SOCIO-CULTURAL MILIEU’S EFFECT ON PREJUDICIAL RELATED-PARTY TRANSACTIONS: EVIDENCE FROM WITHIN THE CORPORATE GOVERNANCE SETTING IN CHINA

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Abstract

This paper re-visits the topic of self-serving, controlling shareholders seeking to perpetuate their financial and power advantage over minority shareholders, a topic known as the secondary agency problem. This topic has been widely examined using theories of controlling shareholder’s concern for rent-protection and the market for ownership control. This paper uses evidence of tunnelling and propping practices through related-party transactions that prejudice decisions against the interest of minority shareholders and focuses on identifying financial and voting control conditions that drive such practices. This paper aims to fill a gap in such extant literature by an examination of the socio-cultural factors influencing governance and managerial behaviour towards the enabling of tunnelling and propping practices. It does so in the context of the socio-cultural milieu within the corporate governance framework in China. Theories of transitional markets, agency bonding, and the cultural phenomenon of ‘guanxi’ are considered, together with corporate governance practices in China, in order to develop measures of factors enabling tunnelling and propping. Secondary data is drawn from a database of listed companies in China. Results reveal that directors and CEOs who were senior cadres from the former state-ownership regime, as well as the guanxi-based path dependence of chairs and CEOs, affect the extent of prejudicial related-party transactions in the forms of tunnelling and propping, respectively. The implication of the findings is that securities regulations in China will need widening if adequate protection of minority shareholders’ rights is to be assured.

Keywords: Related-party Transactions, Tunnelling, Propping, Controlling Shareholder, Corporate Governance, Socio-cultural


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1. INTRODUCTION

Corporate governance research has given attention to the secondary (or type 2) agency problem of conflict of interest within shareholders (i.e., the principal-principal problem) (Claessens & Fan, 2002; La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2000; Young, Peng, Ahlstrom, Bruton, & Jiang, 2008). Such
principal-principal conflicts of interest are particularly pronounced in the context of concentrated ownership and weak legal enforcement of property rights, both of which are prevalent in developing and transitional economies (Huyghebaert & Wang, 2012). Share-market data on Asia as a whole has revealed that as many as 93% of listed companies are owned by the controlling shareholders (Claessens, Djankov, & Lang, 2000). With such a concentrated ownership structure, the principal-principal conflict problem can become manifest in prejudicial related-party transactions (RPTs). These are transactions that are ‘unfairly prejudicial’ to the interests of minority shareholders and are inappropriately favorable to the interests of majority shareholders. RPTs usually take the form of non-arms-length transactions by a company with its own controlling shareholders or their related parties.

Empirical research has confirmed that controlling shareholders often resort to prejudicial RPTs for private benefit at the cost of minority shareholders (Atanasov, Black, & Ciccotello, 2008; Cheung, Rau, & Stouraris, 2006; Dow & McGuire, 2009; Peng, Wei, & Yang, 2011). Prejudicial RPTs are found to erode firm value (Atanasov, Black, Ciccotello, & Gyoseh, 2010; Renova, 2003; Peng, Wei, & Yang, 2011) and many corporate collapses in the early twenty-first century are associated with prejudicial RPTs (Gallery, Gallery, & Supranowicz, 2008; Ge, Drury, Fortin, Liu, & Tsang, 2010).

Research into practices involving prejudicial RPTs has coined the terms corporate tunnelling and negative tunnelling (or corporate propping). Jointly with Lopez-de-Luena, and Shleifer (2000) first used the concept of tunnelling in reference to the means by which controlling shareholders expropriate a firm’s funds to themselves, usually through related parties, that rightfully belong to minority shareholders to their detriment. The reverse practice of propping was first used by Friedman, Johnson, and Mitton (2003) to refer to the transferring to the firm, by controlling shareholders, of resources of related parties, usually a subsidiary of their group. Propping is perceived as a strategy adopted by controlling shareholders to rescue their firm from a financial shock and maintain their control. It can involve the intention of returning to tunnelling practices on recovery or, if recovery becomes unlikely, to undertake looting practices.

The extant research into the relationship between the secondary (or type 2) agency problem and the practice of tunnelling and propping has focused on prevailing financial and voting control conditions that motivate controlling shareholders to undertake prejudicial RPTs. Tunnelling studies have drawn on Bebchuk’s (1999) rent-protection theory of corporate ownership. Propping studies are largely based on Jensen and Ruback’s (1983) theory of the market for ownership control.

Apart from financial and ownership control conditions that motivate controlling shareholders to pursue prejudicial RPTs, there is also the matter of the ability of controlling shareholders to get actual prejudicial RPTs executed through the board and executive management of the company. To achieve this, the controlling shareholder will need a board and top management to provide advice on the best RPT contractual arrangements that could meet their interests and then facilitate the execution of those transactions in accordance with the controlling shareholder’s wishes. This implies collaboration (even collusion) between controlling shareholder(s) and other board members and top management in the enabling of prejudicial RPT practices as sought by the controlling shareholder(s). For controlling shareholder(s) to influence the behaviours and choices of members of the board and top management in an uncomfortable direction (i.e., their failure to act in the interests of all shareholders), it is postulated that not just economic rewards, but a certain type of socio-cultural milieu within the corporate governance setting will need to exist.

