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# An Institutional Analysis of Market Transition and Political Capital

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**Key Words:** Market Transition Theory, Chinese Industries, Political Capital, Institutions

## **LIST OF ABBREVIATIONS**

|       |   |
|-------|---|
| MTT   | Market Transition Theory                          |
| SOE   | State-owned Enterprises                           |
| CCP   | Communist Party of China                          |
| NPC   | National People's Congress                        |
| TVE   | Township Village Enterprises                      |
| SEZ   | Special Economic Zones                            |
| SME   | Small Medium Enterprises                          |
| ICS   | World Bank Investment Climate Survey 2003 China   |
| RRT   | Ramsey RESET Test                                 |
| PRC   | People's Republic of China                        |
| TCM   | Traditional Chinese Medicine                      |
| IP    | Intellectual Property                             |
| R&D   | Research and Development                          |
| SAMI  | State Administration of Metallurgical Industry    |
| PRC   | People's Republic of China                        |
| SMHC  | Shanghai Metallurgical Holding Company            |
| WTO   | World Trade Organization                          |
| CNGA  | China National Garment Association                |
| MEI   | Ministry of Electronics Industry                  |
| SSTC  | State Science and Technology Commission           |
| CICPA | Chinese Institute of Certified Public Accountants |

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# 1 INTRODUCTION

## 1.1 Background

The development of the market economy in China has unleashed a confluence of political and economic forces bearing down upon existing systems of incentives and institutional structures governing the behavior of individuals and organizations. In his 1989 seminal paper and subsequent publications, Victor Nee developed the market transition theory (MTT) to describe these forces and theorized on the causal mechanisms of the changes in the incentives for economic agents, patterns of earnings differentiation, returns to education and the valuation of political capital. There is a substantial amount of literature supporting and contesting the different hypotheses of MTT (Gerber, 2002; Gerber and Hout, 1998; Parish and Michelson, 1996; Szelényi and Kostello, 1996; Walder, 1995, 1996, 2000, 2002, 2003; Nee 1989, 1996; Nee and Cao, 1999, 2004; Bian and Logan, 1996; Rona-tas, 1994; Xie and Hannum, 1996; Zhou, 2000a).

One of the most contentious issues of this market transition debate is whether the departure from communism has led to the relative decline in the value of political connections. China's transition to a socialist-market economy has progressed at different levels, varying across industries and sectors, due to partial reform measures as shaped by the events of its transition and liberalization making the resolution of this issue far from straightforward.

## 1.2 Aims and Research Questions

This paper, then, aims to test Nee's hypothesis on political capital using the *World Bank Investment Climate Survey for China in 2003* (ICS) dataset and run regressions to examine the valuation of political capital in 14 of China's service and manufacturing industries. More than the ownership type, which previous studies have focused on as their basis for testing, industries tend to exhibit a pattern of regulation, state involvement and the institutional environment that make it ideal for empirical examination.

Furthermore, this paper aims to show that the valuation of political capital can be determined by the degree of institutional efficiency of a marketized industry, in an effort to help explain the seemingly contradictory findings of some scholars on the valuation of political capital. This paper will argue, to this end, that deficiencies in China's institutional environment have led entrepreneurs to continue to put a premium on political connections and to attempt to convert their commercial clout into political capital by becoming a member of the Communist Party. This part of the paper will draw on the findings of Li, Meng and Zhang in their 2006 article "Why do entrepreneurs enter politics? Evidence from China". In sum this study will address the following questions:

- How is political capital valued in specific service and manufacturing industries represented in the dataset used in this study?
- What are the institutional factors that determine this valuation?
- How has these institutional factors been shaped by China's post-socialist transition?

The research questions will be developed throughout the analytical framework and the answers to which will be theoretically and empirically derived.

### *1.3 Method and Material*

In order to test MTT's contingent theory on political capital an analytical framework that draws on significant MTT literature (Gerber, 2002; Gerber and Hout, 1998; Parish and Michelson, 1996; Szelényi and Kostello, 1996; Walder, 1995, 1996, 2000, 2002, 2003; Nee 1989, 1996; Nee and Cao, 1999, 2004; Bian and Logan, 1996; Rona-tas, 1994; Xie and Hannum, 1996; Zhou, 2000a) and specific industry information, will be developed. The framework will distill the MTT debate to focus on the issue surrounding political capital and provide the arguments and background to support the empirical testing using the ICS dataset. The ICS will also be used to construct some key institutional indices to formulate a picture of the institutional environment in which these 14 industries operate within. This analysis will be juxtaposed against the valuation of political capital in each

industry derived from the OLS regression results. This matching method might help explain the different conclusions academics have arrived at in resolving whether or not political capital has been devalued in the marketized environment.

#### *1.4 Limitations*

This essay does not intend to construct a corollary theory to MTT because testing is limited to China so that any conclusions arrived at here may or may not apply to other transition economies. This, however, does not mean that no general insights can be made on market transition and political capital. This study departs from the MTT debate that discusses whether markets or the state best determine the valuation of political capital in a transition economy. In fact, this study assumes a political economy approach as it is and has always been accommodated within the MTT construct. The analytical framework of this study builds on MTT and institutional literature specific to China. There are various ways of interpreting the data gathered and the phenomenon described here. But that this paper subscribes to the MTT paradigm, interpretation of results might be self-contained.

The quality of industry information in this study varies. Some industries have been analyzed better than others and have numerous published accounts of its transition and some, do not. However, I perceive this as indicative of the progress of marketization of the industry. For example, industries like garments and food processing industry have official websites on different aspects of their industrial transformation which could be a sign of maturity of the industry and the level of its liberalization. Furthermore, the study is full of secondary data and the dataset itself is dated to 2003 whilst many changes have been taking place in China with respect to its industries, politics and institutions.

## 2 THEORETICAL FRAMEWORK

### 2.1 *Market Transition Debate*

There are mainly two competing paradigms in analyzing the impact of China's transition to a market economy: MTT (Nee, 1989, 1992, 1999; Nee and Lian, 1994) and the state-centric approach (Walder, 1995, 2000, 2003). Market transition theory posits that the emergent market economy is chiefly responsible for necessarily altering China's institutional structures of incentives and organizations, shifting earnings stratification, increasing returns on human capital, and devaluing political capital. The theory advances three core arguments about the nature of institutional change to support this:

- State sponsored institutional changes geared towards economic reform are implemented by the state and the progress of which, are determined by the competing interests of political and economic actors.
- As the economy approaches marketization, political capital is relatively devalued which brings about a decline of the advantages of the political elite.
- Institutional change that uses of market mechanisms alter the structure of incentives by changing the informal and formal rules of property rights, expanding pay-offs to market oriented performance for economic agents and firms which raises the value of human capital (Nee, 2000).

However, some argue unequivocally that market allocation per se has no clear implication for elite advantage (Gerber 2002; Parish and Michelson 1996; Szélenyi and Kostello 1996; Walder 1996). And instead advocate a state-centric approach in explaining institutional change. According to this view, the state solely determines the opportunities of elites. The extent of regime change and asset appropriation, determines elite opportunities and the manner of asset appropriation is determined by the economic strategy of the regime. The premise of Walder is that regime change has not been extensive in China so that opportunities for the elite are still apparent. However, this is not necessarily true. Firstly, Walder's definition of regime change is vague. This makes it



difficult to quantify regime change so as to determine its effects. But even beyond semantics, while there have been no nominal regime change in China, there has been a clear changing of the guards within the Party. A younger, more educated and reform-minded generation of cadres have assumed their places within Party ranks and have taken up the market economy flagship because they can no longer ignore the organic spread of market-like transactions between economic agents. Regime change then, doesn't seem to be necessarily dramatic and extensive (i.e. overthrowing existing government and changing political system) and market forces seem to be altering the incentives of politicians so as to take up market reforms for implementation (Nee and Lian, 1994).

Furthermore, the claim that the shift to markets has no consequences for the allocation of power and income is refuted by the rise of rich new entrepreneurs that did not become so from political connections. MTT has highlighted the role of markets but from the very beginning (Nee, 1989), it was a political economy approach included in its discourse that was used to explain the impact of China's departure from a planned economy. The discussion on partial reform and hybridization qualifies the claim of the relative decline of political capital even further.

The most contested issue in the MTT debate is the contingent prediction of the theory on whether or not political capital has been devalued in the transition economy. Political capital in this discussion will be measured in credentials and connections. According to Nee, market reform devalues political capital and increases returns on education and entrepreneurship (Nee 1996; Nee and Cao 1999) in relative terms.

Critics of this proposition have documented the ability of cadres to adeptly convert their positional power in the new economy and the persistence of the premium placed on political capital, official power and privilege (Bian and Logan 1996; Rona-tas 1994; Gerber 2002; Gerber and Hout 1998; Houser and Xie forthcoming; Walder 2002; Xie and Hannum 1996; Zhou 2000). Cross-sectional data and time series data have demonstrated that structural and institutional features of economies cause elite advantages outside the scope of market forces (Gerber 2002; Gerber and Hout 1998; Parish and Michelson 1996; Walder 2002; Xie and Hannum 1996; Zhou 2000a).

However, Nee has responded to these refutations and continuously shown that the findings of some scholars are either misinterpreted or wrong. The MTT has always been an elegant theory that took pains to qualify its predictions, which are qualified on certain site conditions such as for example the degree of marketization that some of those opposed to the MTT seem to overlook often. Furthermore, the theory had never ruled out an independent causal mechanism of the state in changing the structure of incentives but only that market forces were the main driving force behind the institutional change.

The next section is a discussion on political capital, the commodity in question and how it is generated and converted in the post-WTO accession economy.

## *2.2 Political Capital*

Political capital are rent-generating advantages sold by public officials and politicians to private firms that need to circumvent institutional impediments such as a weak legal system, lack of access to formal credit and onerous regulatory and tax burdens (Hellman, Jones and Kaufmann, 2003). Although the involvement of the state has been significantly reduced since the planned economy era, the use of political capital persists. Does this mean political capital has not been devalued? Marketization has devalued political capital in relative terms just as the MTT predicted. The rise of new and wealthy non-state entrepreneurs (Li, Meng and Zhang, 2006) is a testament of the transfer of relative market power from political elites to economic agents. Cadres, while still enjoying the ability to “sell” permits to regulation compliance seekers and is able to capture rents due to the partial reform environment, has not been able to prevent this transfer. These economic opportunities and entrepreneurial activities is also available to cadres and is not as limiting as rent-seeking activities in its income generating prospects

There will always be a certain degree of politicization of the economic life of private firms so there were always be opportunities to extract rent. Politicians exercise control rights over private businesses. These rights include regulatory powers over firm activities, the ability to restrict entry with the granting of the business license, control the

use of land and real estate that private businesses occupy, determine and collect taxes on businesses, the right to inspect firms with regard to their compliance with rules and standards, control over international trade and foreign exchange transactions and in some cases, even the power to set prices or even expropriation (Johnson, Kaufmann, Shleifer, Goldman and Weitzman, 1997). Politicians use these rights for their self-interest, using it to enrich themselves by offering firms relief from regulation in exchange for bribes or gifts. Firms expend political capital to make this transaction with the politician because it helps the firm capture market gains. In extreme cases, political control reduces the profitability of doing business by taking away potential profits from firms through regulation (red tape), taxation, and corruption. In short, because of the high degree of control, private businesses cannot fully rely on the markets to secure resources. Political capital becomes a very useful tool in redirecting these resources to the firm.

The degree of the usefulness of political capital depends on the extent of the regulation, how privatized an industry is and how much power from the government is ceded to market-supporting institutions, e.g. legal structures, to regulate the market. In turn, the degree of privatization and regulation depends on how valuable the industry the Party perceives it to be. For example, heavy industries such as metallurgy have historically been seen as a matter of national interest so privatization has been very slow in this area. Factor markets such as steel are tightly controlled by the government.<sup>1</sup> Political capital has a high tendency to be very valuable in restricted markets. In order to overcome entry barriers alone, such as getting permits to operate, it will be important how deep the political connections of a firm goes.

Successful entrepreneurs in China are responding aggressively to overcome these barriers. Instead of kowtowing to political officials to have enough political capital to maneuver the institutional impediments it faces, some are actually joining the Chinese People's Political Consultative Conference (CPPCC) and the People's Congress (PC) in order to capture direct political capital and to overcome the lack of well-functioning market-supporting institutions. Membership in the PC or the CPPCC is advantageous to private entrepreneurs because it not only gives them some measure of political power but

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<sup>1</sup> See section 2.4.11 for a deeper discussion on the Metallurgical industry.

also makes it easier for them to cultivate ties with important governmental bureaucrats. Chinese private entrepreneurs who join the PC and the CPPCC can obtain resources not accessible in the market, circumvent regulations, redirect resources their way, secure tax deductions and obtain legal or non-legal protection for their businesses. To understand the process by which this happens, a brief description on the functions of the PC and the CPPCC is necessary.

