0.815)	0.003 (0.942)	0.083 (0.311)
<i>OP</i>	?	0.017 (0.183)	0.016 (0.343)	0.042 (0.190)
<i>NOP</i>	?	0.004 (0.750)	0.013 (0.468)	0.021 (0.440)
<i>Combine</i>	?	0.010 (0.678)	0.021 (0.494)	0.016 (0.632)
<i>Dual</i>	—	0.033 *** (0.009)	0.030 ** (0.048)	0.007 (0.758)
<i>State</i>	—	0.001 (0.888)	-0.005 (0.657)	-0.028 (0.193)
<i>B_Size</i>	?	0.002 * (0.098)	-0.000 (0.920)	0.013 *** (0.004)
<i>OP</i> × <i>Treatment</i>	—	-0.020 (0.187)	-0.016 (0.439)	-0.064 (0.101)
<i>NOP</i> × <i>Treatment</i>	—	-0.021 (0.210)	-0.030 (0.200)	-0.062 * (0.093)
<i>Dual</i> × <i>Treatment</i>	—	-0.030 ** (0.039)	-0.031 * (0.100)	-0.013 (0.643)
<i>State</i> × <i>Treatment</i>	—	0.008 (0.488)	0.015 (0.316)	0.019 (0.511)
<i>B_Size</i> × <i>Treatment</i>	?	-0.001 (0.764)	-0.001 (0.803)	-0.009 (0.276)
<i>ROA</i>	?	-0.005 (0.896)	-0.062 ** (0.041)	-0.107 ** (0.036)
<i>Leverage</i>	?	0.001 (0.686)	0.000 (0.788)	-0.002 (0.317)
Constant		-0.052 (0.005)	-0.010 (0.749)	-0.113 (0.061)
Year Fixed effects		Yes	Yes	Yes
Industry Fixed effects		Yes	Yes	Yes
Adjusted R^2		0.127	0.068	0.086
Robust F		6.180	9.260	5.170

lower CARs compared to the firms with RPT PAs, (2) the rectification action has a significant effect to help the sanctioned firms to retrieve the investors' confidence, and (3) the CARs of firms with EAs are negatively associated with the non-operating transactions.

Additionally, market differentiates the same characteristics of corporate governance based on the degree to which the firm is compliance with the regulatory rules and laws. Plus, no matter a firm's RPT is sanctioned or legal, investors are less favorable to the RPT if the firm is in a *a priori* good financial condition. In conclusion, H_{1a} , H_{1b} , H_{2a} and H_{2b} are all strongly supported, and H_{2c} is only valid for firms with EAs.

6. CONCLUSION

Chinese Accounting Standards for Enterprises No. 36 defines a *related party transaction* (RPT) as an event whereby a transfer of resources, labor services or obligations takes place between affiliated parties, irrespective of whether money is charged. China is suitable for studying the inter-trading between related listed firms due to its characters of social environment. First, unique rules for share issuance and delisting stimulate companies to engage in earnings management utilizing RPT. Second, the business group structure of Chinese listed companies facilitates the implementation of RPT. Third, the weak legal system is tolerant of RPT (Wong and Jian, 2003; Cheung et al., 2006; Chen and Chien, 2007; Jian and Wong, 2010; Lei and Song, 2011; Peng et al., 2011).

The data used in the research consists of 168 public firms listed in China from 2000-2013. The main purpose of this study is to find how Chinese market reacts to the announcement of enforcement actions (EAs) against listed companies' RPT, therefore, it starts with a sample of 84 firms with EAs. Meantime they are matched to the same number of firms which have disclosed RPT with public announcements (PAs) and not having been imposed with EAs. EAs and companies' financial statistics are obtained from China Stock Market and Accounting Research (CSMAR) database. PAs are obtained from the companies' public reports.

The descriptive analysis of sample shows some interesting features of the Chinese public companies which engage in RPT. RPT is largely concentrated in manufacturing industry and is widely spread in fiscal years 2011 and 2012. In addition, there are average nine members on board of a listed firm and the majority of them have separate CEO/chairman. Debt is a primary financing method compared to equity financing in term of the leverage ratio. Most of RPTs are undertaken for the company's operation needs or at least covered by the operating activities. The state ownership is still the main ownership structure denominated in China.