Prior studies have not considered the effect of socio-cultural factors, especially within a corporation’s governance system, on the enabling of prejudicial RPTs. The effects of national-level, socio-cultural aspects on dividend policy have received attention. Barnett and Casper (2001) modelled the effects of national culture on dividend policy. Socio-cultural milieu refers to the immediate physical and social setting in which a person works or lives, including the culture that the individual was educated in or resides in and the people and institutions with whom they interact (Barnett & Casper, 2001).

This study adopts the socio-cultural perspective through the lenses of Nee’s (1989) and Meckling’s (1976) bonding phenomenon from agency theory, complemented by the cultural overlay in China of guanxi in business relationships.

This leads to the aim of this paper: to contribute to the literature on the principal-principal conflict problem by developing socio-cultural theory-driven models and providing evidence from the context of China.

The paper will proceed through the practical background for RPTs in China, the development of hypotheses based on socio-cultural perspectives of selected theories, the specification of the model to be tested including definitions of variables, the choice of methods in a cross-country study, the empirical results and their discussion, and finally the conclusions and implications arising.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Corporate regulatory and market background for RPTs in China

Since China provides the context for empirical results in this study, a brief background is provided below on the code of corporate governance in China relating to the means for protecting minority
shareholders. The Code of Corporate Governance for Listed Companies (the Code) was issued jointly by the Chinese Securities and Regulatory Commission (CSRC) and the State Economic and Trade Commission (SETC) in January 2002. The Code is applicable in China to all listed companies who are required to act in the spirit of the Code in their efforts to improve corporate governance. The CSRC acts in the dominant role of overseeing the implementation of the Code as part of its responsibility for the regulation of securities markets.

In relation to minority shareholder protection in China, this is officially regarded as a major regulatory objective by the CSRC. However, there is evidence that in practice the position of minority shareholders is poorly protected, especially as regards to Chinese listed companies (Tomasic & Andrews, 2007). In fact, minority shareholders are poorly protected in several countries in East Asia (Cang, 2002; Lin, Fan, & Lang, 2002). In Chinese context, the limits of the rule of law have been described as the “bird in a cage” (Lubman, 1999). As explained by Tomasic and Andrews (2007) “this may also be said of the shareholding structure in China’s listed companies ... it has been constrained by ideas that have their roots in the extensive state-owned enterprises and the “cage” of China’s one-planned economy” (p. 89). Tomasic and Andrews (2007) explained that there are several specific rules and guidelines on minority shareholders protection. In China’s company law, article 4 provides that the “shareholders of a company shall, according to law, enjoy such rights of owners as benefiting from assets of the company, making major decisions and selecting managerial personnel”. Further, article 153 allows shareholders to bring group actions before a court where damage has been caused “to the interests of any shareholders of the company by any illegal action by a director or senior officer of the company”. In practice, however, according to Tomasic and Andrews (2007) it is not clear how these provisions can work. They argued that enforcements through the courts is problematic because of “the short-term horizons of such shareholders... the low levels of expertise of Chinese courts in dealing with such cases (and) the problems of proof that need to be dealt with in bringing such civil cases” (p. 92).

2.2. Agency bonding and the cultural custom of guanxi

This section focuses on the directors’, supervisors’ and executives’ dependency on the ultimate controlling shareholder. The main issue to consider is how controlling shareholders can create a governance setting that is conducive to pressuring a firm’s board and top management to put in place prejudicial RPTs, despite any regulatory directives or codes of corporate governance supposedly in place to prevent or mitigate such behaviour.

Agency bonding in relationships between corporate governance actors is the theoretical perspective invoked. However, in the context of China, the cultural custom of guanxi can also be a factor underlying dependency or independency in working relationships in business. Guanxi is a fundamental dynamic in personalized social networks of power in China.

Under agency bonding, a bonding mechanism takes the form of a credible commitment, such as a commitment by a CEO to achieve a pre-set firm performance measure before receiving a remuneration bonus. Lippert and Moore (1995) explained that bonding the CEO’s or board chair’s decision-making to the interests of the shareholders may be accomplished directly by the suitable design of their employment contract. The argument is that the more the firm’s performance outcomes from the executives’ and directors’ decision-making are tied to their contractual remuneration and share entitlements, the more their decision-making will be aligned to the interests of the shareholders who have the power to approve these contracts. In diversely held firms, there is evidence of only weak or no pay-performance alignment (Jensen & Murphy, 1990; Murphy, 1993). However, Gomez-Mejia, Tosi, and Hinken (1987) found that a firm’s share ownership structure affected the sensitivity of the alignment of management compensation to firm performance. Among firms controlled by a dominant shareholder, they found a significant positive relationship between CEO salary, bonus, and long-term income and shareholder returns.

In China, the ultimate controlling shareholder, as the principal, is in a position to engineer the bonding of management agents. Such bonding activities by the controlling shareholder aim to make directors, supervisors, and top executives dependent in several ways in practice. First, in relation to bonding activities in Chinese culture, the alignment between performance and compensation for these agents is likely to be determined in subtle ways. Work and business relationships in Chinese culture tend to emphasize the combining of affective and instrumental ties (Bond & Hwang, 1988; Yang, 1994). This means that Chinese business relationships tend to have a strong socio-emotional component, typically involving personal gifts, shared meals, and introduction to family members (Pearce & Robinson, 2000; Trompenaars, 1994; Yang, 1988; Yang, 1994). This distinctive pattern of socio-emotional business relationships in Chinese business has been described as guanxi (King, 1991; Lin, 2001). It is, however, probable, therefore, that the ultimate controlling shareholder (whether this is the bureaucratic and political representatives of the controlling government shareholder or a “cadre entrepreneur”) will establish instrumental and affective ties with
directors, supervisors, and executives. These ties are likely to involve the ultimate controlling shareholder holding instrumental power in the determination of contracts of appointment and compensation levels for directors, supervisors, and executives. In return, affective ties would extend to getting favours from relevant directors, supervisors, and executives such as pushing through RPT transactions of the firm that are desired by and beneficial to the ultimate controlling shareholders.

