A STUDY OF INTERLOCKING DIRECTORSHIPS AMONG MAINLAND CHINESE COMPANIES LISTED ON THE SGX

Margaret Tan*, Chu Keong Lee, Wai Chong Chan, Su Hauw Koh, Sugihardjo

Abstract

The objective of this paper is to understand the extent of inter-locking directorates among mainland Chinese companies listed on the Singapore Exchange (SGX). This study also seeks to understand if these mainland Chinese companies were different from those Chinese companies in Singapore in terms of the social network structure of its board of directors. It has been well known and indeed as part of the Chinese culture, the concept of quanxi or social networking is important. However, in the context of corporate governance, the concern is if too many directors are interlocked, will the concept of quanxi be counterproductive in the practice of attaining high standards of governance of the listed companies.

Keywords: social network analysis, interlocking directorships, Singapore Exchange, corporate governance

Introduction

The Singapore Stock Exchange (SGX) has been reaching out to potential companies overseas to list on its Exchange to fuel Singapore economic growth. So far it has been quite successful in doing so, for instance, foreign companies listed on SGX rose from 24.8 percent out of a total 584 listed companies as at June 2004, to 35.3 percent of the 722 listed companies as at June 2007 (SGX, 2004; SGX, 2007). As a result, as the number of foreign companies as a percentage of all Initial Public Offerings (IPOs) grew steadily from 25 percent in 2001 to 70 percent in 2007, the total market capitalisation of SGX has increased as well, thus, providing it the impetus to develop itself as a world-class equity exchange.

In particular, the growth of mainland Chinese companies listing in SGX had been phenomenal. In fact, as at June 2007, out of 722 companies listed on SGX, there were 255 (35 percent) foreign companies. And of the 255 foreign companies listed, 116 (45 percent) companies from China, 48 (19 percent) from Hong Kong, 47 (18 percent) from South East Asian countries, 17 (7 percent) from Taiwan, 16 (6 percent) from Asia Pacific countries, and 11 (4 percent) from the rest of the world. (SGX, 2007).

China, being the world’s most populous nation, is fast becoming an economic power-house, and with the buoyant Chinese economy, the numbers of Chinese companies seeking capital overseas have increased significantly. There were 32 China counters quoted in the SGX at end-2003, and due to the success of SGX’s outreach initiatives, the figure more than trebled to 106 in mid-2007. It is interesting to know that the number of mainland Chinese companies listed on SGX accounted for 12.6 percent at the end of June 2005 and it grew to 16.1 percent two years later. Indeed, in the past 3 years, the Chinese companies accounted for most of the foreign listings in SGX; and it accounted for 45 percent of total foreign listings or 14 percent of the total listings which in turn accounted for about 5 per cent of the market’s total capital (Wong, 2006). Perhaps the strong interest in SGX is a reflection of the Singapore reputation and strict financial regulations, and also of the marketing efforts of SGX and the bankers. In a way, the China Securities Regulatory Commission also plays a part in expediting the listing process by scrapping the “letter of no objection” (Loh, 2004). As more Chinese companies from China list in SGX, it is important to understand the extent of interlock among the mainland Chinese companies compared to that of the other companies. In this context, this research tries to understand the extent of the interlocking directorship of the Chinese companies listed on SGX.

However, SGX has been facing strong competitions from global exchanges as more overseas stock exchanges in Asia, Europe and America are also seeing the potential of these IPO companies. For example, Germany has attracted as many as 30 Chinese companies to list in their bourse (Reuters, 2006). Top Chinese companies like Sina and Baidu have opted to list on New York’s NASDAQ. Within Asia, Hong Kong Exchange has the advantage of listing major Chinese state-owned enterprises or red chip companies. In 2005, the Korea Exchange amended their Exchange regulatory policy to enable the listing of foreign companies, especially from
mainland China. In Malaysia, Bursa Malaysia made a special appeal to Chinese commodity companies as it sought to increase its mainland listings. The Exchange has also amended its rules in June 2006 to make it easier for foreign companies to list in Malaysia (Gu, 2007).