The PC is China's legislature, the highest organ of state power in China. Local PCs have the autonomy to elect officials at their own administrative levels, to draft and enact local laws and to impeach government officials. The National PC's main functions and powers include making laws and policies and electing top government officials to the central government. The CPPCC plays an advisory role to the Party. The main functions of the CPPCC are to be consultants to different government bodies and to provide a supervisory role to government officials. Consultation with the CPPCC is held on major political, economic, cultural and social policies before implementation. And in 2002, the Party passed a law allowing private entrepreneurs to join these two governmental bodies, the PC and the CPPCC.

Li, Meng and Zhang examined the determinants of the political participation of these entrepreneurs. Their findings are that the probability of entrepreneurs entering politics decreases by 8-20% from the mean when the institutional indices improve by one standard deviation. This implies that political capital is sought after in an environment characterized with weak market-supporting institutions. This important finding potentially clarifies why some industries, with different levels of institutional development, might value political capital and others might not; an observation not completely unrelated to Nee's (1992) exposition of the idea of partial reform. The institutional indices constructed for Li, Meng and Zhang's study are on the legal structures, access to formal credit, contract enforcement, regulatory environment, etc.<sup>2</sup> They also find that not just any institutions matter in this determination but market

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<sup>2</sup> Market-supporting institutional indicators are constructed for this study using the ICS dataset. See section 2.3 for a full discussion.

supporting institutions are the most crucial in incentivizing entrepreneurs to join the CPPCC and the PC.

According to the authors, a private firm owner and a member of the CPPCC Zhejiang Provincial Committee successfully introduced proposals for simplifying the authorization procedures for private projects, appeals for non-discriminatory treatment in extending credit, and legal protection of the property rights of private businesses. This is an example of the kind of returns involved when becoming a Party member.

The fact that entrepreneurs are entering the Party demonstrates two things: firstly, that the market has empowered and enriched new non-state entrepreneurs who did not derive political capital from the planned economy and have gained commercial clout from entrepreneurship. This corroborates the MTT claim that a relative measure of elite advantage declines and is transferred to non-state actors as economic coordination increases; and secondly, these rich entrepreneurs want to convert their commercial clout into political capital, a commodity that has not been completely devalued in the face of weak market-supporting institutions.

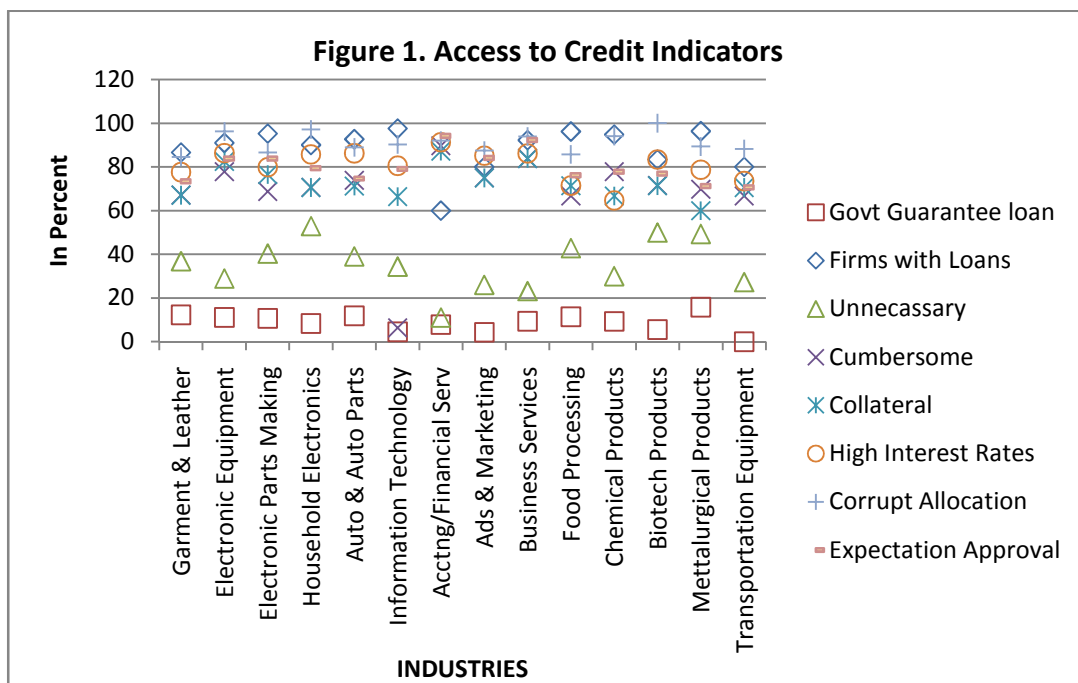
The level of development of market-supporting institutions can explain a lot of the differences in the valuation of political capital. The next section is a discussion on the current state of these institutions in China and its effects on businesses.

### *2.3 Market-supporting Institutions*

While there has been progress in market reforms overall, market supporting institutional impediments persists. Financial markets in China are still underdeveloped despite WTO arrangements to open up its financial markets in December of 2006. A healthy financial market is vital for firm development. It frees up firms from financial constraints, allowing firms short of internal funds to expand beyond their own capacity (Dollar, Hallward-Driemeier, Shi, Wallsten, Wang, and Xu, 2003).

Small and medium enterprises (SMEs), which make up the bulk of the manufacturing and service industry, have been marginalized from the formal loan market. They have been

forced to borrow from the informal financial markets and are paying higher interest rates in the process. Figure 1 shows that between 60 to 80% of firms belonging to the 14 industries represented in the study, consider the interests to be too high, find the loan process to be cumbersome, the required collateral to be too high, does not expect to be approved for the loan and the process of loan allocation corrupt. And since most of the firms surveyed in the dataset are SMEs, government guaranteed loans are only available in small amounts. Somewhat surprising are the percentage of firms that have loans well above 80% across industries except for the Accounting industry.<sup>3</sup> However, it is worth noting that for this question, a lot firms elected not to answer and were considered as missing values in the dataset.



The efficiency of the market for bank loans are also limited by the domination of public-sector banks, which have systematically, favored state enterprises at the expense of private firms (Lindbeck, 2006). Bank credit tends to be granted to SOEs because of the dual roles of a commercial and a policy institution that banks must play. Bank lending in China have been plagued with non-performing (paying neither interest rates nor

<sup>3</sup> In the ICS dataset, Section L. Finance, firms were asked whether they have a loan from a bank or a financial institution.

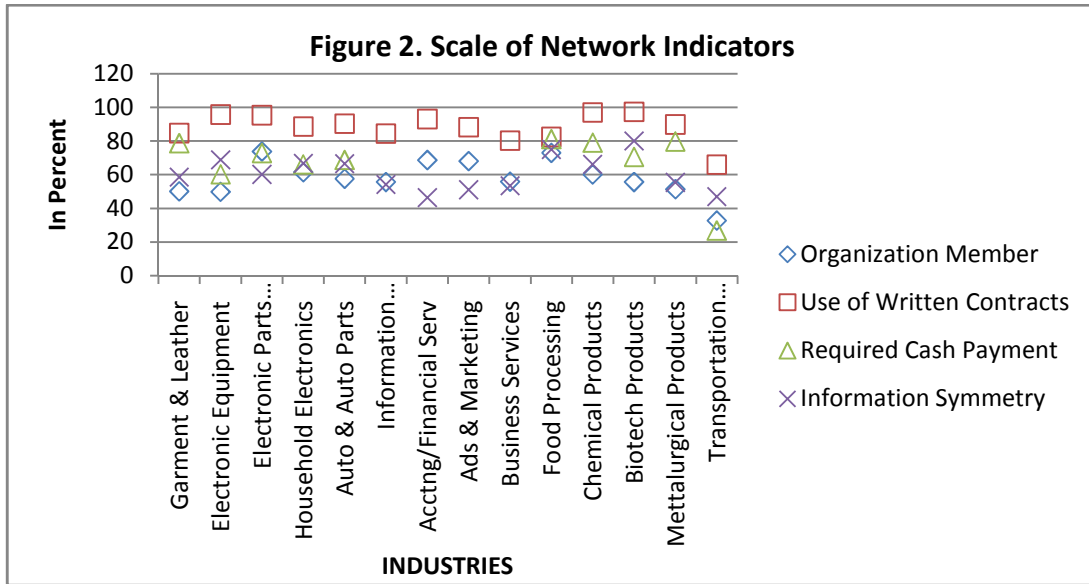
amortization) loans. Furthermore, the government, using banks as a policy tool, has a soft-budget constraint (Kornai, 1989) meaning banks are expected to bail out failing SOE's and in turn bank managers typically expect the authorities to bail them out in the event of severe financial difficulties nullifying the incentive to improve firm efficiency.

Another fundamental institutional feature of the economic environment in which industries in China must operate in is the over-reliance on informal networks, sometimes used to substitute for "the rule of law". Chinese businesses refer to this informal network as *guanxi*. Transactive relationships are founded on social norms of cooperation rooted in traditional kinship and community institutions (Allen, Qian and Qian, 2006). Businesses often become members of industry organizations to forge relationships with similar firms and other industry players. In the absence of market supporting institutions like a legal framework, organizations can help establish best practices for firm conduct within an industry such as managing predatory pricing that can undercut a competitor's profit level and membership in that organization help protect firms from market distorting practices. As shown in Figure 2, most industries, more than 40% of firms are indeed members of an organization. The transportation industry seems to be the outlier with only a little more than 20% engaging in membership. The reason for this could be that most transportation firms are government owned and therefore have access to the state bureaucracy in upholding its contracts.

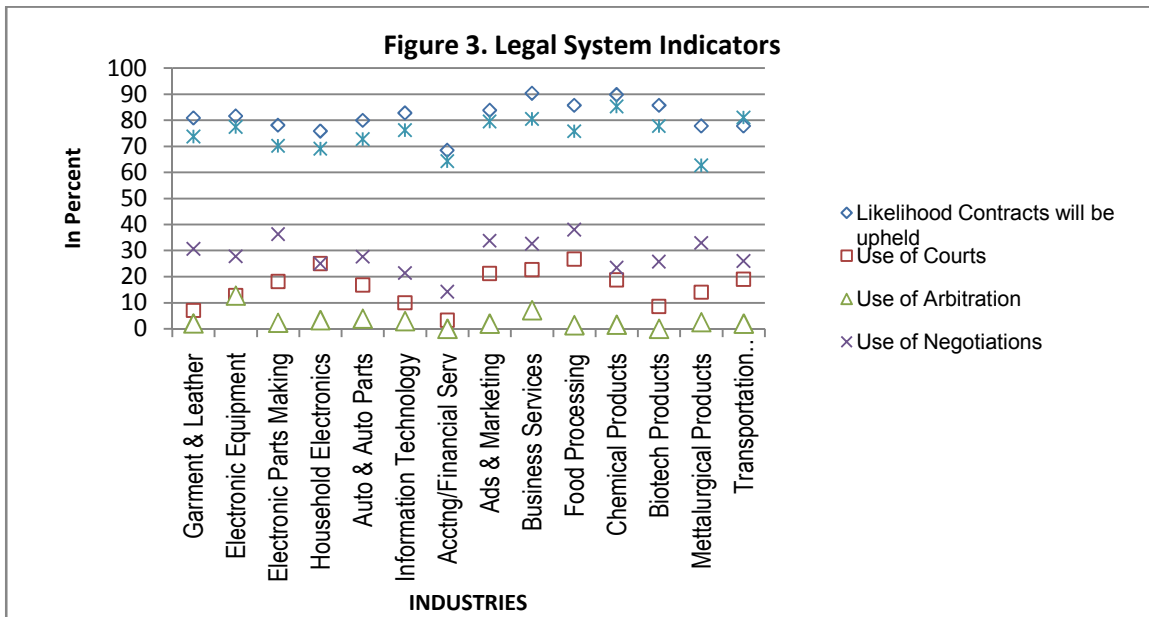
Membership with an organization can also reduce the cost of acquiring information for firms regarding things like trustworthy suppliers and clients that will fulfill contracts faithfully. With a weak legal framework that does not necessarily uphold contracts, this information becomes especially valuable to the firm. Figure 2 shows that between 40 to 80% have a large enough network that they will get wind of client deception with other firms.<sup>4</sup> Networks extends to close ties with local officials and is a form of political capital especially valued by firms that operate within an economic system characterized with numerous institutional impediments such as the ones described above.

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<sup>4</sup> In the ICS questionnaire, Section E. Relations with clients, question E11. Asks if on your main clients deceives another firm (for example it does not pay even with ability), would you find out?