Second, bonding activities by the ultimate controlling shareholders can extend to ways of preventing the appointment of genuinely independent directors. Generally, although boards of directors are elected during the shareholders’ general meeting, in practice over half of the directors are appointed by the ultimate controlling shareholder (Cheung, Qi, Li, Rau, & Stouraitis, 2009). Hence, boards of listed Chinese companies tend to be dominated by insiders, such as senior managers and representatives of the ultimate controlling shareholder. Bai, Liu, and Song (2004) estimated that in firms listed in China, more than half of directors are typically appointed by the state. The apparent prevalence of bonding mechanisms and guanxi in relationships between the controlling shareholder (or their representatives) and directors, supervisors and top executives, is likely to result in directors, supervisors and top executives acting in the interests of the controlling shareholder by enabling the practice of using RPTs for tunnelling and propping purposes.

This discussion leads to the following hypotheses:

Hypothesis 1a (H1a): The emoluments of the top 5 executives are positively related to the extent of tunnelling and propping, respectively, through RPTs.

Hypothesis 1b (H1b): The emoluments of directors are positively related to the extent of tunnelling and propping, respectively, through RPTs.

Hypothesis 1c (H1c): The percentage of shares held by main board directors is positively related to the extent of tunnelling and propping, respectively, through RPTs.

Hypothesis 1d (H1d): The percentage of non-executive directors on the main board is inversely related to the extent of tunnelling and propping, respectively, through RPTs.

Hypothesis 1e (H1e): The percentage shares held by the supervisory board is positively related to the extent of tunnelling and propping, respectively, through RPTs.

2.3. Nee’s market transition perspective on perpetuation of power and privilege

Another socio-cultural perspective on the enabling of prejudicial RPTs by privileged and powerful controlling shareholders (or their bureaucratic or entrepreneurial representatives) in China is Nee’s (1989) theory of market transition. As explained by Nee (1989) the transition of economies from centrally planned to market-oriented economies entail a transition from a redistribution system to a market forces system. In the transition process, power shifts away from the redistributors towards the direct producers. Market reform in China, according to Nee (1989), has resulted in the bypassing of hierarchies. The extent of vertical segmentation found in socialist economies is reduced when horizontal market relationships emerge. These market relationships establish new social networks between private buyers and sellers.

Nee (1989) found that, overwhelmingly, the majority of entrepreneurs come from direct producers, as predicted by his theory of market transition. While state socialist redistributive economies were characterized by the allocation and distribution of goods through central planning, in the current market economy in China there is admiration for political elites who get rich quickly. Cadre entrepreneurs were found by Nee (1989) to have advantages over other entrepreneurs. This finding indicates that political power has utility for entrepreneurs.

While the Communist Party of China’s (CPC’s) policies and mechanisms have a direct effect on the corporate governance of listed SOEs, the forces of the market economy also have an influence, according to Nee’s (1989) theory of market transition. When there is a transition to a market economy, cadre entrepreneurs obtain more power relative to the cadre responsible for conducting the re-distribution system (Nee, 1989; Nee & Oppen, 2009). This process strengthens the power of cadre entrepreneurs to influence relevant governance players within their corporation, especially political appointments to the board and top management, towards conducting prejudicial RPTs. This leads to the hypothesis about cadre entrepreneurs as follows:

Hypothesis 2a (H2a): The cadre entrepreneur, as the ultimate controlling shareholder (or it’s representative), has a positive effect on the extent of tunnelling and propping, respectively, through RPTs.

Moreover, Nee’s (1989) theory of transitional markets referred to the ability of the network of cadres from the former regime to remain a strong force after their government agency becomes corporatized. This network of cadres has control over the management of China’s corporatized SOEs through the role played by the CPC in the corporate governance of SOEs. First, in essence, the CPC remained the political centre of these enterprises and, as such, handles all political affairs, including managing cadre appointments, enforcing ideological commitment and ensuring that corporate decisions take national policies into account. The ranks of the cadres usually determine the level of managerial positions they can hold. Second, the CPC may become involved in all major corporate decisions of SOEs by placing party cadres in the most important leadership positions, including those of the CEO and chairperson (McNally, 2002). This makes the careers of top managers and directors “path dependent” on the party cadres associated with the state-based, ultimate controlling shareholder. This path dependency is achieved through control of their appointment level, remuneration, and fringe benefits such as company housing, education, and health support for themselves and their families. This tends to make management and the board deferent to the controlling state-based shareholder and its political and bureaucratic representatives. Such deference is likely to include the enabling of tunnelling and propping practices that are in the interests of the controlling shareholder. The following related hypotheses are generated:
Hypothesis 2b (H2b): The path dependence of the CEO is positively related to the extent of tunnelling and propping, respectively, through RPTs.

Hypothesis 2c (H2c): The path dependence of the chairperson is positively related to the extent of tunnelling and propping, respectively, through RPTs.