**Interlocking Directorship in Chinese companies**

Interlocking directorships simply states that when a director sits on the boards of more than one company, he or she is said to hold multiple directorships and the companies that he or she is a director in are said to have interlocking directorships. Pei (2004) found that interlocking directorships produce contradictory effects on a firm’s performance. On one hand, when there are directorate interlocks between companies in different business sectors, the companies in question benefit from their perspectives of the wider business environment. But when they serve to perpetuate the interest of an elite class or clan, these directors represent a substantial cost with little discernible benefit. Indeed, they would not be viewed in a positive light in terms of corporate governance where objectivity and transparency of decision makings should prevail. The deleterious impact of a dependence on relationships can most recently be seen in the fraud orchestrated by Allen Stanford and his Stanford International Bank.

The depth of networking among Chinese businesses is almost legendary. Weidenbaum & Hughes (1996) documented many instances of successful Chinese businesses in countries across Asia built out of family ties and guanxi. Oxfeld (1998) conducted fieldwork on the Hakkas in Calcutta and found very strong work or business and ethnic ties which centred on wealth acquisition. Social status is measured by the wealth that one accumulates, and strong mutual support among the businesses enabled the Hakkas in Calcutta to dominate the leather tanning industry. Serrie (1998) went on to list the more common ways that overseas Chinese build business ties, namely through organisations established along the following lines: kinship, surname, residence, origin and contractual.

Liu (2006) studied the Chinese entrepreneurs in Asia Pacific and noted the importance Chinese businesses place on guanxi or linkages or networking to secure business deals. However, evidence of such linkages can be interpreted by investigating the presence of interlocking company directorships between the respective companies. In fact, the interlocking directorship is considered a key contributor to successful business networking. Unlike the Western developed countries, which have established institutionalised legal systems which promote social trust among contracting parties, the Chinese social structure plays an important role in establishing companies ties and relationships. In addition, Chinese cultural values also play a pivotal role in the management and have demonstrated the centrality of kinship in the corporate world. Indeed, even in today’s context, Chinese listed companies still demonstrate that “familism” remains a key element in Chinese entrepreneurship.

In recent years, studies have found that there has been an increase in multiple directorships, especially from Chinese listed companies. Tan & Lee (2006) found that there are varying degrees of inter-locking directorships in Mainboard-listed companies in Singapore. In another study, Tan & Chiam (2007) found that 87.4 percent companies were interlocked and 14.7 percent of directors have multiple directorships. It concluded that directorship interlocks were widespread in the listed companies in Singapore. It appeared that there was a potential concentration of power in the “hands of a few”.

There are interesting perspectives to consider when studying the directorship interlocks. Western companies have a different view in interlocking directorships as compared to Chinese companies. While Western corporations shy away from having interlocked directors, Chinese ones still practice it. There is a need to strike a balance between corporate governance and interlocked directorships. Unlike in Western economies, corporate governance might be perceived as a barrier to the business growth as it is perceived as having various levels of conflicts of interest in multiple directorships; Chinese companies, however, will continue to build on the strength of and advantages afforded by the networks in interlocked directorships. It is also important to note that higher levels of interlocking directorships among companies can also be attributed to environmental factors such as government regulations and adverse economic climate as such an economic downturn tends to spur greater cooperation between companies (Hughes, et al., 1997).

**Corporate Governance**

SGX takes the practising of corporate governance seriously. For instance, an ex-Member of Parliament, who was a director in the boards of ten listed companies in Singapore, was fined for failing to publicly disclose his interests in another company when he was its CEO although there was no suggestion that the ex-CEO had benefited commercially from any transaction between the two companies (Quah, 2007). However, the case illustrated how the Singapore jurisdictions have maintained corporate governance standards and required company directors – whose compensation packages, if not consequential – to adhere to the high standards required of their conduct as a trusted member of companies’ board. Not only must they avoid taking advantage of their privileged positions, they are expected to publicly disclose all potential sources of conflicts or shun them altogether.
It is interesting to observe that even worldwide, such enforcements, among others, have resulted in the decreasing instances of directors holding multiple directorships and company interlocks. This development was illustrated by Roy, et al (2004) in their studies of New Zealand listed public companies. Roy et al (ibid) found that company and directorship interlocks, as well as average board size, had decreased since 1984. While they attributed the observed decreases to the rise in incidences of corporate insolvencies and bankruptcies, there was also a growing awareness of corporate governance issues during the period in question. If the level of potential interlocks between companies was used to measure the significant of a network of corporate power, the study showed conclusively that such power had declined significantly in New Zealand. Potential interlocks had decreased because of falling board sizes and a reduced number of directorships held by each director.