6.1. SUMMARY OF RESULTS

Five hypotheses are constructed on the basis of earlier studies. H_{1a} aims to confirm the impact of RPT EAs on the market reaction. It hypothesizes that there is a negative market reaction toward RPT EAs. Compared to H_{1a} , H_{1b} aims to confirm the announcement effects of RPT with PAs. It hypothesizes that there is a positive market reaction toward RPT PAs. H_{2a} attempts to investigate the impact of the rectification actions on the valuation effects of firms with EAs. It assumes that the rectification actions have positive impact on the market reaction. H_{2b} explores the impact of transaction types on the market reaction. And it assumes that the non-operating RPT raises negative market reaction. In order to test H_{2b} , RPT is mainly classified into two types, i.e., operating and non-operating. Additionally, H_{2c} intends to detect the market reaction toward firms with different corporate governance mechanism with regards to the CEO duality, board size and ownership. The sample of firms are divided into firm with EAs and firms with PAs.

This study offers four main findings to the extant literature.

First, market reacts significantly and negatively to EAs that are imposed on the listed firms' RPT. Firm that are subject to the RPT EAs lose value. The average cumulative abnormal returns (CARs) are approximately $-0.9\% \sim -1.2\%$ fluctuating across different announcement periods. Quite a few companies in the sample are sanctioned due to missing or false disclosure. Such misbehavior attempts to cover up transactions to conceal the private benefit from the outside investors. It is injurious to investors' interest and disfavored consequentially yielding negative stock returns. By comparison, market reacts positively and significantly to the RPT PAs. Their average CARs are around $1.0\% \sim 3.7\%$ across time. Investors believe that these publicly disclosed RPTs are good for a company's normal operation hence having optimistic anticipation. Therefore, hypothesis H_{1a} and H_{1b} are confirmed.

Second, the rectification actions are likely to be associated with the modest market reaction. For firms that have not announced rectifications with EAs, their CARs are significantly negative with a magnitude ranging from -1.4% to as low as -3.0% . But for firms

that have announced rectifications accompanying EAs, their CARs increase toward zero (-0.1% ~ 1.2%), thus the negative announcement effects are reduced. Therefore, H_{2a} is supported. Further, it is recommended for the sanctioned companies to publish the rectification measures proactively and rapidly to retrieve the market rating.

Third, it is uncovered that even though few sanctioned RPTs are non-operating activities they have induced stronger market reaction than other types of transactions. For firms that undertake non-operating RPT as the only transaction type sanctioned by EAs, market shows negative and significant reactions. They yield CARs approximately around -1.4% ~ -2.8%, whereas the remaining types of transactions yield CARs that are relatively less negative and less significant. There are not many non-operating RPTs out of the total amount of treatment sample (32 out of 84), but they still yield more significant abnormal stock returns than the rest. H_{2b} is confirmed.

Finally, it is found that market gives different evaluations on firms' characteristics of corporate governance based on whether RPT is sanctioned or not. For firms with RPT PAs, the correlation between CARs and CEO duality is significantly positive (around 3.1%). For firms with RPT EAs, however, market depreciates CEO duality by around 3.2% ~ 3.5%. Therefore, the hypothesis H_{2c} is partially rejected since market does not discount firms with RPT PAs. In addition, a positive association between CARs and board size is reported. This is consistent with some researchers' findings with respect to the effect of board size on firms performance (Klein, 2002; Anderson et al., 2004; Adams and Mehran, 2005; Brown and Caylor, 2006; Chen, 2014).

The study provides no support for the negative association between market reaction and the government as the ultimate controller. An implication of this result is that recent years the gap between SOEs and other ownership types of listed firms has been shrinking and is gradually to be less of concern. An alternative possibility is that it might have been affected by the sample size or the measurement of variable.

6.2. CONTRIBUTIONS

The research findings of this study are expected not only to be bridged to the previous research about RPT, but also shed new light on the field of announcement effect of EAs.

First of all, there have been massive studies concerning the valuation effects of normal RPT announcements (e.g., [Wong and Jian, 2003](#); [Cheung et al., 2006](#); [Kohlbeck and Mayhew, 2010](#); [Lei and Song, 2011](#); [Amzaleg and Barak, 2013](#)), however, none of them bring RPT with EAs into scope. There also have been studies about the valuation effects of EA announcements released by regulatory institutions (e.g., [Feroz et al., 1991](#); [Chen et al., 2005](#)), but few of them focus on the EAs against RPT. This study fills in the gap by putting the main emphasis on the announcement effect of RPT that is sanctioned with regulatory body's EAs. Using the Chinese stock data and RPT EAs observations, supporting results are managed to be obtained confirming that market discounts the RPT EAs release significantly around announcement period.