2.4. A governance mechanism to constrain enablers of prejudicial RPTs

Agency theory suggests that firm performance is positively related to a share structure that has non-controlling blockholders (Shleifer & Vishny, 1997). Empirical research in both developed and emerging economies largely confirm this proposition: such as the US (Hill & Snell, 1988) and emerging economies such as China (Liu, Atinc, & Kroll, 2011; Qi, Wu, & Zhang, 2000; Xu & Wang, 1999), Czech Republic ( Claessens & Djankov, 1999), India ( Ramaswamy, Li, & Veliyath, 2002), and Russia (Buck, Filatotchev, Wright, & Zhukov, 1999) largely confirms this proposition. Deng and Wang (2006) believe it is plausible that at the board level outside directors representing large shareholders, especially those non-affiliated outside directors, are more likely to be concerned with performance in order to maximize their investment. Similarly, resource dependence theory argues that outside directors are likely to bring useful resources from other organizations (Pfeffer, 1972). It is further suggested by Tang, Xie, and Zhang (2007) that the influence of company laws on corporate governance will trail off in capital markets with concentrated ownership structure, especially when a pyramid shareholding or cross-shareholding structure is prevalent. Tang, Xie, and Zhang (2007) contended that in such circumstances, blockholders (beyond the first blockholder) will have enough motivation and ability to control the company in order to protect their own particular interests, to the detriment of others. It is important for the assurance of non-controlling blockholders’ interests to prevent the controlling shareholder from 1) expropriating the firm’s funds to themselves, usually through related parties, i.e., through tunnelling using RPTs and 2) drawing funds from the firm’s related parties (particularly wholly-owned subsidiaries) to sustain the control of the holding company by the controlling shareholder, i.e., through propping using RPTs. These arguments generate the following hypothesis:

Hypothesis 3 (H3): The percentage shares held by blockholders (top 2 to 10 shareholders) is inversely related to the extent of tunnelling and propping, respectively, through RPTs.

3. SPECIFICATION OF MODEL AND VARIABLES

To test the above sets of hypotheses, the first step is to specify a model of relationships and to define variables.

3.1. Classification of tunnelling and propping transactions

This study seeks to operationalize the concept of prejudicial RPTs as two dependent variables, tunnelling and propping. Therefore, the classification of RPTs needs clarification. Cheung, Qi, Lu, Rau, & Stouraitis (2009) sought to develop a classification scheme that could distinguish tunnelling from propping transactions. They classified RPTs into ex-ante potential tunnelling transactions and ex-ante potential propping transactions. The problem with Cheung, Qi, Lu, Rau, & Stouraitis (2009) classification scheme is that the types of RPTs are not based on a recognised financial accounting structure and are not all mutually exclusive.

This study develops a revised scheme as shown in Table 1.

<table>
<thead>
<tr>
<th>RPT type</th>
<th>Nature of transaction</th>
<th>Tunnelling</th>
<th>Propping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating</td>
<td>Purchase of goods or services by company (buyer)</td>
<td>Price above fair value</td>
<td>Price below fair value</td>
</tr>
<tr>
<td></td>
<td>Sales of goods or services by company (seller)</td>
<td>Price below fair value</td>
<td>Price above fair value</td>
</tr>
<tr>
<td>Investing</td>
<td>Acquisition of assets by company (buyer)</td>
<td>Price above fair value</td>
<td>Price below fair value</td>
</tr>
<tr>
<td></td>
<td>Sales of assets by company (seller)</td>
<td>Price below fair value</td>
<td>Price above fair value</td>
</tr>
<tr>
<td></td>
<td>Private offering by company of shares or securities convertible into shares to 'insiders' (i.e., related parties) (seller)</td>
<td>Price below fair value</td>
<td>Price above fair value</td>
</tr>
<tr>
<td>Financing</td>
<td>Loans, loan guarantees (lender) (seller)</td>
<td>Interest below market rate</td>
<td>Interest above market rate</td>
</tr>
<tr>
<td></td>
<td>Borrowing, leasing by company (borrower, lessee) (buyer)</td>
<td>Interest or terms above market rate</td>
<td>Interest or terms below market rate</td>
</tr>
</tbody>
</table>

Since prejudicial RPTs are typically concerned with transferring cash or funds from/to the company for the private benefit of the controlling shareholders, the classification of RPTs in Table 1 is initially based on the cash flow statement’s categories of operating, investing and financing transactions. Within these three categories, the nature of transactions with related parties is listed. Then the direction of the pricing of these transactions is given to distinguish between whether they represent a tunnelling or propping phenomenon.

In Table 1, the direction of the differences between RPT price/interest and fair value/market rate reveals a consistent pattern. Tunnelling activities require the RPT price/interest on purchases, asset acquisitions and lending to be set above the fair value/market rate, while the price/interest of sales, equity offerings, and lending are set below fair value/market rate. The consequence is that the overall net amount of RPTs would be reduced (i.e., diminished) due to tunnelling activities. In contrast, for propping activities, the pattern of price/interest setting on all these types of RPTs is in the opposite direction. This means that the overall net amount of RPTs would be increased (i.e., inflated) due to propping activities. However, there is an absence of a reported fair value benchmark for all these categories of RPTs. Consequently, while the direction of the annual change in the overall book value of net RPTs could be computed, it would in effect be a poor proxy for the extent of tunnelling or propping in that year.
Rather than measuring the overall net amount of RPTs as the dependent variable, specific relevant categories of RPTs could be chosen. For example, an issue addressed in the literature is whether prejudicial transactions are undertaken in practice across all categories or types of RPTs, or whether they would predominantly be found within selected categories of RPTs. Potentially, tunnelling or propping can occur across all these types of RPTs shown in Table 1. However, only a select range of RPTs have been used in prior research as a proxy measure for tunnelling or propping. For example, Berkman, Cole, and Fu (2009) used total loan guarantee to related parties as a proxy measure for tunnelling; Gao and Kling (2008) used the difference between accounts receivable and payable to related parties divided by total assets; Jiang, Lee, and Yue (2010) used 'other receivables' scaled by total assets; Cheung, Rau, and Stournaritis, (2006) used sale or purchase of goods and services with the related party as the types of selected transactions through which tunnelling is most likely to occur; alternatively financing and investing transactions with related-parties are most likely to take the form of propping.