Non & Franses (2007) offered another reason why companies may wish to avoid interlocking directorships. In their study of 101 listed companies in The Netherlands from 1994 to 2004, with data collected on the stock returns, such as the price-earnings ratios and the price-to-book ratios, the returns on assets and the returns on equity, it was found that the firms’ performance actually deteriorated with the increase in directorship interlocks. Indeed, they found that corporate interlocks had a negative effect on the companies’ profitability, albeit with a little time lag. They attributed the effect to the fact that directors serving on multiple boards had time constraints to devote to each company considering the number of board they had to serve. Also, they found that interlocking directorships tended to serve in boards which were more homogeneous with little diversity among their directors. Thus with a homogenous upper class of directors, they tended to perform less well in decision making, as they strived for unanimity and often suffer from a reduction in independent critical thinking. In other words, lack of heterogeneity among a company’s directors can inhibit the boards’ ability to deal with the diverse range of issues that a company faces in today’s complex business environment. This corroborates with Florida and Gates’ (2001) findings of the link between diversity and growth.

In this context, the objective of this research is to understand the extent of the interlocking directorship of the Chinese companies from China that were listed on SGX and to shed some light on how closely these companies are inter-linked with each other.

**Method**

UCINET and NetDraw were used to analyse the datasets and to generate the SNA sociograms to reveal directors interlocks and companies linkages. The datasets consisting of names of directors and companies were obtained from SGX websites at: http://www.sgx.com/chinese/listed_companies/Listed_Market_Summary.shtml. Prospectuses (mostly in Adobe’s Portable Document Format) of the companies were also downloaded.

We analysed 80 Chinese companies (from China) and 80 non-Chinese companies (local) that were recently listed on SGX. The size of datasets was critical as it had to be large enough to show up significant linkages between companies and yet not too large as to become unmanageable. In this context, we chose only the most recently listed 160 companies.

For data consistency and comparative purposes, the periods of the Initial Public Offers (IPOs) were as close as possible to each other. For the Chinese companies, the closing dates of their IPOs ranged between September 2004 and August 2007, while for the non-Chinese companies, the dates range was from January 2005 to July 2007. While we could have chosen to extract the most up-to-date listings of directors of each company for comparison, we had instead opted for their public offering prospectuses. This is because the objective of the study is to focus on the ‘linkages’ or guanxi of the directors or companies at the time the Chinese companies were listed in Singapore.

It was interesting to note that many of these listed Chinese companies were incorporated in Bermuda. So we set the following criteria to determine the identification of the Chinese companies: first, the principal nature of the business has to be in China; and second, major shareholders have to come from China. After establishing the list of companies to be studied, we performed data priming which involved data cleaning to prepare it for analyses.

Two files were created, one for the Chinese companies and the other for the non-Chinese companies. Company name and directors’ names were extracted, and in order to be consistent with the input data, the following criteria were used:

1. Real Estate Investment Trusts (REITs) and other related funds were excluded
2. The Directors’ honorifics (example Dr, Prof, Dato, Mr, etc) were removed
3. Anglo-Saxon names were appended behind the Chinese name
4. All alias “@” names were removed after checking that these directors are not known by the alias name in another company (e.g. “Seah Kian Wee @ Seah Kian Hua” was changed simply to “Seah Kian Wee”)

The data were formatted in accordance to the UCINET data format for analysis. We performed affiliations between companies-to-companies and directors-to-directors for both Chinese and non-Chinese companies. To show the representation of the affiliations in the visual representation, we used NetDraw to generate the visual social network.
representation. Figure 1 shows the visual social network representation of the Chinese companies.

**Figure 1.** The visual representation of the Social Network

**Analyses and Findings**

Table 1 show that the average directorship for Chinese vs Non-Chinese companies was 6.55 and 7.07 respectively. The difference of 0.525 was not significant.