The second contribution of this study is to consider the announcement type as one of the factors that influence the market reaction for RPT EAs. The announcement type of EAs is characterized as either including rectification measures or not. Some earlier studies only have mentioned in passing the concept of rectification for auxiliary purpose (e.g., [Feroz et al., 1991](#); [Firth et al., 2014](#)). Considering the lack of evidence, I decided to expand the discussion regarding whether and how the rectification actions affect the market reaction toward EAs. The results provide valuable insight into the above question by showing that the rectification actions mediate the negative stock shock incurred by RPT EAs.

The third contribution is to propose an argument that the non-operating RPT is more possible to be associated with the negative market reaction. The fund occupation resulted by non-operating RPT is a very common but serious issue existing in the Chinese companies' business activities ([Zheng, 2006](#)). However, there are a limited number of English articles addressing this issue. When coming to the classification of RPT, most of studies choose to differentiate transactions according to their trading forms (sale, purchase or lending, etc) instead of ultimate purposes. Because these studies have normal or legal RPT in their

research sample. EAs allow the study to learn an RPT's real purpose that has been covered up in the previous disclosure before anything wrong is detected. Both univariate and regression analyses end up with results supporting the argument.

6.3. PRACTICAL IMPLICATIONS

This study has several practical implications for the listed companies, investors and regulators. First, the company is advised to release the rectification actions as soon as possible right after the EAs are issued. According to the univariate results, firms who also release rectification measures have less negative stock returns than firms who do not release. This can help to minimize the adverse effect on both company's firm value and on shareholders' interest.

Moreover, it is observed that a fraction of companies are sanctioned for improper execution, instead of for the expropriation. This is simply because the management is not familiar with the related trading rules. For example, there are cases that the routine RPT contracts are not signed, or trading amounts are exempted from reporting by mistake since accountants are not aware of the specific exemption threshold. Therefore, the management should put effort to enhance the occupational training, increase professional awareness and improve the corporate governance.

Second, investors ought to be conscious of the potential exploitation by controlling shareholders, or the potential revenue manipulation using RPT. This study has documented that the announcement of RPT EAs results in a 1% statistically significant drop in the excess stock returns on average. Thus investors consequently suffer wealth losses. Normally, related parties are listed in the footnote of annual report where the information of affiliated relationship can be found. If there is evidence that a company keeps benefiting with, or lending to a related party for years, it raises questions about the credibility of such transactions. Investors are encouraged to increase their financial literacy.

Finally, regulators (such as the MOF, CSRC and stock exchanges) should strengthen the law enforcement. Though Chinese stock market has grown rapidly in the past years, it has been with weak legal and corporate governance structures ([Chen et al., 2005](#)). [La Porta](#)

[et al. \(2000\)](#) argued that the law enforcement institutions play a vital role in safeguarding the interests of investors and instilling confidence in the stock market. Therefore, on the basis of thorough drafting of RPT standards, the regulation enforcement (such as more severe punishments) is more urgent to be implemented. Furthermore, the CSRC should increase the consistency and transparency of its investigations, giving a more comprehensive disclosure of EAs. Borrowing and adopting the best regulatory practices from US or other developed financial markets can also help the CSRC to improve its functions.

6.4. LIMITATIONS

Despite the valuable contributions to our existing knowledge about RPT, care must be taken in generalizing this study's findings.

First, only a small proportion of firms are included in the sample, which might lower the statistical power of tests. Statistical power refers to the probability of rejecting the null hypothesis, when the alternative hypothesis is correct ([Cohen, 1988](#)). It depends on several factors including the sample size. Therefore, if the sample size declines, the statistical power also declines, so does the power of reliably showing the traits that are sought by the researcher.

Second, only the abnormal returns of short-term event windows are analyzed. This prevents further analysis from inspecting the extent to which the announcement types, transaction types or other factors explain the magnitude of abnormal returns further. It is commonly recognized that an event window should be long enough to capture the significant effect of the event, but short enough to exclude confounding effects ([McWilliams and Siegel, 1997](#)). When the market adjustment to the new information of RPT is not immediate, or there is uncertainty about when the information was revealed, long event windows might better to be used to capture the potential profound long-term effect.

6.5. SUGGESTIONS FOR FUTURE RESEARCH

There are many options for the further research on the studies about RPT, such as exploring various features of RPT EAs. The violation types could reveal a country's common company misbehavior, such as assets fabrication, false statement, failure to disclose information, and shareholder embezzlement, etc. The report type seems to be rarely connected with the topics of EA, such as interim report, quarterly report, temporary announcement, or IPO prospectus. Another research option is the source of initial disclosure, such as the company, stock exchange, regulatory agency, or social media.