In this study, specific categories of RPTs will be chosen for the tunnelling dependent variable and different specific categories of RPTs for the propping dependent variable. First, in relation to tunnelling, it is argued that tunnelling activities are more likely to be executed through a going price manipulation of operating sales to, and purchases from, related-parties. Bebchuk's (1999) rent-protection theory of corporate ownership structure infers that controlling shareholders continuously assess the size of expected private benefits potentially accessible to them from their controlling shareholders (through tunnelling) as long as they are able to maintain a 'lock on control'. Bebchuk, Kraakman, and Triantis (2000) argued that the lower the firm’s distributed cash flows (as dividends, or its potential cash flow availability to controlling shareholders (as dividend cover or free cash flows to equity), then the stronger would be the enabling condition for tunnelling in that particular year. The on-going extraction of private cash benefits by the controlling shareholder through price manipulations of RPT operating sales and operating purchases. Aharony, Wang, and Yuan (2009) and Jian and Wong (2010), for example, found that companies used receivables to related parties as a proxy measure for tunnelling or propping, an explanatory model and definitions of its variables are specified as follows:

\[ \text{TUNNELLING or PROPPING} = \alpha - \beta_1 \text{EMOLEXEC} + \beta_2 \text{EMOLDIR} + \beta_3 \text{BRDSHOLD} + \beta_4 \text{BRDINDEP} + \beta_5 \text{SUPSHOLD} + \beta_6 \text{CADREENTPR} + \beta_7 \text{CEOPATHDEP} + \beta_8 \text{CHAIRPATHDEP} + \beta_9\text{BLOCKHOLD} + \beta_{10} \text{STATEDUMMY} + \beta_{11} \text{ASSETSLN} + \beta_{12} \text{BKTMK}\]

where, TUNNELLING is defined as follows:

\[ \text{RPT OPALES} - \text{RPTOPPURCH} / \text{TOTAL REVENUE} \times (-1) \]

This is the size of the gap between RPT operating sales and RPT operating purchases, scaled by the firm’s size of total revenue. The closer to zero this relative gap, the greater is likely to be tunnelling, reflecting the tunnelling (i.e., expropriation) phenomenon that sales to related...
parties would be deflated against their fair value, and purchases from related parties would be inflated. This tunnelling measure is computed in its inverse (i.e., multiplied by -1) in order to make the concept intuitively fit the direction of relationships specified in the hypotheses and equation above. PROPPING is defined as follows:

\[
\text{PROPPING} = \frac{\text{RPTOFFER} + \text{RPTASSETSALES} + \text{RPTBORROW}}{\text{TOTAL ASSETS}}
\]

This is the size of specific RPT investing and financing transactions, scaled by the firm’s size of total assets. The larger this relative size of RPT transactions, the greater is likely to be propping, reflecting the use of sizable one-off cash-raising RPT share offerings, fixed asset sales, and borrowings to achieve propping in that year.

The definitions of the tunnelling and propping dependent variables have been logically drawn from the categorisation of transactions in Table 1. EMOLEXEC comprises the total emoluments of the top three company executives.

EMOLDIR comprises the total emoluments of all main board directors.

**CEOBATHTHEDEP** is an index of the potential path dependence of the chair of the board on the ultimate controlling shareholder. It is computed as follows:

**Table 2. Scoring of CEO’s path dependency**

<table>
<thead>
<tr>
<th>CEO’s path dependency factors:</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO’s term of appointment</td>
<td>5 years or more</td>
<td>Less than 5 years</td>
</tr>
<tr>
<td>CEO’s source of progression to position</td>
<td>Internal</td>
<td>External</td>
</tr>
<tr>
<td>CEO’s age</td>
<td>Over 58</td>
<td>58 and under</td>
</tr>
<tr>
<td>Scoring: 1 point each high; 0 points each low</td>
<td>Max: 3 points</td>
<td>Min: 0 points</td>
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</table>

**Chair’s path dependency factors:**

<table>
<thead>
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<th>Chair’s term of appointment</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair’s source of progression to position</td>
<td>3 years or more</td>
<td>Less than 3 years</td>
</tr>
<tr>
<td>Chair’s source of progression to position</td>
<td>Internal</td>
<td>External</td>
</tr>
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<td>Chair’s age</td>
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<tr>
<td>Scoring: 1 point each high; 0 points each low</td>
<td>Max: 3 points</td>
<td>Min: 0 points</td>
</tr>
</tbody>
</table>

**BLOCKHOLD** is the percentage shares held in aggregate by the top 2 to 10 shareholders in the company. It represents the extent of blockholder concentration beyond the ultimate controlling shareholder.

**STATEDUMMY** is scored as 1 if the ultimate controlling shareholder is a State-based enterprise or legal person or a state-based non-enterprise bureaucratic institution (e.g., ministry, bureau; or other government bureaucracy); and is scored as 0 if the ultimate controlling shareholder is non-state.