The percentage cash payment is also a good indication of the scale of networks and the implications on the strength of the legal framework in an industry. Firms that pay on cash basis do not need to establish a credit system because their economic network is too small that it might be more efficient to pay on cash basis. But even more importantly, cash payments are a guaranteed means of transaction. Without a strong legal system that can enforce written contracts and agreed upon amounts of payment, cash payment basis becomes a necessary transactive tool. Between 60 to 80% of firms in most industries get

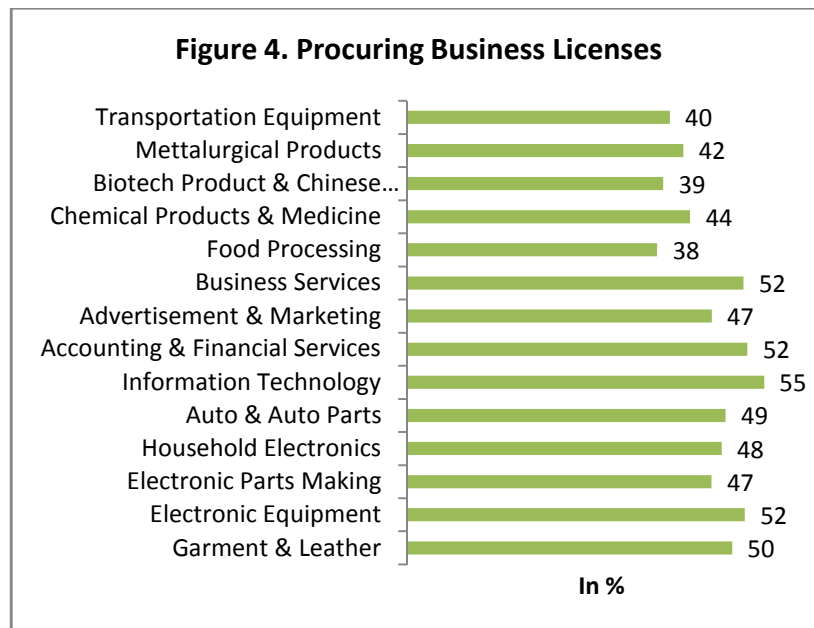




and require cash payments even if 80% percent of firms in most industries use written contracts. The transportation industry is again the outlier with only 20% of its firms requiring cash payments. This might be because the industry products are very expensive and unlikely to be bought on a cash basis.

Without a mature legal system that can enforce legal contracts, informal networks serve to guarantee credibility of transactions, act as channels for informal lending institutions and are routinely utilized to traffic information on the creditworthiness of firms.

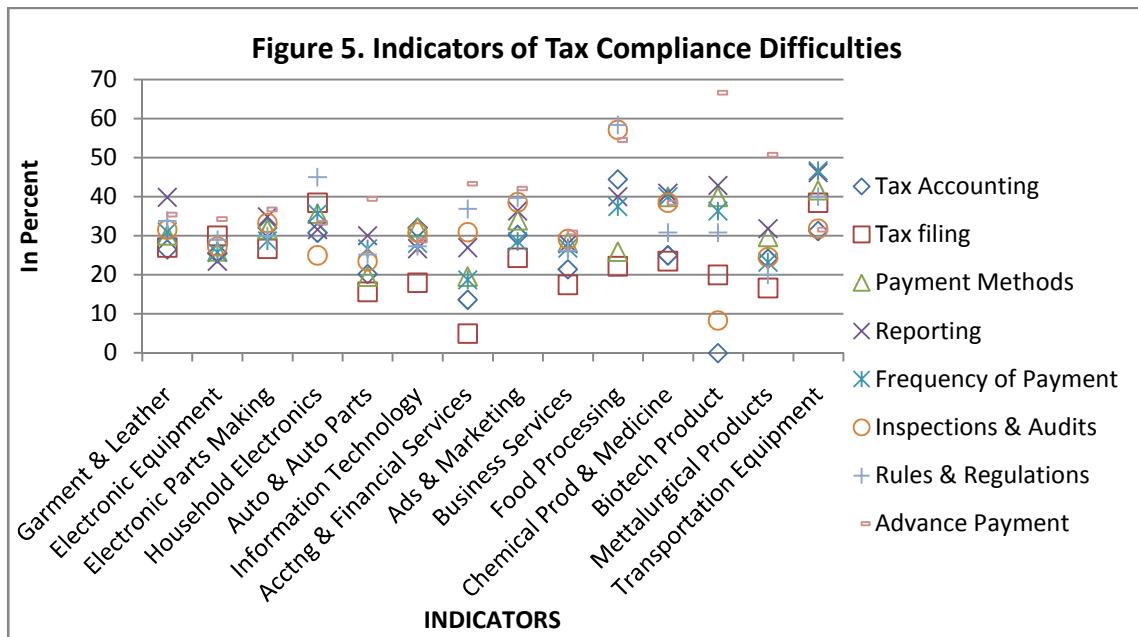
The indicators for the legal system seem a little strange. 80% of firms across industries expect their written contracts to be upheld by the legal system and yet only between 0 to 30% of firms insist on getting their day in court. Most industries don't even use third-party arbitration and instead use negotiations to settle disputes with renegeing clients. The seeming anomaly in the answer might be explained by the fact that firms are cautious in being perceived to be criticizing the government in any way. The incentive to answer that contracts have an unlikelihood of being upheld is very low and might even be damaging to the firm.<sup>5</sup>



<sup>5</sup> In the ICS questionnaire, Section H. Relations with Government, the firms are asked in H5. What's the likelihood that the legal system will uphold my contract and property rights in business disputes?

Another indicator set up for this study is the regulatory efficiency for the industries. Figure 4 shows the percentage of firms that was able to procure business licenses for expansion of their operations. Most have a more or less 50% chance of success rate in securing business licenses for their own devices as show by the figure.

Figure 5 summarizes the tax compliance indicators. The firms as asked to tick of the answer that would make compliance with tax duties difficult. Tax filing seems to be the easiest of the compliance requirements. Rules and regulations is consistently cited as one of the main reasons for difficulties in tax compliance. This might be explained by the fact that China has undergone many changes, often having to restructure the industry in fulfilling its WTO commitments. This overhaul might have resulted in many changes in the taxation rules.



In summary, China’s institutional environment can be characterized with frequent political and bureaucratic interventions in public sector firms, poorly developed financial markets that make access to credit hard for SMEs and business networks that partly replace the “rule of law”, regulatory burdens that make in difficult to procure licenses and difficult compliance with tax responsibilities. And these are the market-supporting institutions that determine the value of political capital to an industry.

The qualities of the institutional environment by which industries must operate within are a function of the history of its transition and liberalization. The following section traces the general progression of China's market transition and subsequent development of the manufacturing and service industry and the following sub-sections provide information on industry-specific transition.

#### *2.4 Institutional Change: Industry Transition*

The institutional environment is far from homogenous and the structure of incentives differs across sectors of the transition economy, varying according to the extent of the institutional logic of a market economy permeates and transforms the pre-existing framework (Nee and Cao, 2004). This is due in part to the fact that the historical development of different sectors and industries proceeded with reform to the tunes of their own respective beats.

The process of transition in China started with spontaneous local reorganization into the Household Responsibility Systems in agriculture in 1978, resulting in increased autonomy and productivity for family farms. The reforms in industry started in the 1980's as highly successful collective industrial firms expanded in rural areas known as township and village enterprises (TVEs), initiated by local political leaders which gestated out of the so-called Commune Brigade Enterprises formed during the Great Leap forward and the Cultural revolution; firms which originally took over industrial production from agricultural communes. The TVEs became spokes for the wheel that was the manufacturing sector in China from the early 1980s to the early 1990s (Lindbeck, 2006).

The economic reform process continued with the central government policies to increase the autonomy of individual state-owned enterprises (SOEs) so as to implement incentive structures for management to improve productivity. This eventually led to the privatization of numerous small and medium sized SOEs. The reform process proceeded with the creation of special economic zones (SEZs), a model replicated from region to

region, which paved the way for the subsequent entry and expansion of domestic and foreign private firms gradually moving towards the liberalization of international trade. However, the desire to maintain state control over a number of production units that are strategic to the state has caused the delay in privatizing mammoth SOEs that are concentrated in heavy industries.

The openness of the Chinese economy since its accession to the WTO is one of the most distinguishing features of its reform. It has significantly reduced its tariff structure in its service and manufacturing industries in compliance to its initial commitments to world trade. The general marketized character of the firms in the industries in question burgeoned organically as the Chinese Communist Party (CCP) chose to sponsor other industries and eased the institutional obstructions to entering the market for the sectors they cut loose early from the planned economy.

The move to private ownership of firms has been slower in manufacturing and services than in agriculture, although the process sped up considerably in the mid 1990's. The disfavoring of SMEs, which mostly made up most of the manufacturing industry, during the early reform period manifested through various discriminatory regulations including the non-allocation of land-lease contracts, onerous regulations, difficulty in procuring permits, limited access to formal credit, etc. It is estimated that SMEs received less than ten percent of the bank loans in the early 21<sup>st</sup> Century. Some manufacturing industries have increasingly received attention from the government however in terms of being a value-added component to the economy such as the electronics industry.

During the Sixth Five-Year Plan period (1981-85), the average annual growth rate of China's industrial and agricultural production value exceeded 10 percent. The service sector is neglected by comparison. But the service economy has expanded in the last 20 years in China despite the ideological bias against it. Most services were considered unproductive in the doctrines of Marx, as it was believed to encourage consumption and materialism (Ho and Lo, 1984). Despite CPP's benign neglect, the demand for services in areas such as shopping, dining, commuting, and communicating has allowed the service

industry to flourish outside the rubric of government control ensuring the general privatized nature of this industry.

With the networking of the world industrial structure, trade in services, as one of the indicators to demonstrate the development of a service economy, has become an increasingly important part of the Chinese economy. In recent years, international trade pertaining to its service economy has developed, with China benefitting from offshore service outsourcing, commercial output in services and transnational mergers and acquisitions concentrated in the service industry. Under the WTO's institutional framework and multilateral trading system, China has further opened its service sectors, and gradually lowered trade barriers in services, resulting in considerably reduced institutional and transactional costs in its economic activities.

The process of liberalization and institutional impediments discussed above exist in differing degrees in each industry because of the different levels of reform that took place in these industries. The following sections will be a closer examination of the institutional characteristics of each specific industry represented in this study to provide the background as to why political capital might or might not be important. Hypotheses on the industry-specific valuation of political capital will be derived after each respective industry analysis.

#### *2.4.1 Garment and Leather Industry*

The garment and leather industry primarily supply ready-made clothing, fashion apparel and accessories. The total actual output of garments reached 46.5 billion pieces in 2005, up by 11.2% from 2004 (Esquel Group, 2005). This growth can be attributed to the country's market transition, increased international trading after accession to the WTO with the easing of foreign investing restrictions and prevailing low labor costs in the industry (People's Daily, 2007).

Majority of apparel manufacturers have factories located in coastal areas. This geographical concentration of apparel manufacturers is due to the fact that the industry

began organically in the region because of a large number of skilled labor availability. The main garment economic development zones of Ningbo, Qingdao, Zhuhai, Haikou, Shenzhen, Shanghai, Dalian, and Xiamen are all located in coastal areas. This industry is one of the first to marketize and depart from the planned economy.

The Chinese government plays a relatively small role in the country's garment industry. Garment SME's are generally private enterprises or red hats that are nominally owned by the local government but operate as private enterprises. It is worth pointing out that this is in sharp contrast to the ownership structure of China's textile industry, the most important factor of production to the apparel industry. The Party, through its textile SOEs, controls the buying and selling of cotton, wool and silkworms and is heavily involved in spinning and weaving. The Party's involvement in the textile industry has resulted in domestic fabric prices often being higher than world market prices giving the Chinese garment industry little access to cheap textile. It is estimated that some 55% of China's exported garments are made of imported materials (People's Daily, 2007). As a result, approximately half of exported garments are made under export processing contracts in SEZs, in which garments are cut and sewn according to the specifications of foreign buyers who usually also provide fabrics from abroad. Largest importers are Japan, Hong Kong and USA.

Due to their small scale and their dependence on domestic or overseas middlemen to obtain orders, most garment SMEs lack the ability to explore new markets and weather risks because they do not have adequate access to formal credit domestically. Without access to formal credit it becomes difficult to expand their operations to reach economies of scale. Without economies of scale, garment SMEs need to be members of large organizations like China National Garment Association (CNGA) to cut the costs of acquiring information, promote their firms and acquire international clients.

In summary, the garment industry is populated with SME's that developed outside the rubric of government control. While this has contributed to the entrepreneurial quality of the industry, it also entailed costs. These firms don't have access to formal credit that make it difficult for them to expand, cannot cater to international clients that expect a

basic standard of quality, do not have access to cheap textiles. Additionally, manufacturers do not prioritize innovation and R&D and is unable to implement international standards like cotton grading.