This study arises several problems that required further exploration. For example, it is worth to investigate that whether the attitude toward the CEO duality in current public companies is always unfavored, or is dependent on the situation what a company is in, such as the case that the CEO duality is more likely to be supported during a institutional transition ([Peng et al., 2007](#)).

Given the importance of the RPT studies especially in China, more research about auditing on RPT is called for. EAs from the sample show that the constant on-going and the complex mechanism of Chinese RPT need to be clearly aware by the auditing professionals. Other possible research problems include studying the practical implications of RPT inside a company by adopting qualitative methods.

Finally, more precise and persuasive results are expected to be gained from high-caliber quantitative methods. In sum, there are many interesting avenues for the future of RPT research, in which the existing models of RPT effects should be extended and refined.

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APPENDIX A CSRC’s enforcement action on Hangzhou Tian-mu-shan Pharmaceutical Co., Ltd.

The CSRC investigated Hangzhou Tian-mu-shan Pharmaceutical Co., Ltd. (hereafter referred to as Tianmu Pharmaceutical) and its lendings to companies which are controlled by Pengfei Zhang who is Tianmu Pharmaceutical’s chairman of the board and controlling shareholder. The lendings constitute the RPT and result in the funds possession by related parties and capital loss. The CSRC enforcement actions against Tianmu Pharmaceutical was published on 1 February 2009.

A.1 Facts of the violations

The core of the violation was the failure to adequately disclose the transactions between the related parties.

- From 30 November to 1 December 2006, Tianmu Pharmaceutical provided “financial support” of RMB 40 million to its related party, Zhejiang Hyundai Automobile Repair Co., Ltd. (hereafter referred to as Hyundai Automobile Repair) through subsidiary. Tianmu Pharmaceutical first issued a check to one of its subsidiary located in Zhejiang Province, and then the subsidiary endorsed the check over to Hyundai Automobile Repair.
- During the period December 2006-March 2007, Tianmu Pharmaceutical again provided funds worth RMB 28.5 million to Hyundai Automobile Repair through bank transfer and endorsement.
- In 2006, Tianmu Pharmaceutical signed an advertising agency contract with an advertising company (hereafter referred to as Agent) who was responsible for creating an advertisement and having it run between 1 August 2006 to 31 December 2007. In September 2006, Tianmu Pharmaceutical totally made advance payment of RMB 9.4 million to the Agent in three times after which the Agent transferred the funds to Hyundai Automobile Repair.
- From December 2006 to January 2007 Tianmu Pharmaceutical transferred RMB 15 million in total to Hyundai Automobile Repair through a company whom Tianmu

Pharmaceutical purchased packaging materials from.

From December 2006 to April 2007, Tianmu Pharmaceutical also transferred large amounts of funds to another two related enterprises in the name of lending. All the RPTs were done indirectly through a third party. All of the above related enterprise were controlled by Tianmu Pharmaceutical's chairman and controlling shareholder, Pengfei Zhang and the frequent fund transfers were also known to and authorized by the CEO. No public disclosure or announcement were made to the investors, which should have. Tianmu Pharmaceutical's behavior was literally a tunnelling of minority shareholders' wealth to benefit the controlling shareholders.

A.2 Censure

Tianmu Pharmaceutical's violations constituted behaviors of "failing to disclose information in accordance with relevant regulations" according to Article 177²² (preceded by Article 193) of *Securities Laws* based on which the CSRC decided to give warnings to Tianmu Pharmaceutical, the chairman and the CEO, respectively; also imposed fines on them of RMB 400,000, RMB 300,000 and RMB 30,000, respectively.

A.3 Classification

The RPTs were undertaken in the name of financial support or lending, and the essential purpose was to shift wealth to the controlling shareholder by expropriating minority shareholders. Such transactions had no intention to be utilized into the company's normal operating activities or to improve the operating revenue. Therefore, the nature of the RPT is classified as the non-operating activity.

²²Article 177 of *Securities Law*: where the issuer of securities listed upon verification pursuant to this Law fails to disclose information in accordance with relevant regulations or the information disclosed contains a falsehood, misleading statement or major omission, the securities regulatory authority shall order the issuer to take remedial measures and impose on it a fine of not less than 300,000 yuan but not more than 600,000 yuan. The persons directly in charge and the other persons directly responsible shall be given a disciplinary warning and also be fined not less than 30,000 yuan but not more than 300,000 yuan. If the offense constitutes a crime, criminal liability shall be pursued according to law.