**ASSETSLN** is the natural logarithm of total assets of the firm. It is a proxy measure of firm size.

**BKTOMKT** is the ratio of book value of total assets at year-end to the share-market capitalisation of the company at year-end. It is a proxy measure of firm growth outlook.

**4. METHODS**

This study uses quantitative methods based on cross-sectional analysis using secondary data. The reliance on a commercial database in this study is justified because the reported corporate accounting numbers, corporate governance data, and stock market statistics contained in this database are subject to corporate reporting standards and stock market requirements in China that follow international norms. In-depth understanding of practices and decision-processes at the firm level using qualitative methods such as case-based interviews and observations has not been feasible for this study. The topics of expropriation of minority shareholders rights, the motives of the ultimate shareholder for propping-up of earnings or cash flows and the lack of independence of directors or executives from the controlling shareholders are too sensitive to achieve access to potential participants from the board, executive management or a spokesperson of the state controlling shareholder of listed companies. Such sensitivity is why prior empirical studies undertaken in China on tunnelling and propping activities have been limited to secondary data and quantitative analysis only.

The China Securities Market and Accounting Research (CSMAR) database of companies listed on the Shenzhen and Shanghai Stock Exchanges is the main source of data for this study. This database contains 24 datasets on the Chinese stock market, as well as corporation and financial information data. It claims to conduct rigorous verification tests to ensure the accuracy of data and applies design techniques compatible with international standards. It is subscribed globally by more than 600 institutions including leading universities in many countries. The CSMAR database contains publicly
disclosed data on all listed A-share companies, starting from 1999. Supplementary data on directors was found from searches of several China company websites.

Access to data from the CSMAR database was only available to the researcher up to the end of 2012. Data was drawn from this database for the top 1,000 companies (out of 2,215) listed companies across the Shenzhen and Shanghai Stock Exchanges. The collection of supplementary data from disclosures in websites of companies outside the top 1,000 was variable in quantity, quality, and trustworthiness. This lack of data for smaller listed companies was especially limiting for the variable CADREENTRPR.

The following exclusions from the data set were made:
- Internationally cross-listed companies are excluded because they access international financial markets. They are therefore subject to different legal and stock market rules compared with the firms listed only on Shenzhen and Shanghai Stock Exchanges. Thus, accordingly, forty-eight (48) companies with shares listed overseas, i.e., H shares, were subsequently removed from the sample.
- Industry type is considered using CSRC’s industry website. Companies categorized as belonging to banking, securities and futures, financial trust, and insurance industries, being thirty-eight (38) companies, were excluded. For these companies, the cash flows related to financial service were not easy to predict, and the way the companies were capitalized was under different regulations than companies in the other categories.
- Companies that did not report any RPTs are excluded. These companies either did not comply in reporting their RPTs or have not activated any process to facilitate tunnelling or propping activities. Since they had no data for the dependent variables, they were excluded from the regression analysis. A total of one hundred and sixty-five (165) companies have blank data for annual RPTs.

After taking into account these three categories of excluded companies, the final sample was seven hundred and forty-nine (749). For this final sample, “data cleaning” was undertaken. Three variables had ten percent (10%) or more of their data missing; this data was replaced with the sample mean for that variable. Variables with outliers that have been transformed to normality using natural log are total assets and total revenues of the firm.

5. RESULTS AND DISCUSSION

5.1. Descriptive statistics of sampled companies

A profile of the companies contained in the sample is given in Table 4. In terms of company size, a range of companies is contained in the sample, from a minimum of RMB489.5m to a maximum of RMB13,458b in book value of total assets. A breakdown of categories of RPTs shows substantial means in each category: operating transactions (mainly sales and purchases of goods and services to and from related parties) averaged RMB413.36b (= RMB237.16b + RMB176.20b); investing transactions (i.e., sales of assets and offerings of equity to related parties) averaged RMB132.78b; financing transactions (i.e., borrowing and leasing from related parties) averaged RMB51.45b).

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>N</th>
<th>Unit of measure</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total assets at book value</td>
<td>749</td>
<td>RMB Bill</td>
<td>5.87</td>
<td>203.63</td>
</tr>
<tr>
<td>Book value of total assets to market capitalisation</td>
<td>749</td>
<td>%</td>
<td>0.59</td>
<td>0.25</td>
</tr>
<tr>
<td>Operating sales related-party transactions</td>
<td>794</td>
<td>RMB Bill</td>
<td>237.16</td>
<td>31.74</td>
</tr>
<tr>
<td>Operating purchases related-party transactions</td>
<td>711</td>
<td>RMB Bill</td>
<td>126.20</td>
<td>12.37</td>
</tr>
<tr>
<td>Investing-related-party transactions</td>
<td>603</td>
<td>RMB Bill</td>
<td>132.78</td>
<td>14.29</td>
</tr>
<tr>
<td>Financing-related-party transactions</td>
<td>578</td>
<td>RMB Bill</td>
<td>51.45</td>
<td>31.64</td>
</tr>
<tr>
<td>Emoluments of the top three company executives</td>
<td>748</td>
<td>RMB Bill</td>
<td>0.018</td>
<td>21.21</td>
</tr>
<tr>
<td>Emoluments of the all main board directors</td>
<td>748</td>
<td>RMB Bill</td>
<td>0.009</td>
<td>17.19</td>
</tr>
<tr>
<td>Shares held by main board directors</td>
<td>746</td>
<td>No. shares ('000)</td>
<td>1.65</td>
<td>61.95</td>
</tr>
<tr>
<td>Proportion of independent directors on the main board</td>
<td>749</td>
<td>%</td>
<td>0.33</td>
<td>0.28</td>
</tr>
<tr>
<td>Shares held by the supervisory board directors</td>
<td>733</td>
<td>No. shares ('000)</td>
<td>0.06</td>
<td>16.35</td>
</tr>
<tr>
<td>Age of CEO</td>
<td>641</td>
<td>years</td>
<td>49</td>
<td>8.27</td>
</tr>
<tr>
<td>Term of appointment of CEO</td>
<td>566</td>
<td>Years</td>
<td>5.1</td>
<td>1.70</td>
</tr>
<tr>
<td>Age of chair of the main board</td>
<td>637</td>
<td>Years</td>
<td>30</td>
<td>8.40</td>
</tr>
<tr>
<td>Term of appointment of chair of the main board</td>
<td>637</td>
<td>Years</td>
<td>6.31</td>
<td>2.05</td>
</tr>
<tr>
<td>Proportion of shares held by top 2 to 10 shareholders</td>
<td>748</td>
<td>%</td>
<td>16.80</td>
<td>13.18</td>
</tr>
</tbody>
</table>