#### *2.4.2 Electronics Industry*

The main areas of China's electronic industry are communication electronic equipment, electronic parts such as semi-conductors and household entertainment equipment. The equipment made by China's local manufacturers are mainly used in the following areas: IC, discrete components, new display products, piezoelectric crystal components (quartz crystal resonator, oscillator, filter), solar batteries, sensitive components, and optical fiber communication components. While still producing labor-intensive subassemblies, plants in China are now assembling a growing number of final products, including Scientific Atlanta's satellite decoders, Sharp's personal digital assistants, and a full range of electronic games, telephones, and stereo products. China's electronic industry, like much of the economy, is both export-oriented and foreign capital-led (Wikipedia, 2008).

China's electronics industry capabilities were weak in the early 1990s. China's primary focus was on low-cost manufacturing of generic electronic equipment. The number of electronic industry related companies in China jumped from 7,500 in 2001 to 17,600 in 2003 after WTO accession and 67,000 in 2005 with approximately 56,000 of these being manufacturing companies. However, despite WTO commitments, promotion of the electronic parts industry is still very much a part of China's national industrial policy to augment the value-added sectors in its economy. This preferential treatment has generated political capital for the industry in terms of credit accessibility, R&D funding and lax implementation of patent laws on electronic equipment.

In 2005, the total amount of research and development increased 14.6% from the same period of the previous year. Meanwhile, the number of companies applying for patents jumped from 44 in 2000 to 90 in 2005. For example, Huawei's, one of China's biggest electronics firm, in 2005 patent applications through the Patent Cooperation Treaty ranked 37th in the world demonstrating an increased faith in legal institutions in

upholding patent rights and a perception of credibility with the patents system. This might also be due to the fact that global intellectual property rights system is enforceable world-wide. Even if China doesn't have a strong legal framework to uphold possible disputes over patents, there is legal recourse in international law and within the arbitration panel in the WTO for country disputes.

The government has a number of important organizations that regulate electronics manufacturing, including the Ministry of Electronics Industry (MEI) and the State Science and Technology Commission (SSTC). Both organizations report directly to the State Council, the administrative arm of the National People's Congress. It oversees the computer and electronics industry, and it is increasingly involved in telecommunications. The Electronic Technology Information Research Institute, China Computer & Microelectronics Information Research Institute, China National Electronics Import Export Corporation, the Chengdu Electronics Research Institute, and the Great Wall Computing Corporation are arms of MEI. SSTC is one of 10 state commissions. It oversees the nation's R&D policy for high technology.

Steel materials account for 20-30% of electronic companies' inputs costs in China. A 20% increase in steel price could significantly cut an electronic company's net profit margin, which is a significant number for the Chinese electronic industry given low profit margins. Inefficient access steel makes it difficult for the industry to capture market gains. So the cost of raw materials that is controlled by the government is important determinant of the development of this industry.

### *2.4.3 Auto and Auto Parts*

China is one of the world's largest automakers, trailing only Japan and the U.S. Auto-parts are generally classified into three categories: collision parts which are used to replace accident related car problems; replacements parts needed as cars grow older; and tuning or performance parts to enhance a car's form. Chinese-made auto parts tend to be high-energy consuming and non-environmental friendly products, making it difficult for



it to pass certification tests. This makes exporting difficult since both the European and American AM markets require certifications for auto parts to ensure safety.

China Association of Automobile Manufacturers (CAAM) claim that China's auto-industry output jumped from 2 million units in 2000 to 7.2 million in 2006. However, it is been shown that China employs market distorting practices in this market. It levies taxes on imported auto parts from the US, EU and Canada. WTO accession has made China subject to the WTO dispute-settlement mechanism. Trade representatives have been complaining about these import taxes. There have been trade-related lawsuits against Chinese auto-parts makers in the U.S. and Europe. In fact, the WTO recently ruled against China confirming the claims that they have been using punitive tariffs on auto imports (USA Today, 2008). The trade friction between China and foreign countries regarding imported auto parts originated from China's implementation of the "measures governing imported knockdown parts for finished cars" on April 1, 2005, which stipulates that auto parts imported must be subject to tariffs at 25%, significantly higher than tariffs on other auto-parts which are mostly at 10%. These high tariffs rendered imported auto parts less competitive relative to locally-made ones, in effect making China renege on its WTO commitments.

The dispute with world traders highlights the predicament faced by the Chinese auto-parts industry which remains vulnerable to foreign competition with the expiration of the protection from the five-year grace period of the WTO membership. Foreign firms have been making major inroads into the Chinese auto-parts market. Timken, a U.S autoparts maker, has successfully bought full ownership five former joint-venture Chinese factories.

Chinese auto-parts makers have problems taking on foreign competition because of a lack of basic technologies. In addition, Chinese auto-parts enterprises spend very little of their revenue on R&D as compared with foreign competitors. They are lagging far behind in standardization, technology inspection and certification as well. Furthermore, the profitability of Chinese automakers is being eroded by rising material costs. Steel prices, have become too expensive that it is undercutting the profit margin of these companies.

The case of the tuning parts, a sub-sector of the auto-parts industry, demonstrate the pertinent issues of this industry. China's legal system for car renovation is incomplete and leaves many gray areas in the market. New road-safety laws prohibit any organization or individual from renovating a vehicle's structure, power-train system, or appearance to avoid difficulties in passing certification tests. This is intended to promote highway safety but in effect, it also hinders the development of the tuning-parts industry. With no safety standards to regulate tuning parts and no oversight committee to implement any such standards, the government has adopted the expediency of a ban.

This situation is further aggravated by China's large number of small and unprofessional car-modification shops which generally install inferior parts on their customers' vehicles, a market distorting behavior. But this behavior typically demonstrate manufacturers in China which are small firms with limited capitalization, low volume of production, weak R&D capability, and poor product quality output.

#### *2.4.4 Information Technology Services*

The IT industry provides services in developing software, product support and maintenance, consulting, systems integration, related training, and system management outsourcing. Many key industries, such as finance, telecommunications, manufacturing and retailing, have become the base market for China's local IT services industry providing domestic demand for software and services.

The scale of software enterprises is merely fractional with weak intellectual property rights protection, industry fragmentation, lack of product quality control, reliable technical support, software customization ability, and information security.

A strengthening of enforcement of intellectual property rights in the face of growing international pressure, Dec. 23, 2004 saw China's highest courts announcing stricter interpretation of China's existing IPR laws. According to the courts, China has lowered the threshold for punishable offenses to USD 6,000 from USD 12,000-24,000 and has increased prison sentences from three to seven years. And the dissemination of pirated

goods or software over the internet is has now been explicitly forbidden in the law. The changes in the laws are far from reality but it is a significant step in getting China to honor its WTO commitments.

China has a growing IT talent pool. There are about 2 million software developers in the country. In addition, there are currently 5.86 million engineering graduates. Moreover, incidences of China-born, U.S.-educated businesspeople and IT executives are going back to China. These executives are using experiences from abroad in the local market. For examples, Charles Zhang, Ph.D., founder of Chinese Internet Portal Sohu.com and a 1994 physics graduate from the Massachusetts Institute of Technology, returned to his home country to establish his own IT business.

#### *2.4.5 Accounting and Non-banking Financial Services*

China's regulatory authorities have revised local accounting standards and practices to conform more closely to international best practices. In 1992, the Ministry of Finance promulgated a new set of standards for domestic companies known as the Accounting Standards for Business Enterprises (ASBE). The ASBE was based on International Accounting Standards (IAS) and adapted to local conditions.

Despite these reforms, however, the quality of domestic financial statements was thought to be insufficient for international users for the following reasons: While the ASBE are based on IAS, they differ in several fundamental aspects. They overlook the rule that inventories are valued at cost or at market price, whichever is lower, and do not report if the value of land, buildings, and equipment becomes non-recoverable. Under the ASBE, international users do not receive a certification that the financial statements conform to internationally acceptable standards or an indication of the extent of any divergence (People's Daily).

The financial statements of domestic companies reporting under the ASBE are being audited by domestic audit firms whose independence are questionable. Staff auditors in many of these firms were formerly internal accountants in the companies they now are

required to audit. In the Chinese context of guanxi, their relationships with and obligations to former colleagues are likely to persist and become an insurmountable conflict of interest.

The impediments to accounting industry reform are as follows:

- The prevalence of guanxi networks.
- The strong hand of the government in the accounting system and the close link between tax reporting and financial reporting, which create a conflict of interest such as a stable source of tax revenue for the state and avoiding reporting embarrassingly large losses.
- The stock exchange listing rules which require companies to be profitable providing a further incentive for the managers to hide losses and to collude with external auditors.

The shortage of qualified accountant and the lack of audit independence provides a major obstacle to the application and enforcement of accounting standards. The legal framework and the absence of shareholder litigation provide managers and auditors with little incentive to reflect economic realities such as losses in the publishing of its financial statements.

Thus government regulation alone will not induce trustworthy accounting information. Managers and audit firms must face market-based incentives.. Accounting standards are closely associated with the institutional environment, including the development of an independent judicial system, the reform of the governance of state-owned enterprises in areas of conflicts of interest, the implementation of bankruptcy law, and the reform of the financial and tax systems.

#### *2.4.6 Advertisement and Marketing*

The communist era saw a near extinction of advertising and marketing and propaganda developed in its place. The Open Door Policy of the late 1970s reintroduced commercial advertising in China. With the creation of the SEZ's and the entrance of foreign commerce, advertisements such as loose print media, gradual admission to radio and television broadcast resurfaced.

The city of Shanghai is currently the hub of Chinese advertising where many of the multinational ad agencies are located. Foreign companies were first required to operate in China as joint ventures with local Chinese agency counterparts. China abandoned this requirement in 2005. Multinational agencies now operate as foreign-owned corporations and repatriate profits easily. This has become a powerful incentive for big agencies to have offshore companies that operate cheaply in China. Many have even elected to maintain the networks afforded by their local connections and former joint-venture partners.

China's advertising industry weaknesses are that it is scattered and weak with local advertising companies incapable of R&D and thus they can't offer high quality services. Part of the reason why the industry has been slow to develop is because the Communist Party continues to look upon advertising with some suspicion as it is viewed as promoting and glorifying both capitalism and consumption. For example, the American coffee company, Starbucks, operates a coffee house within the the Forbidden City. A consumer-based movement has demanded an end to such imperialism and what is viewed by some as foreign encroachment into one of China's most historic sites.

The most distinctive feature of this industry is the degree of government control and interference it has to grapple with. Stories of government censorship of news, advertising, and the Internet are ubiquitous. In 2004, Nike produced a 90-second commercial to be aired in China, Hong Kong, Singapore, and the US. The ad featured LeBron James of the National Basketball Association defeating an elderly Chinese martial arts master, a pair of dragons, and two legendary Chinese goddesses in a simulated videogame. The Chinese

State Administration for Radio, Film, and Television ordered the commercial banned because it violated "regulations that mandate that all advertisements in China should uphold national dignity and interest and respect for the motherland's culture. All advertising that will appear on the national network CCTV is reviewed and must be approved by Beijing.

#### *2.4.7 Business Logistics Services*

Business logistical services involve inventory control, timely delivery of components, supply-chain management, professional services like payroll and HR services, market analysis covering purchasing and manufacturing information and other distributional processing services. These services are subsidiary services to other industries. The industry is small and mainly SMEs. There seems to be a dearth of information regarding this industry partly because it is relatively young. This is indicative of a general privatized character of the industry with low government involvement.

#### *2.4.8 Food Processing*

The food processing industry is mainly based in Shanghai, Guangdong and Shandong provinces. This industry is very fragmented with many small-scale operators in the field. China has large tractable lands for growing food crops. The food resources are varied in number and type. Its major agricultural products include rice, wheat, potatoes, sorghum, peanuts, tea, millet, barley, cotton, oilseed, pork, and fish. After WTO accession, it has become easier for the industry to export internationally. The government is keen on developing its produce of corn, wheat, dairy products, food additives and seasonings for international trading purposes.

China has developed a strong domestic demand for dairy products and is spurring local production both for domestic and international consumption. The recent scandal on the exported milk of China as tainted and possibly poisonous shows how the industry can circumvent proper quality control measures due to bribes of companies of regulatory bodies.

#### *2.4.9 Chemical Products and Medicine*

China's chemicals industry concentrates on the production of basic chemicals, e.g. inorganic and organic feedstocks like ethylene, propylene, ammonia, benzene and chlorine. Among other things, ethylene and propylene are needed to produce plastics for the ship-building, automobile and IT industries, household goods and toys. A series of measures such as the creation of the Shanghai industry park established specifically for such products, is designed to attract more foreign investment to this industry.

The biggest chemical companies in China are state-owned -- China National Petroleum Corporation, China National Petrochemical Corporation, China National Offshore Oil Corporation, China National Chemical Corporation, and China Pharmaceutical. The chemicals industry occupies a key position in the economy and is strategic to the government. As such, the Chinese government continues to actively steer market entry to this industry for foreign companies, sometimes setting exist barriers from these industries to control the market.