<table>
<thead>
<tr>
<th>Dataset</th>
<th>No. of companies</th>
<th>No. of directorships</th>
<th>No. of directors per company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese</td>
<td>80</td>
<td>456</td>
<td>6.55</td>
</tr>
<tr>
<td>Non-Chinese</td>
<td>80</td>
<td>539</td>
<td>7.07</td>
</tr>
</tbody>
</table>

**Table 1.** Elements found in the respective datasets

Among the directors in the Chinese companies, we found four directors who held directorships in 4 companies (Chan Wai Meng, Lai Seng Kwoon, Lien Kait Long and Seah Kian Wee). Among the Non-Chinese companies, only director who held 4 directorships was Lim Siang Kai.

Figure 2 shows the linkages among the companies. While the Non-Chinese companies showed that most companies’ directors were distinct from other companies, the same cannot be said for the Chinese companies. It is not surprising to note the size of the Chinese companies where the largest component seemed to almost envelope the other components. The results showed that the largest component comprised 233 directors out of the total of 456, i.e. 51.1 percent of the total.

Next, we analysed the companies-to-companies sociograms. The results showed that the networks of Chinese companies were very fragmented compared to those of the non-Chinese companies. While the networks of Chinese companies were dominated by its largest component which comprised 44 companies, which was more than half the total 80 for the whole dataset, the networks of the non-Chinese companies had no network that dominated (Figure 3). The largest component in the non-Chinese companies’ sociogram was a relatively simple sub-graph comprising six companies (circled in Figure 3).

In contrast, the inter-company linkages in the largest component of the Chinese companies’ sociogram were rather intricate with the longest geodesic distance registered at 13, merely 31.7 percent of the maximum possible geodesic distance for a 44-node component. See Figure 4.
The next three largest components in the Chinese companies sociogram were of sizes 7, 6 and 5 respectively, while the Non-Chinese companies sociogram’s largest component comprised only 6 company nodes and it did not have any component of size 5. (See Table 3)
Component size Chinese Non-Chinese
44 1 -
7 1 -
6 1 1
4 1 2
3 1 5
2 4 5
1 (Isolates) 10 41
Total 18 54

Table 3. Number of components and their respective sizes in each sociogram

In both sociograms, the isolates (components of size 1) represent companies whose directors do not sit in boards of any other company in the respective datasets. For the non-Chinese companies, the number of non-interlocked companies was 41, while the number of Chinese companies was only 10. Company-to-company sociograms with a component size larger than 1 were said to be interlocked, and Table 4 summarised the number of companies that were interlocked. While 48.7 percent of the non-Chinese companies were interlocked, 87.5 percent of the Chinese companies were found to be so.

<table>
<thead>
<tr>
<th>Component size</th>
<th>Chinese</th>
<th>Non-Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of company isolates</td>
<td>10</td>
<td>41</td>
</tr>
<tr>
<td>No. of company interlocks</td>
<td>70</td>
<td>39</td>
</tr>
<tr>
<td>% of company interlocks</td>
<td>87.50</td>
<td>48.75</td>
</tr>
</tbody>
</table>

Table 4. Number and percentage of company interlocks

The analysis also showed that cliques of size 3 and above further augmented the findings. Not only did we find more cliques of size 3 among the Chinese companies, but cliques of larger size were also found. There were 16 cliques found among the 80 Chinese companies, of which 3 were of size 4, compared to the corresponding size of 1 each for the non-Chinese companies as shown in Table 5.

<table>
<thead>
<tr>
<th>Clique sizes</th>
<th>Chinese</th>
<th>Non-Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of company isolates</td>
<td>10</td>
<td>41</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 5. Number of cliques of size 3 and above in each sociogram

Normally, with such small datasets of only 80 nodes each, cliques are few and far between. The high incidence of cliques among Chinese companies, going against the spirit and principles of corporate governance movements, is indicative of the high levels of their inter-company linkages, whereas the much fewer cliques found among the non-Chinese companies is more in line with good corporate governance. To identify the key nodes in the sociograms, Freeman’s Degree Centrality and Freeman’s Betweenness Centrality were computed for each node. In both measures of centrality, the key players in the Chinese companies scored significantly higher than their counterparts in the non-Chinese companies. This indicated that the directors in the Chinese companies wielded much higher power and social influence than their counterparts in the non-Chinese companies. Table 6 lists the two highest Freeman’s Degree Centrality scoring nodes in each of the four sociograms. Notably, the 22 directors of ThaiBev obtained a high score of 21 because ThaiBev had the highest number of directors among all the companies being studied, not because of any interlocking directorships among the ThaiBev directors.