Note: Missing data in the CSMAR database and/or company websites has caused observations (N) to be lower than the sample size of 749.

5.2. Multicollinearity tests

Table 5 provides multicollinearity tests for the separate tunnelling and propping models. It shows that the variable inflation factor (VIF) and the tolerance are within acceptable levels. As a rule of thumb, if any of the VIF is greater than 10 (greater than 5 to be very conservative), then this is assumed to show that there is a multicollinearity problem (Ethington, 2012). In Table 5, all the VIF results are below 10, but two results are above 5. These are EMOLEXEC and EMOLDIR. Therefore, multicollinearity is unlikely to have an effect on the regression results.
5.3. Regression results to test hypotheses

The results of ordinary least-squares regressions are presented in Table 6. This table contains results for two regressions as tests of the determinants of tunnelling and propping, respectively.

Table 6. Regression results

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Model 1: Tunnelling</th>
<th>Model 2: Propping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
<td>t-value</td>
<td>Sig.</td>
</tr>
<tr>
<td>EMOLEXEC</td>
<td>.102</td>
<td>.359</td>
</tr>
<tr>
<td>EMOLDIR</td>
<td>.019</td>
<td>.563</td>
</tr>
<tr>
<td>BRDSHOLD</td>
<td>.010</td>
<td>.523</td>
</tr>
<tr>
<td>BROADDEPEND</td>
<td>.000</td>
<td>.989</td>
</tr>
<tr>
<td>SUPSHOLD</td>
<td>.004</td>
<td>.800</td>
</tr>
<tr>
<td>CADRE-ENTRPR</td>
<td>.048</td>
<td>.087*</td>
</tr>
<tr>
<td>CEO-PATHDEPEND</td>
<td>.070</td>
<td>.066*</td>
</tr>
<tr>
<td>CHAIRPATHDEPEND</td>
<td>.089</td>
<td>.033**</td>
</tr>
<tr>
<td>BLOCKHOLD</td>
<td>-.007</td>
<td>.682</td>
</tr>
<tr>
<td>Control variables:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STATEOWN</td>
<td>.068</td>
<td>.036*</td>
</tr>
<tr>
<td>ASSETLN</td>
<td>.091</td>
<td>.023**</td>
</tr>
<tr>
<td>BKTOMKT</td>
<td>-.010</td>
<td>.599</td>
</tr>
</tbody>
</table>

Model summary

R = .257, R² = .121, AdjR² = .102, F = 4.123, sig. = .000
R = .463, R² = .281, AdjR² = .236, F = 9.016, sig. = .000

The model in Table 6 with the stronger explanatory power is the propping model, with an adjusted R² = .236, although the tunnelling model also has significant explanatory power with an adjusted R² = .102. A robustness test was performed using alternative measures of tunnelling and propping. Tunnelling was computed using the gap in operating RPTs as a proportion of total RPTs, whereas propping was computed using total investing and financing RPTs as a proportion of total RPTs. Conclusions that could be drawn from the results of these alternative regressions were mostly similar to the conclusions drawn below.

Hypotheses test in these regressions in Table 6 are now highlighted and discussed, in turn, and indicate the following. First, the results for the set of hypotheses that invoke classical agency bonding, H1a to H1e, are found to be non-significant. That is, bonding of top executives, directors, and supervisors to the controlling shareholder, through formal mechanisms of emoluments and share allocations, do not have an effect on the enabling of tunnelling and propping. These formal mechanisms apparently failed to capture the socio-cultural determinants of executive and director behaviour. As previously mentioned, in the Chinese cultural milieu, the alignment between performance and compensation for these agents is likely to be determined in subtle ways through affective means involving personal gifts, shared meals, and introductions to family members (Pearce & Robinson, 2000; Trompenaars, 1994; Yang, 1998; Yang, 1994). In return, these affective ties would most likely be reciprocated in largely undetectable ways by bestowing favours and benefits to the controlling shareholder (or their representative) such as pushing through prejudicial RPTs. This distinctive pattern of trusting relationships in Chinese business, known as guanxi (King, 1991; Lin, 2001), has not been captured in the governance mechanisms of levels of compensation measured in this study.