Since 2001, with Chinese accession to the World Trade Organisation, obstacles for chemical imports have been reduced. Chinese companies at least are no longer obliged to buy raw materials locally. A key component of the chemical industry is the production of medicine such as penicillin. China Pharmaceutical, a state-owned company, plays a central role in the industry. It is exported to the medicines market worldwide. One competitive advantage of this industry is the low development costs of drugs. The reason for the lower costs is the relatively short time it takes to develop drugs in China which typically lasts only five to eight years for getting a new medication to be approved as compared with the eight to ten years on average in the USA. This is a significant and important advantage for the pharmaceuticals industry. The main reason for the shorter approval periods are the site conditions in China. The substances go through a three-stage clinical examination process that the companies have to qualify for by providing clinical data. The country has a large number of patients with specific disease patterns that can be tested more quickly. Furthermore, the pharmaceutical industry also has a large pool of

graduates in the natural sciences for human capital inputs with an estimated 170,000 graduates in this field.

The overall increase in capacity in the chemicals sector has been mainly financed by direct investments as part of the government strategy in having state-owned firm go into cooperative ventures with foreign partners. The government's main goal is to partner ailing state-owned firms with foreign investors to infuse new capital into the industry.

#### *2.4.10 Biotech Products and Chinese Medicine*

More than 300 domestic firms in China are using molecular biology to create products, provide services, and research new drugs. China's biopharmaceutical firms are primarily in the generic market producing interferon series, erythropoietin, colony-stimulating factor series, tumor neurosis factor, insulin, growth hormone, and interleukin-2—all of which are widely used in developed countries. China's manufacturers are also focused on *E. coli*, yeast, fermentation-based chemicals such as citric acid and ascorbic acid (Vitamin C) and Chinese hamster ovary expression systems (a method of manufacturing useful proteins from cells (Wikipedia, 2008).

Reform policies in the late 1970s continuing throughout the 1980s achieved a lot in terms of restoring China's science and technology system and earmarking government funding for it. The CCP initiated the National High Technology Research and Development Program primarily aimed at providing funding to various science initiatives including biotechnology. The city of Shenzhen has created SEZ's where some of China's earliest biotech companies began their operations and in which infrastructure and tax incentives were put in place to entice firms to set up their biotech shop there. In 1993, China first granted patents for medicines, a milestone for the fledgling biotech industry then.

Throughout the 1990s, the biotech industry grew. Increases in funding, the reorganization of science and technology ministries, a movement toward a peer-review system in which scientists judge fellow scientists, and the flow of government money into quasi-venture capital funds were critical in its development. The number of biotech companies



multiplied encouraged by China's participation in the Human Genome Project, China's sequencing of the rice genome and the influx of returning Chinese scientists with biotech experience and more available capital (Chervenak, 2008).

To develop new drugs, foreign investors have helped form a host of startups in China over the last 10 years. PRC authorities have granted some, such as SiBiono GeneTech, approval for their therapeutic products to be developed in China. These startups focus on the discovery and development of their own intellectual property (IP), in contrast to most of the biopharmaceutical manufacturers producing and selling generic (copies of medicine invented elsewhere) drugs. Areas of technological development for these companies include gene therapy, antibodies, and traditional Chinese medicine (TCM) modernization.

Although estimates vary widely, it is believed that government funding amounts to \$600 million per year on biotech research and development (R&D) manifested in different initiatives. China's national and local governments also make credit accessible to quasi-venture capital companies that invest in technological enterprises. China's biotech industry comparative advantage are low costs of labor, cheap equipment, consumables, and reagents. Foreign investment has flowed into China's biotech industry through outsourcing biopharmaceutical activities, lab supply manufacturing, and R&D-based exchanges.

China's biotech industry has emerged largely because of increased program funding from the government, low labor costs, and reorganization of China's science and technology system, increased human capital from returning Chinese biotech graduates from abroad. And the creation of high-tech special economic zones has helped put important infrastructure and tax incentives in place to allow the industry to expand and flourish. However, a weak intellectual property rights system, immature legal system to enforce patents and an underdeveloped capital market remain the largest barriers to biotech growth in China.

#### *2.4.11 Metallurgical Products*

China is rich in most of metallurgical resources such as steel, refractory, ferro-alloy, carbon products, coke and coal etc. China's metallurgical industry registered some 1.3 billion yuan in profits from January to August of 2004 (Chinese Statistical Year Book, 2003). The industry comprises of a small number of large and medium-sized firms and thousands of small-scale operations. The largest producers are all state-owned enterprises. Most of these SOEs suffer from chronic problems like weak corporate governance, soft-budget constraints, social welfare burdens like employment, lax financial and cost accounting standards, and decentralization resulting in conflicting local and central government policies. These issues are at the root of many of the structural and performance problems besetting the metallurgical, in particular, the steel industry.

The metallurgical industry is suffering from structural problems such as industry fragmentation, poor product quality, low labor productivity, an overly narrow product range (concentrated at the low, value-added end of the market), growing domestic demand, supply imbalances and obsolete plant and equipment. The industry remains grossly inefficient, technologically backward and unable to meet adequately changing market needs. These problems are largely due to China's partial economic and institutional reforms, particularly in the case of the large state-owned enterprises operating in China's heavy industrial sector, a legacy of the policies from the planned economy era and the government's need to consider non-economic objectives in its restructuring efforts.

After China's accession to the World Trade Organization (WTO), it has had to address international trade concerns such as import surges, dumping and subsidies. It has also reduced its ability to employ market distorting practices such as restricting steel imports and subsidizing steel exports. To honor its free trade commitments, China has had to:

- Reduce tariffs on steel imports from an average 10.3 percent to 6.1 percent, with many of the largest reductions involving high-end specialty metallurgical products.

- Eliminate various non-tariff barriers, including import substitution measures, import quotas and non-automatic import licensing and import registration requirements.
- Eliminate the prohibition on foreign companies distributing imported metallurgical products in China.
- Subject to strong subsidy disciplines under the WTO Agreement on Subsidies and Countervailing Measures, that includes elimination of export and import substitution subsidies.
- Remain subject to a special, non-market methodology for counteracting dumping for fifteen years.

However, even with increased liberalization the government is unwilling to fully privatize the metallurgical industry. Instead, it has opted for a merging strategy and progressive decentralization of control over the industry. Many of these metallurgical company mergers in China have involved the forced marriage of financially healthy and unhealthy firms, where little or no gain is realized by the financially healthier firm. While these types of rationalization mergers allow the government to temporarily avoid direct shutdowns and layoffs, they might work against the government's long-term efficiency and growth goals.

The 1998 merger of Baoshan, Shanghai Meishan Group and Shanghai Metallurgical Holding Company (SMHC) is a case in point. Although the resulting industrial conglomerate now accounts for 20% of the fixed assets in the metallurgical industry, bigger in this case is not necessarily better. The merger saddled Baoshan—China's largest, most modern, efficient and profitable producer of metallurgical goods—with outdated equipment, debts and onerous pension obligations. The merger increased Baoshan's payroll from the 11,000 employed directly at Baoshan's steelworks to over 131,000 workers, a jump that drastically the profit margin of Baoshan.

Consistent with its general approach to reform in the state-owned enterprise sector, the central government continues to oversee large state-owned enterprises, while allowing administrative control over smaller producers to devolve to provincial and local governments. In 1998, the central government took several steps toward decentralization:

- Downgrading the Ministry of Metallurgical Industries to a state bureau now called as the State Administration of Metallurgical Industries (SAMI).
- Eliminating SAMI's investment oversight function and its authority to formulate production and material distribution plans for specific enterprises.
- Liberalizing internal distribution and export trading rights in steel. SAMI now performs more of a pure industrial policy function, for example, determining which product areas need support.

#### *2.4.12 Telecommunications and Transportation Equipment*

The industry analysis will focus on telecommunications because of a dearth of information regarding the transportation equipment industry. There are few accessible published studies on the transportation equipment industry. Based on information from the China Statistical Yearbook, it seems that the transportation equipment's customer base is mainly governmental agencies since transportation in China is, by and large, a service provided by the state.

The telecommunication services are divided into two kinds: basic and value-added services. Basic services consist of fixed-line and mobile local, long distance and international phone calls; supply of infrastructure facilities; satellite communications; Internet and information transmission; sale or lease of bandwidth, wavelength, optical, channels or other network elements; paging; and reselling services. Value-added services cover five categories. They are fixed-line based telecom services mobile phone-based value-added telecom services; internet-based value-added telecom services, including

internet access and video conferencing; and other data transmission and network-based services such as email and electronic data exchange(Wikipedia, 2008).

China Telecom, under the Ministry of Posts and Telecommunications (MPT), had a protracted monopoly in China's telecom services market. While facing domestic pressures and trying to get accession to the WTO, the government began serious reforms of the telecom industry in the mid 1990s.

In 1994, China United Telecommunication Corporation (China Unicom) was granted a basic telecom license, which dissolved the monopoly status of China Telecom. Since then, the government itself carried out large-scale downsizing in its state-owned firms. This reform affected the telecom industry considerably. Three major forces shaped the restructuring of China's telecommunications regulatory framework. First, China Unicom urged the government to completely separate China Telecom from the MPT. Second, the government realized the problem of duplicative construction in communication networks such as the cable network of the Ministry of Radio, Film and Television. Third, the government acknowledged the importance of industry restructuring. All these forces led to establishing a new government agency to replace the MPT. In 1998, the Ministry of Information Industry (MII) was set up as a regulatory body of telecom services. The MII was a merger of the MPT, the Ministry of Electronic Industries, the Network Division of the Ministry of Broadcasting, Film and Television, and various other government regulatory units. The MII extended its regulatory coverage from telecommunications to information technologies (People's Daily, 2007).

Prices were set by the MII and the State Pricing Board. Competition was limited and service quality remained poor. In addition, the telecommunications system in rural areas was underdeveloped. In response to this, rural communities started to set up their own systems to provide local telecom services.

In 1999, the telecommunications industry was restructured and China Telecom was divided into several SOEs according to different types of services -- fixed line telephone, mobile phone, paging and satellite telecommunications. Consequently, the monopoly was

broken up. China Telecom, keeping the original name, is the successor to the original company's main business with a focus on the fixed line business. It has a 70% market share of the telecoms industry. China Unicom, a spin-off from the original company, concentrates on the mobile phone business. It has a more modern management structure and is managed by younger, professional managers. It has benefited from the popularity of mobile phones and so has been able to expand in recent years. The paging services merged with China Unicom.

The satellite segment became China Satellite. In 2000, China Network Communications Corporation and China Railway Telecommunications Corporation obtained licenses to supply basic telecommunication services except mobile services. China Railway Communications is owned by the Ministry of Railways. It has licenses to provide fixed lines (both local and long distance), VoIP and data services. Unlike China Unicom, it uses the rail infrastructure for its own communication networks as the backbone of its communication infrastructure. This avoids the problem of obtaining network support from China Telecom. China Railcom is allowed to provide fixed line services to the whole country, and hence is viewed as the only truly nationwide competitor of China Telecom. China Telecommunication Broadcast Satellite Corporation was established in 1985 to manage and provide telecom satellite services for the MPT. It owns two satellites.

In 2001, China Telecom was further divided into the northern and southern parts. The northern part was merged into China Netcom to form China Network Communications Group Corporation which mainly supplies internet broadband to residential and corporate users. It has 30% of the market. The southern part was given control to China Telecommunications Group Corporation which has 70% of the market share. As a result of the restructuring, six companies now dominate the domestic telecom market.

Any company that wants to enter the domestic telecom services industry must obtain a license from the MII before starting its business. The conditions for obtaining basic telecom service licenses are extremely strict so there are high entry barriers to the market.

### 3 METHODS AND MODELS

The ICS dataset used in this study draws from a survey sample of 2400 firms. The survey uses standardized survey questionnaires drawing from China’s registered firms and utilizes random sampling methodology to measure the quality of the business environment. Businesses are randomly selected from manufacturing as well as the services sectors, assuring that small, medium, and large enterprises in the interest of full representation.