<table>
<thead>
<tr>
<th>Chinese</th>
<th>Non-Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Node Degree</td>
<td>Node Degree</td>
</tr>
<tr>
<td>ISDN Holdings</td>
<td>4</td>
</tr>
<tr>
<td>China Print Power Group Limited</td>
<td>4</td>
</tr>
<tr>
<td>Lim Siang Kai</td>
<td>24</td>
</tr>
<tr>
<td>ThaiBev directors</td>
<td>21</td>
</tr>
</tbody>
</table>

Table 6. Highest Freeman Degree Centrality nodes in each sociogram

Table 7 lists the two highest Freeman’s Betweenness Centrality scoring nodes in each of the four sociograms. The Directors in non-Chinese companies were very fragmented that there was no betweenness centrality measure to be found.

<table>
<thead>
<tr>
<th>Chinese</th>
<th>Non-Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Node Degree</td>
<td>Node Degree</td>
</tr>
<tr>
<td>ISDN Holdings</td>
<td>476.5</td>
</tr>
<tr>
<td>China Print Power Group Limited</td>
<td>471.5</td>
</tr>
<tr>
<td>Teo Moh Gin</td>
<td>14,586</td>
</tr>
<tr>
<td>Teo Yi-Dar</td>
<td>12,686</td>
</tr>
</tbody>
</table>

Table 7. Highest Freeman Betweenness Centrality nodes in each sociogram
Conclusion

The decision by Chinese companies to venture abroad in search of capital to fund their business expansion plans is certainly a growing phenomenon. Therefore it helps to understand their organisational cultural context in terms of their peer companies who are also taking similar strategies. Studies by Liu (2006) and Hughes, et al. (1977) have both suggested that Chinese firms listed on SGX would yield high levels of directorate interlocks. Our findings also confirmed that there is a greater degree of linkages among Chinese companies listed on SGX when compared against other Chinese companies listed at the same time-frame. Indeed, the Chinese companies listed on SGX have a strong social networking with high interlocked directorships.

Although there is a growing global concern regarding corporate governance among listed companies for the potential for conflict of interest arising from directors with multiple directorships, and despite the emphasis placed on corporate governance by the Monetary Authority of Singapore (MAS) discouraging multiple directorships among listed companies, it appears that the interlocked directorships in the Chinese companies have proven effective in moving Chinese companies aboard and maintaining a closely knitted network. In fact, SGX CEO, Hsieh Fu Hua, personally delivered a keynote address (Hsieh, 2005) at a seminar organised to raise awareness of corporate governance among the Chinese directors and to emphasise the importance of diversity to high-achieving people. According to Hsieh, the need for more wide-ranging opportunities to invest "beyond" Asia has not been fulfilled by the recent company settlement in their new status as publicly listed companies.

It had been perceived that the interlocked directors in the Chinese listed companies played a pivotal role in harnessing their guanxi in attracting more Chinese companies for listing especially in Singapore. However, it would be interesting to see if the directorate linkages we found in this paper persist over time. As this study only examined the most recently-listed companies, we are not able to see whether over time the highly-linked Chinese companies will become fragmented. We suggest conducting another study in three to five years time with the same companies to see if the interlocking directorships remain as extensive as now, or will the companies attain a higher standard of corporate governance by reducing the extent of interlock.

However, going forward, as the Chinese companies settle down in their new status as publicly listed companies, the need for more wide-ranging experience and skills in independent directors will grow in importance (Pease & McMillan, 1993). And this may likely to negatively impact the renewal of directors who were appointed for their guanxi in helping the company get listed on a foreign stock exchange.

References