Second, the results for the hypotheses generated from Nee's (1989) market transition theory, H2a to H2e, are found to be significant. In terms of H2a, the CADRE-ENTRPR variable has a significant impact on both tunnelling and propping. Nee (1989) argued that the power of cadre entrepreneurs in China to influence relevant governance players within their corporation is strengthened. Moreover, he contends that the business culture is strongly influenced by the ability of the network of cadres from the former regime to remain a strong force after their government agency becomes corporatized. The cadre entrepreneur, who represents the state-based controlling shareholder, tend to be involved in all major corporate decisions, including placing party cadres in leadership positions, particularly the CEO and chairperson. This makes the career of top managers and directors 'path dependent' on the cadre entrepreneur by controlling their appointment level, terms of appointment, fringe benefits, and other favours. The role of guanxi means such path dependency is
largely socio-cultural in nature and difficult to measure reliably. The results for the variables, \textit{CEOPATHDEP} and \textit{CHAIRPATHDEP} are also significant for both tunnelling and propping, although only weakly significant for tunnelling. $H2b$ and $H2c$ are supported. This evidence again supports the aspect of Nee's (1989) theory of market transition which refers to the perpetuation of personal networks, privileges, and dependencies among cadres from the former centrally planned state enterprises to the current market-driven companies. Where the controlling shareholder is a state-based entity, the company it controls is likely to have been historically carved out from that state-based entity. Its chair and CEO are likely to have been cadres in a career path that originated from the former state-based entity if they have been internally appointed, are born before 1954, and hold a longer term of appointment. A final mechanism hypothesised as a restraint on enabling the ultimate controlling shareholder to achieve tunnelling and propping transactions is the other blockholders (i.e., other shareholders). The results above show no significant effect of the \textit{BLOCKHOLD} variable on RPTs. Hence, $H3$ is rejected.

6. CONCLUSION

Prior literature has been concerned with understanding factors that drive the phenomenon of secondary agency problem through the practice of using RPTs for tunnelling and propping (which advantages the controlling shareholder and disadvantages the minority shareholders), has focused on financial and voting control conditions that motivate controlling shareholders. It has not addressed the socio-cultural conditions that make directors and top executives conducive to enabling the execution of tunnelling and propping practices. This study has sought to address this gap in the literature. It invokes by using theories of transitional markets, agency bonding, and cultural \textit{guanxi} to explain what facilitates prejudicial RPTs through the firm's governance mechanisms. The results discussed above give considerable support to the addition of such a socio-cultural perspective to any study of tunnelling and propping.

The use of Nee's (1989) transitional market theory has been applied in this study for the first time at the corporate level. These findings have implications for corporate governance research concerning the principal-principal problem. Results support the use of this theory to explain the enabling influences on tunnelling and propping in the milieu of China's economy with remnants of perpetuated power and privilege. Traditional agency bonding mechanisms, such as aligning executive and director compensation with desired performance were found to be ineffective in addressing tunnelling and propping behaviour. This study also has practical implications. The existence of cadre entrepreneurs as controlling shareholders for non-state controlled firms or a key bureaucratic representative for state-controlled firms and the path dependency of the board chair on this form of controlling shareholder are two factors found to significantly positively affect prejudicial RPTs practices. Currently, the Code of Corporate Governance for Listed Companies in China, issued by the CSRC, contains clauses that are couched more as principles than specific requirements for protecting minority shareholders. For example, clause 19 states “The controlling shareholders owe a duty of good faith toward the listed company and other shareholders”; clause 23 states “The personnel of a listed company shall be independent from the controlling shareholder.” This study identifies the board chairs' length of appointment, internal progression through the company, and history of senior standing in the CPC as key factors in path dependency on the controlling shareholder. Such path dependency of the chair might be reduced if the CSRC implemented specific regulations that limit the period served by a board chair, restrict internal appointments to chair positions, and limit the appointment of people who have a history of being associated with the CPC as a senior official.

These path dependency factors tie to Nee's (1989) market transition theory which explains the ability of the new party regime to remain a strong force after transition from a command to a market economy. It is apparent that controlling shareholders in China, whether state-based or cadre entrepreneur-based, are historically entrenched in that country’s socio-cultural milieu in such a way that provides them with deep access to political and business networks. Consequently, while such behaviour is a central part of and strongly embedded in the Chinese socio-cultural milieu, attempts to tighten corporate governance requirements and the independence of the board chair may prove to be limited as a means of protecting minority shareholders' rights.

There are limitations to this study. First, the data is sampled from one year only. If suitable data across several years had been available, then panel regression analysis could have been conducted. This would overcome the problem in a cross-sectional analysis of bias caused by unobservable heterogeneity. Second, in modelling the relationships between the extent of tunnelling/propping and governance variables, endogeneity could be present. For example, a reverse causal relationship could exist between executives’ and directors’ shareholdings and the level of tunnelling/propping, if there is a private offering of shares to ‘insiders’ at a price below/above fair value.

Further research may be able to address these limitations, as would greater access to reliable data. The model in this study could be replicated using secondary data from a series of years. If the period of the Global Financial Crisis (2008-2009) was included, it could be treated as a dummy variable in the model. Further, the variables used in the models in this study could be extended or refined in future research. Finally, a future study could pursue cross-country comparative research using data from listed companies. Many emerging economies with a domestic stock exchange now require their listed companies to disclose RPTs under IFRSs and to adopt corporate governance guidelines. Such research would have relevance to international investors who would typically be a minority shareholder in various companies around the world.
REFERENCES