Furthermore, the survey draws from cities representing the five main regions in China – Benxi, Dalian, Changchun, and Haerbin representing the Northeast region; Hangzhou, Wenzhou, Shenzhen, and Jiangmen, representing the Coastal region; Nanchang,

**Table 1. Frequency table of cities**

| City      | Frequency | Percent | Com.   |
|-----------|-----------|---------|--------|
| Benxi     | 100       | 4.17    | 4.17   |
| hangchun  | 150       | 6.25    | 10.42  |
| Changsha  | 150       | 6.25    | 16.67  |
| Chongqing | 150       | 6.25    | 22.92  |
| Dalian    | 100       | 4.17    | 27.08  |
| Guiyang   | 150       | 6.25    | 33.33  |
| Haerbin   | 150       | 6.25    | 39.58  |
| Hangzhou  | 100       | 4.17    | 43.75  |
| Jiangmen  | 100       | 4.17    | 47.92  |
| Kunming   | 150       | 6.25    | 54.17  |
| Lanzhou   | 150       | 6.25    | 60.42  |
| Nanchang  | 150       | 6.25    | 66.67  |
| Nanning   | 150       | 6.25    | 72.92  |
| Shenzhen  | 100       | 4.17    | 77.08  |
| Wenzhou   | 100       | 4.17    | 81.25  |
| Wuhan     | 150       | 6.25    | 87.50  |
| Xian      | 150       | 6.25    | 93.75  |
| Zhengzhou | 150       | 6.25    | 100.00 |
| Total     | 2400      | 100.00  |        |

Zhenzhou, Wuhan, and Changsha, for the Central region; Nanning, Guiyang, Chongqing, and Kunming, from the Southwest region; and Xian and Langzhou represent the Northwest region (Ayyagari, Demirguc-Kunt, and Maksimovic, 2007).

The ICS is divided into two main sections where the first is composed of questions regarding general information about the businesses, their relationship with customers, suppliers, and the government, as well as a

qualitative part relating to the firm’s management views on the existing business

environment. The second section pertains to interviews with each company's accountant or financial manager and human resources manager, regarding information on the firm's financial statements as well as employees' wages and human capital development.

Using the data described previously, a set of institutional indices will be presented to construct a picture of the institutional environment in which the 14 represented industries, *garment and leather products, electronic equipment, electronic parts making, household electronics, auto and auto parts, information technology, accounting and non-banking financial services, advertisement and marketing, business services, food processing, chemical products and medicine, biotech products and Chinese medicine, metallurgical products (manufacturing and tools) and transportation equipment including telecommunications*, belonging in the manufacturing and service industry, must operate in. The institutional indices chosen will cover the 5 important areas discussed in the theoretical framework: legal system (use of courts, negotiations and third party arbitration, informal networks), scale of networks, access to financial markets (ability to take formal loans) and excessive regulations (procuring permits) and tax burdens. This was analyzed in section 2.3 and in conjunction to the regression analysis, provide the valuation of political capital in these 14 industries. This is to test the Hypothesis that political capital has a positive effect on industries with weak market-supporting institutions.

The model for the OLS regressions is specified as follows:

$$Y_i = \beta_0 + \beta_1 (\text{gvt helps to find foreign clients}) + \beta_2 (\text{gvt assistance to get credit}) + \beta_3 (\text{CEO holds party position}) + \beta_4 (\text{CEO appointed by govt}) + \beta_5 (\text{city}) + \beta_6 (\text{age}) + \beta_7 (\text{size}) + \beta_8 (\text{lagged assets}) + \beta_9 (\text{government ownership}) + \varepsilon$$

Where  $Y_i$  are assets of each industry as reported in the 2003 ICS on China conducted by the Enterprise Group. The natural logarithm of the variable assets is taken in anticipation of non-normality to make sure that the error term in the model is normally distributed so



as not to get extreme values that could be misleading in the interpretation of the results. The regression will be run 14 times for each respective industry. Proxy variables have been chosen to capture the value of political capital in these 14 industries and are specified in the model as *government helps to find foreign clients*, *government assistance in accessing credit*, *CEO holds party position*, and *if the CEO was appointed by the government*. Firm age, city (18 in the dataset), government ownership, previous year's assets and size in terms of employees are in the model as control variables. The following describes in detail the variables used in the model specification.

### **Dependent Variable**

The dependent variable for each of the 14 regressions is a combination of the assets with the specific industry. This was created by creating a subsample of each industry with the corresponding assets from the general dataset. This was chosen in order to test whether the use of political capital had any market returns for that specific industry. The natural logarithm of assets has been taken in order to normalize the error terms and decrease the spreads for ease of analysis.

### **Independent Variables**

*Government helps to find domestic client*: A dummy variable was created for this form of political capital, government assistance getting the value of 1 and no government assistance getting the value of 0.

*Government assistance in accessing credit*: A dummy variable was created for this form of political capital, government assistance in getting loans was given the value of 1 and no government assistance in getting loans was given the value of 0.

*CEO holds party position:* A dummy variable was created for this form of political capital. If a firm has a CEO holds a position in the Party, a value of 1 is given, and if the CEO does not hold a party position, the value of 0 is given.

| Summary of political capital variables             | Freq. | Percent | Cum.   | Obs  |
|--|-------|---------|--------|------|
| Government assistance in acquiring foreign clients | 1975  | 82.29   | 82.29  | 2400 |
| Government assistance in accessing credit          | 2025  | 84.38   | 84.38  | 2400 |
| CEO holds Communist Party position                 | 780   | 33.18   | 33.18  | 2400 |
| CEO was appointed by government                    | 612   | 25.86   | 100.00 | 2400 |

*CEO was appointed by the government:* A dummy variable was created for this form of political capital. If the CEO

was appointed by the government, then the value given is 1 and if the CEO was not appointed by the government, then the value given is 0.

**Control Variables**

*Lagged Assets:* The firm’s logged assets of the previous year’s logged assets of the firm are used to control for any influence from the previous year’s acquisitions to the current year.

*Age:* The firms’ age, logged, is used to control for the differences in a firm’s assets as influenced by their age. The data set reveals a variety of firm ages, from 3 years to over 50, with a logged mean of 2.43 years and a logged standard deviation of .8. In the context of China’s business environment, older firms typically retain political capital generated from pre- and early reform days whilst younger firms are unlikely to have inherited any political capital.

*Firm Size:* The number of employees is the proxy for size in the model. Bigger firms tend to have more political capital and usually recruit party members. Many big firms were former red hats or state-owned enterprises cut loose from the planned economy but still

enjoys a legacy of political capital with former cadre's managing it. Larger firms usually possess bigger assets.

*City*: To control for regional difference, city was included in the model. The city in which a firm is situated in will influence the level of marketization of that industry and the level of government assistance it enjoys. Cities typically found along the eastern seaboard or close to or are SEZs, or have a large number of foreign firms that will show a propensity marketization. This is due to the gradualist approach taken by the CCP in opening up the country – starting in the east and moving inland – to foreign and private firms, and allowing market-friendly reforms to be tested by local governments. Furthermore, the decentralization of power towards provincial and local governments has created a diverse range of business environments throughout the provinces which account for why political capital is used despite marketization. This justifies why industries will indicate varied

**Table 3. Ownership structure dummy frequency summary**

| Summary of Ownership Structure Dummy | Freq. | Percent | Cum.   |
|--------------------------------------|-------|---------|--------|
| Firms with no govt ownership         | 1,807 | 75.29   | 75.29  |
| Firms with government ownership      | 593   | 24.71   | 100.00 |
| Total                                | 2400  | 100.00  |        |

institutional qualities. 18 dummy variables that account for which city-firms in each industry are used and 17 cities are used to control the effects. One is used as the base.

*Government Ownership*: The ownership structure of a firm in China has a lot to do with how much political capital it has. The involvement of the state in its activities, decision-making, personnel

appointments has a large impact on the success of a firm and how it behaves in the industry.

| <b>Table 4. Descriptive Stats of Variable</b> | <b>Obs</b> | <b>Mean</b> | <b>Std. Dev.</b> | <b>Min</b> | <b>Max</b> |
|---|------------|-------------|------------------|------------|------------|
| Log age                                       | 2400       | 2.429834    | .7994084         | 1.098612   | 3.970292   |
| Log (no. Of employees)                        | 2392       | 4.795285    | 1.569271         | 0          | 11.32572   |
| <b>Assets of each Industry</b>                |            |             |                  |            |            |
| Garment & leather products                    | 349        | 33905.94    | 192504.5         | 12.7       | 2923840    |
| Electronic equipment                          | 183        | 115048.8    | 289851.9         | 30.71      | 1742915    |
| Electronic parts making                       | 273        | 91122.43    | 449011           | 7          | 5713326    |
| Household electronics                         | 63         | 44018.52    | 86982.18         | 7          | 424904.3   |
| Auto & auto parts                             | 353        | 197849.5    | 886276.8         | 1          | 1.09e+07   |
| Information technology                        | 196        | 28809.14    | 167801.9         | 4          | 2117030    |
| Accounting non-banking financial serv.        | 142        | 37540.02    | 371032.5         | 4          | 4410083    |
| Advertisement & marketing                     | 143        | 97786.38    | 806174.7         | 20         | 9389966    |
| Business services                             | 263        | 659061.2    | 3346765          | 29         | 4.09e+07   |
| Food processing                               | 70         | 43863.42    | 151905.5         | 7          | 1222720    |
| Chemical products & medicine                  | 65         | 116154.8    | 417556.5         | 224.01     | 3150418    |
| Biotech products & Chinese medicine           | 35         | 23599.17    | 60061.73         | 234.55     | 348228.4   |
| Metallurgical products (manuf. & tools)       | 155        | 29371.46    | 123216.1         | 66.88      | 1331777    |
| Transportation equipment (inc. telecoms)      | 49         | 269640.3    | 1440772          | 56         | 9983629    |
| <b>Lagged Assets of each Industry</b>         |            |             |                  |            |            |
| Garment & leather products                    | 349        | 23205.75    | 102200.9         | 2          | 1636969    |
| Electronic equipment                          | 181        | 104592.1    | 258790.7         | 27.55      | 1563431    |
| Electronic parts making                       | 268        | 86289.56    | 451429.5         | 31         | 6062383    |
| Household electronics                         | 61         | 41661.76    | 83056.15         | 6.1        | 399329     |
| Auto & auto parts                             | 353        | 181347.9    | 824723.3         | 1          | 1.00e+07   |
| Information technology                        | 193        | 29154.87    | 168126.4         | 1          | 2171670    |
| Accounting non-banking financial serv.        | 139        | 14664.36    | 93908.03         | 4.2        | 1007282    |
| Advertisement & marketing                     | 140        | 84787       | 774050.9         | 10         | 9041640    |
| Business services                             | 262        | 589006.7    | 3031902          | 29         | 3.90e+07   |
| Food processing                               | 70         | 72251.66    | 304496.5         | 5          | 2310968    |
| Chemical products & medicine                  | 64         | 115571.9    | 418649.5         | 169        | 3158236    |
| Biotech products & Chinese medicine           | 35         | 21045.46    | 50916.99         | 233        | 288046.2   |
| Metallurgical products (manuf. & tools)       | 153        | 28555.4     | 130298.4         | 66.88      | 1359386    |
| Transportation equipment (inc. telecoms)      | 48         | 255906      | 1378267          | 56         | 9470330    |

## **Model Specification Analysis**

Ramsey RESET Test (RRT) was run to test whether the model of this study was correctly specified. The results are catalogued in Table 5 for all the 14 regression models. In general, the null hypothesis that the model had any omitted variables was rejected for most of the specified models except for model 1 for garments industry, model 5 for auto & auto parts industry, and model 6 for the information technology industry. The RRT results for these three models improve when the control variables of cities are removed. There seems to be a trade-off between controlling for all the cities and getting better RRT results. Since the primary goal of this study is to isolate the effects of political capital on an industry and to make contingent conjectures regarding this valuation, I decided to keep the control variables of all the cities in the regression model despite low RRT results.

## **Diagnostic Testing**

Diagnostic testing was performed on the model to make sure the applicable Gaus-Markov assumptions of an ordinary least square (OLS) model holds true. However, since the model's functional form is exploratory, the results of the regression will reveal the significance of the independent variables to the model.

*Goodness-of-fit:* The primary measure of how well the independent variables explain the dependent variables is the  $R^2$  and the Adjusted  $R^2$ . AIC values and BIC values are given in Table 5 as alternative measures of the goodness of fit of the explanatory variables with the dependent variable.

*Heteroskedasticity:* The Breusch-Pagan/Cook-Weisberg test for heteroskedasticity using the F-statistic was performed on the 14 regression models and the results of which are presented in Table 5. All the models satisfy the homoskedastic Gaus-Markov assumption except model 6 for the IT industry and model 9 for the business logistical services industry. Constant variance is achieved for these two models when remove the control variables for the model (see list of control variables below). There seems to be a trade-off for these two models between homoskedasticity and isolating the effects of political capital from factors like age, size, city, the previous year's assets and government

ownership. The control variables are kept in the model because some homoskedasticity does not prevent conjectures to be made regarding the effects of political capital on the assets of the industry. Without control variables, it would be very difficult to pin point the exact effect of political capital even with a disturbance term.

*Multicollinearity:* When running regressions, Stata, the econometric program used in this study, automatically drops collinear variables from the model. Some variables in the model are interrelated and have correlation so the multicollinearity problem can be serious. As an added precaution, I ran post-estimation tests on the regression models designed to diagnose multicollinearity. The third row for each variable in Table 5 is *variance inflation factor* (VIF) value which is a method for detecting the severity of multicollinearity. More precisely, the VIF is an index which measures how much the variance of a coefficient (square of the standard deviation) is increased due to collinearity. VIF greater than 10 indicates the presence of strong multicollinearity. However, when any one of the proximity variables are dropped, the collinearity diagnostics improve such that none of the remaining proximity variables appear to suffer from excessive collinearity, nor any other independent variable.

The regression results will be matched with the institutional indices constructed for each industry. Given the assumption that market-supporting institutions for the manufacturing and service industries represented with the 14 industries from the dataset, the expected signs in the regressors per log of assets are positive because our hypothesis is that despite marketization, if an industry has poor market supporting institutions, political capital is still valuable.

#### **4 EMPIRICAL RESULTS**

The OLS regression results show that it is not possible to conclude, across the board, whether or not political capital has been devalued or not. There are some industries in which some types of political capital are still valuable and some are not. It seems that the usefulness of political capital depends upon the industry and the form of that capital, whether it's government assistance in getting foreign clients (client matching), government assistance in borrowing capital, CEO holding membership and position in the Party or the CEO was appointed by the government. Different industries hold

different forms of political capital useful according to their specific needs as determined by the level of its privatization and the efficiency of its market supporting institutions.

The garment and leather industry is marketized as established by the discussions from section 2.3 on industry transition. Therefore, it should require low levels of political capital for carrying out its transactive relationships. The industry does not seem to need government assistance in acquiring foreign clients. In fact, the assets of the industry decreases by .132 if the government assists it in procuring foreign clients and no decrease if the government does not assist it. This coefficient value is significant at the  $\alpha$  level of .05. This confirms the literature that says that this industry primarily grew from foreign investment independent of government control. The fashion industry is not well suited to state coordination that is normally characterized by a slow bureaucracy and inertia which might explain the negative effect of government assistance in getting clients.

This industry responds positively to government assistance in accessing credit, with industry assets increasing by .081. Section 2.4 shows that 64% of garment firms believe loans to be necessary but 67% of them do not have loans because the collateral required to borrow is too high. This is a problem that can be attributed to a weak financial market, a key market-supporting institution. According to the literature (Lindbeck, 2006), there seems to be a glass wall keeping SMEs out of the formal loan market in which banks give preferential treatment to state-owned enterprises. It makes sense that this form of political capital would have a positive impact because most garment firms are SMEs and do not enjoy this preferential treatment.

Whether the CEO has Party position or owes its appointment to the government, it has a positive impact on the garment industry. The difference in its assets .019 and .056, respectively, if it had a CEO that was a member of the Party or a government appointed CEO, than if it did not. The reason for this might be explained by the institutional indices. 32% of garment firms have difficulties in their compliance with inspections and audits, a process that can be subjective and leaves a lot of room for the discretion of the inspector and the auditor. Being a Party member or being government appointed allows the CEO to cultivate ties with higher ranking officials that can dissuade corrupt inspector from

making things difficult for garment firms. Furthermore, only 50% for firms were able to procure licenses and registrations possibly intended to expand their operations. This type of political capital can get firms the right connections with the officials in charge of registration. This is why this type of political capital has a positive impact on the industry. The model can explain 95% of the variations in the assets of garments.

The electronic, electronic-parts making, and household electronics is one of China's value-added and, consequently, nationally sponsored industry. The biggest players within this industry are state-owned so a large amount of political capital is expected within these three industries. It has been controlled and regulated by the government for quite some time that government assistance in getting foreign clients seem to have a negative impact on the asset acquisition of the firms in all three industries. The industry assets would decrease by .027 in electronics equipment industry, .009 in the electronic parts making industry, and .207 in the household electronics industry if the government helps it in getting foreign customers than if the government had not helped it. The three models for the electronic industry all have an explanatory power of above 92%.

The two types of political capital that seem to be valuable to the auto & auto parts industry are government assistance in getting foreign clients and government appointed CEO. This is corroborated by the literature regarding current industry focus of exporting and entering the formerly closed markets such as the AM markets in Europe. Although the auto-parts industry is populated with SMEs, it has a government sanctioned organization CAAM that can orchestrate its search for foreign clients. Currently, the moulds for making these generic auto parts are inexpensive because they are not subject to quality standards. This might explain why almost 40% of the auto industry respondents feel that loans are not necessary which can also explain why the political capital of government assistance in getting loans does not have a positive impact in this industry.



**Table 5. Dependent variable: Logged Assets of Each Industry**

| Independent Variables                       | Accounting & Non-banking financial services |                    |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                   |                     |
|---|---|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-------------------|---------------------|
|   | (1)   | (2)                | (3)                 | (4)                 | (5)                 | (6)                 | (7)                 | (8)                 | (9)                 | (10)                | (11)                | (12)                | (13)              | (14)                |
| Gvt assistance in acquiring foreign clients | -1.32<br>(.087)**                           | -0.27<br>(.809)*** | -0.09<br>(.878)***  | -0.207<br>(.663)*** | .123<br>(.022)*     | -0.080<br>(.437)*** | .360<br>(.056)**    | -0.131<br>(.255)*** | .152<br>(.023)*     | .233<br>(.125)***   | -0.182<br>(.142)*** | -0.147<br>(.007)    | .069<br>(.704)*** | .014<br>(.828)***   |
| Gvt assistance in accessing credit          | .081<br>(.293)***                           | .019<br>(.873)***  | .085<br>(.093)**    | -0.260<br>(.482)*** | -0.009<br>(.870)*** | .072<br>(.561)***   | .223<br>(.527)***   | .041<br>(.844)***   | -0.005<br>(.944)*** | -0.062<br>(.655)*** | .254<br>(.032)*     | -0.002<br>(.965)*** | .187<br>(.336)*** | -0.086<br>(.246)*** |
| GEO holds party position                    | 1.28<br>(.019)                              | 1.34<br>(.377)***  | 1.22<br>(.828)***   | 1.44<br>(.398)***   | 1.32<br>(.297)***   | 1.34<br>(.967)***   | 1.26<br>(.405)***   | 1.26<br>(.073)**    | 1.21<br>(.541)***   | 1.33<br>(.922)***   | 1.69<br>(.112)***   | 1.91<br>(.858)***   | 1.22<br>(.421)*** | 1.24<br>(.884)***   |
| GEO was appointed by gvt                    | 1.36<br>(.056)                              | 1.31<br>(.311)***  | 1.32<br>(.771)***   | 1.64<br>(.009)      | 1.40<br>(.136)***   | 1.33<br>(.388)***   | 1.25<br>(.951)***   | 1.38<br>(.176)***   | 1.43<br>(.145)***   | 1.51<br>(.099)**    | 1.60<br>(.667)***   | 1.55<br>(.629)***   | 1.35<br>(.333)*** | 1.56<br>(.806)***   |
| age logged                                  | .056<br>(.457)***                           | -0.14<br>(.311)*** | 1.44<br>(.771)***   | 1.38<br>(.009)      | 1.44<br>(.136)***   | 2.37<br>(.388)***   | 1.60<br>(.951)***   | 1.75<br>(.176)***   | 1.27<br>(.145)***   | 2.34<br>(.099)**    | 1.53<br>(.667)***   | 3.28<br>(.629)***   | 1.36<br>(.333)*** | 1.63<br>(.806)***   |
| size logged                                 | .119<br>(.270)***                           | .218<br>(.318)***  | -0.115<br>(.148)*** | .044<br>(.936)***   | -0.164<br>(.065)**  | -0.369<br>(.022)*   | -0.129<br>(.754)*** | .054<br>(.734)***   | -0.159<br>(.072)**  | -0.698<br>(.002)    | .335<br>(.150)***   | -0.083<br>(.330)*** | -0.637<br>(.012)* | .073<br>(.399)***   |
| govt ownership                              | 1.25<br>(.000)                              | 1.25<br>(.041)*    | 1.32<br>(.035)*     | 1.12<br>(.035)*     | 1.96<br>(.084)**    | 1.27<br>(.011)*     | 1.10<br>(.365)***   | 1.08<br>(.157)***   | 1.30<br>(.004)      | 1.53<br>(.153)***   | 1.23<br>(.643)***   | 3.22<br>(.156)***   | 1.82<br>(.018)*   | 2.21<br>(.859)***   |
| lagged assets                               | 2.07<br>(.149)                              | 4.11<br>(.442)***  | 2.74<br>(.360)***   | 3.20<br>(.580)***   | 3.55<br>(.059)**    | 1.92<br>(.326)***   | 1.44<br>(.556)***   | 1.65<br>(.764)***   | 3.44<br>(.765)***   | 1.63<br>(.512)***   | 3.69<br>(.987)***   | 2.98<br>(.226)***   | 2.77<br>(.707)*** | 2.53<br>(.731)***   |
| city1                                       | 1.44<br>(.922)                              | 1.35<br>(.885)     | 1.41<br>(.971)      | 1.39<br>(.743)      | 1.45<br>(.996)      | 2.06<br>(.861)      | 1.66<br>(.845)      | 2.24<br>(.954)      | 1.41<br>(.952)      | 1.63<br>(.838)      | 1.68<br>(.993)      | 1.43<br>(1.03)      | 1.59<br>(.810)    | 2.86<br>(1.00)      |
|   | 2.39<br>(.190)                              | 3.59<br>(.296)***  | (.000)              | 3.16<br>(.000)      | 3.44<br>(.000)      | 2.09<br>(.000)      | 1.51<br>(.000)      | 1.68<br>(.154)      | 3.34<br>(.205)      | 4.46<br>(.839)      | 3.41<br>(.198)      | 3.21<br>(.442)      | 2.58<br>(.541)*** | 2.81<br>(.442)      |
|   | 1.22  | 1.40               | 1.40                | 1.40                | 1.40                | 1.40                | 1.40                | 1.44                | 2.26                | 2.73                | 3.17                | 2.98                | 2.77              | 29.61               |

**NOTE:** Coefficients of beta are in the first row, standard errors are in parenthesis. Asterisks \*, \*\*, and \*\*\* represent the 0.01, 0.05 and 0.10 error levels, respectively. 3<sup>rd</sup> row is the VIF value.

**Table 5. Dependent variable: Logged Assets of Each Industry (CONTINUED)**

| Independent Variables | Accounting & Non-banking financial services |                      |                         |                        |                     |                     |   |                     |                             |                   | Transpo<br>Equipt.           |                                     |   |      |
|-----------------------|---|----------------------|-------------------------|------------------------|---------------------|---------------------|---|---------------------|-----------------------------|-------------------|------------------------------|-------------------------------------|---|------|
|                       | (1)   | (2)                  | (3)                     | (4)                    | (5)                 | (6)                 | (7)   | (8)                 | (9)                         | (10)              |                              | (11)                                | (12)  | (13) |
|                       | Garment & Leather                           | Electronic Equipment | Electronic Parts Making | Household Electronic s | Auto & Auto Parts   | IT                  | Accounting & Non-banking financial services | Ads & Marketin g    | Business Logistics Services | Food Processin g  | Chemical Products & Medicine | Biotech products & Chinese Medicine | Metallurgica l products (manufact. & tools) |      |
| Model                 |   |                      |                         |                        |                     |                     |   |                     |                             |                   |                              |                                     |   |      |
| city2                 | -0.24<br>(.878)***                          | .048<br>(.871)***    | -0.007<br>(.964)***     | .026<br>(.971)***      | -0.054<br>(.547)*** | .098<br>(.650)***   | -0.048<br>(.894)***                         | -0.288<br>(.247)*** | -0.013<br>(.916)***         | .109<br>(.765)*** |                              | -0.130<br>(.247)***                 | -0.200<br>(.783)***                         |      |
| city3                 | 1.32<br>(.197)***                           | 1.55<br>(.416)***    | 1.38<br>(.837)***       | -0.430<br>(.536)***    | 2.13<br>(.323)***   | 2.07<br>(.616)***   | 1.66<br>(.675)***                           | 1.47<br>(.722)***   | 2.75<br>(.274)***           | 2.28<br>(.403)*** | 3.52                         | 23.73                               |   |      |
| city4                 | 1.49<br>(.238)***                           | 2.51<br>(.020)*      | 2.06<br>(.883)***       | 5.63<br>(.835)***      | 1.73<br>(.752)***   | 1.94<br>(.771)***   | 1.95<br>(.997)***                           | 1.87<br>(.345)***   | 1.83<br>(.532)***           | 2.13              |                              |                                     |   |      |
| city5                 | -0.046<br>(.744)***                         | .538<br>(.032)*      | -0.034<br>(.747)***     | 4.37<br>(.601)***      | 2.00<br>(.099)**    | -0.058<br>(.804)*** | -0.001<br>(.996)***                         | .175<br>(.459)***   | .039<br>(.825)***           | .109<br>(.765)*** |                              |                                     |   |      |
| city6                 | 1.46<br>(.971)***                           | 2.12<br>(.243)***    | 1.98<br>(.976)***       | -0.452<br>(.601)***    | 1.42<br>(.507)***   | 1.68<br>(.565)***   | 1.83<br>(.838)***                           | 1.59<br>(.407)***   | 1.52<br>(.714)***           | 2.28<br>(.403)*** | 2.54<br>(.223)***            | -0.017<br>(.837)***                 | .185<br>(.196)***                           | 2.39 |
| city7                 | 1.30<br>(.431)***                           | 1.48<br>(.295)***    | 1.79<br>(.539)***       | 2.20<br>(.265)***      | 1.60<br>(.969)***   | 1.49<br>(.816)***   | 1.77<br>(.275)***                           | 1.74<br>(.176)***   | 1.95<br>(.393)***           | 5.72<br>(.393)*** | 3.31                         | 4.41                                |   |      |
| city8                 | .054<br>(.732)***                           | .527<br>(.036)*      | .122<br>(.251)***       | .026<br>(.971)***      | .004<br>(.972)***   | .095<br>(.696)***   | .232<br>(.592)***                           | .475<br>(.025)*     | -0.025<br>(.858)***         |                   |                              |                                     |   |      |
| city9                 | 1.45<br>(.246)***                           | 2.43<br>(.404)***    | 1.92<br>(.566)***       | 6.36<br>(.470)***      | 1.50<br>(.568)***   | 1.84<br>(.616)***   | 1.45<br>(.953)***                           | 1.63<br>(.917)***   | 1.91<br>(.336)***           | 1.91<br>(.336)*** | -0.118<br>(.336)***          |                                     |   |      |
| city10                | 1.74<br>(.281)***                           | 1.45<br>(.404)***    | 1.79<br>(.368)***       | 6.93<br>(.741)***      | 1.28<br>(.212)***   | 1.47<br>(.741)***   | 1.47<br>(.992)***                           | 1.17<br>(.191)***   | 2.76<br>(.792)***           | 2.76<br>(.792)*** |                              |                                     |   |      |
|                       | .134  |                      | .106                    | .130                   | .130                | .072                | .004  | .275                | .034                        |                   | -0.446                       |                                     |   |      |
|                       | 1.57  |                      | 1.61                    | 1.63                   | 1.63                | 1.81                | 1.42  | 1.64                | 2.55                        |                   | 5.29                         |                                     |   |      |

**Table 5. Dependent variable: Logged Assets of Each Industry (CONTINUED)**

| Independent Variables      | Accounting & Non-banking financial services |                           |                            |                            |                            |                           |   |                           |                             |                            |                              |                                     |  |                            |
|----------------------------|---|---------------------------|----------------------------|----------------------------|----------------------------|---------------------------|---|---------------------------|-----------------------------|----------------------------|------------------------------|-------------------------------------|--|----------------------------|
|                            | (1)   | (2)                       | (3)                        | (4)                        | (5)                        | (6)                       | (7)   | (8)                       | (9)                         | (10)                       | (11)                         | (12)                                | (13)                                       | (14)                       |
|                            | Garment & Leather                           | Electronic Equipment      | Electronic Parts Making    | Household Electronics      | Auto & Auto Parts          | IT                        | Accounting & Non-banking financial services | Ads & Marketing           | Business Logistics Services | Food Processing            | Chemical Products & Medicine | Biotech products & Chinese Medicine | Metallurgical products (manufact. & tools) | Transpo Equipmt.           |
| Model                      |   |                           |                            |                            |                            |                           |   |                           |                             |                            |                              |                                     |  |                            |
| city11                     | -135<br>(.413)***                           | .178<br>(.448)***         | -054<br>(.643)***          | -320<br>(.678)***          | .014<br>(.929)***          | .239<br>(.313)***         | .112<br>(.685)***                           | -.081<br>(.690)***        | -.003<br>(.985)***          | .192<br>(.564)***          |                              |                                     | -.326<br>(.653)***                         |                            |
| city12                     | 1.25<br>.026<br>(.823)***                   | .334<br>1.33<br>(.386)*** | .019<br>1.52<br>(.882)***  |                            | .053<br>1.69<br>(.618)***  | .202<br>1.92<br>(.372)*** | 2.19<br>1.75<br>(.531)***                   | 1.71<br>1.81<br>(.341)*** | 1.96<br>1.94<br>(.832)***   | 3.04<br>7.26<br>(.454)***  | .218<br>.147<br>(.592)***    | .029<br>.043<br>(.580)***           | .386<br>7.24<br>(.623)***                  | .017<br>2.41<br>(.810)***  |
| city13                     | 1.65<br>-1.45<br>(.262)***                  | 1.33<br>1.68<br>(.586)*** | 1.52<br>1.81<br>(.510)***  | 5.96<br>5.96<br>(.793)***  | .013<br>1.35<br>(.933)***  | .106<br>1.75<br>(.634)*** | .314<br>2.10<br>(.270)***                   | .071<br>1.69<br>(.720)*** | .137<br>1.45<br>(.311)***   | .147<br>2.05<br>(.592)***  | -.340<br>2.42<br>(.121)***   | .043<br>4.18<br>(.580)***           | -.370<br>3.12<br>(.674)***                 | -.036<br>2.28<br>(.526)*** |
| city14                     | 1.55<br>-1.82<br>(.191)***                  | .178<br>(.448)***         | -054<br>(.643)***          | -320<br>(.678)***          | .014<br>(.929)***          | .239<br>(.313)***         | .112<br>(.685)***                           | -.081<br>(.690)***        | -.003<br>(.985)***          | .192<br>(.564)***          |                              |                                     | -.326<br>(.653)***                         |                            |
| city15                     | 1.48<br>.149<br>(.329)***                   | 3.08<br>.147<br>(.586)*** | 1.89<br>.068<br>(.510)***  | 4.17<br>-1.80<br>(.793)*** | 1.28<br>.173<br>(.159)***  | 1.93<br>.009<br>(.971)*** | .111<br>(.720)***                           | 1.48<br>.628<br>(.004)    | 2.31<br>.155<br>(.406)***   | 2.31<br>.155<br>(.434)***  |                              |                                     | -.362<br>(.661)***                         |                            |
| city16                     | 1.48<br>-0.71<br>(.574)***                  | 1.68<br>.336<br>(.117)*** | 1.81<br>-0.44<br>(.635)*** | 5.96<br>5.96<br>(.793)***  | 1.35<br>-0.53<br>(.602)*** | 1.75<br>.059<br>(.768)*** | 2.10<br>-2.46<br>(.373)***                  | 1.69<br>.182<br>(.463)*** | 1.45<br>-1.05<br>(.434)***  | 2.05<br>2.05<br>(.434)***  |                              |                                     | 4.11<br>4.11<br>(.661)***                  |                            |
| city17                     | 1.61<br>.043<br>(.735)***                   | 3.35<br>.307<br>(.176)*** | 2.28<br>.020<br>(.813)***  | 2.82<br>2.82<br>(.696)***  | 1.72<br>.168<br>(.111)***  | 2.39<br>.078<br>(.696)*** | 2.34<br>.815<br>(.003)                      | 1.46<br>.111<br>(.652)*** | 2.05<br>-0.39<br>(.769)***  | 2.05<br>-0.39<br>(.769)*** |                              |                                     |  |                            |
| <b>No. of observations</b> | 339   | 173                       | 259                        | 60                         | 339                        | 190                       | 138   | 137                       | 257                         | 68                         | 60                           | 34                                  | 147  | 46                         |
| R-squared                  | .951  | .949                      | .984                       | .903                       | .981                       | .951                      | .917  | .965                      | .982                        | .968                       | .985                         | .997                                | .886                                       | .998                       |
| Adjusted R-squared         | .947  | .941                      | .983                       | .863                       | .979                       | .943                      | .890  | .957                      | .980                        | .959                       | .980                         | .995                                | .873                                       | .998                       |
| AIC                        | 460.282                                     | 319.188                   | 113.938                    | 158.779                    | 294.216                    | 316.981                   | 280.216                                     | 192.758                   | 203.667                     | 84.895                     | 36.323                       | -44.495                             | 326.171                                    | -49.947                    |
| BIC                        | 563.584                                     | 391.714                   | 199.301                    | 196.478                    | 393.692                    | 401.404                   | 353.398                                     | 271.598                   | 299.492                     | 120.409                    | 65.644                       | -24.877                             | 374.018                                    | -26.175                    |
| Ramsey RESET               | .000  | .963                      | .227                       | .634                       | .004                       | .005                      | .010  | .944                      | .712                        | .324                       | .823                         | .969                                | .795                                       | .124                       |
| Heteroskedasticity         | .103  | .151                      | .983                       | .039                       | .047                       | .002                      | .442  | .211                      | .005                        | .562                       | .067                         | .365                                | .175                                       | .403                       |

All of the types of political capital seem to have a positive impact on assets in the IT industry except for government assistance in getting foreign clients. The reason for this could be, according to the industry analysis provided in Section 2.4., the industry itself concentrates on generating products for the local industries and is not yet ready to meet international standards. This might help explain why government assistance in this form will decrease the assets of firms by .080 than if it had not assisted it in getting foreign clients. Political capital, whatever the form, is valued highly in the accounting industry. The increase in assets of the industry with the presence of political capital, as oppose to without political capital, is big. The accounting industry is very cozy with the state and businesses. Accounting standards are not effectively implemented. The industry is very sensitive to changes in institutions like the legal system or tax codes. Accounting industry players seem to be rewarded when getting involved with the government.

As for the advertisement and marketing industry, credit assistance and Party membership seem to be the types of political capital that are valued. This is reasonable given the current state of the advertising industry in China. What hinders it is the inability to expand professionally, it promotes its own brands and the regulations and censorship it must overcome in crafting ad materials. The business logistics services industry is a relatively young industry and is generally privatized in nature. This is why the political capital has a negative impact on the industry. Its assets would decrease if the government assists it accessing credit, if its CEO is a Party member and/or government appointed. The form of political capital it does respond positively to is government assistance in getting foreign clients. This seems to be common to industries that are small and fragmented and in need of a larger customer base to increase its production base and reach economies of scale.

A fragmented industry such as food processing that has high consumer demand but is dependent on certification responds positively to all four forms of political capital. The valued type of political capital is assistance in getting loans and CEO government appointment. The chemicals and medicine industry values assistance from the government in accessing credit and CEO government appointment partly due to the fact that factor markets for chemicals are very expensive and the domestic market does not have enough supply to meet industry demands. Because the industry is highly regulated with the big chemical companies being SOEs, it benefits from political capital in the form of CEO appointment.

The biotech products and TCM industry is marketized and, although market supporting institutions are relatively weak, this industry is scientifically driven in meeting protocols and standards (so the costs of quality control is internalized) and IPR has a worldwide network of enforcement. This might help explain why none of the four forms of political has a positive impact on the industry. The industrial assets seem to decrease with the presence of political capital. This industry is a good example of how MTT can fully explain the process of transition of an industry and how political capital is devalued given the right market-supporting institutions.

Metallurgical products (manufacturing and tools) industry is one of the industries that the state is heavily involved in. All forms of political capital help the industry expand its assets except CEO government appointment. The reason for this is probably the over-concentrating of state influence. The industry is already primarily owned and run by the government. To have a CEO appointed by the government is not optimal especially for an SOE that already has a significant amount of political capital but rather what it might need is better corporate management.

Most types of political capital have a positive impact on the transportation equipment including telecommunications except for government assistance in accessing credit. This industry is controlled and owned by the government. It already has internalized mechanisms for accessing credit because it is embedded in the bureaucracy.

In general, most of the models can explain high percentages of the variations in specific industry's assets and the findings, generally, are statistically significant as shown in Table 5.

## **5 CONCLUSION**

The MTT has gone far in explaining the market transition and the changes in the systems of incentives for private individuals. Recent phenomena of the business elite joining Party ranks confirm MTT's predictions that economic agents will get a transfer of power as industries become more marketized. These are individuals who gain commercial clout outside the rubric of the planned economy. However, it also demonstrates that political capital is valued, especially, as it is shown in this study, in industries where market-supporting institutions are not functioning properly.

The economic system in China has been overhauled by its market transition but there are nevertheless continuities from the reform periods to the present day. Examples of these continuities are the presence of an immature legal structure that make it difficult to uphold contracts and such, onerous regulatory and tax burdens, and poor financial markets that make loans to SME's inaccessible. Sustained economic and institutional reform require a large number of comprehensive and complimentary policy measures. Chief of which is the construction of market supporting institutions that can facilitate transactions successfully in an economy. In China, this has seemed to have proceeded in piece-meal fashion and in varying degrees, depending on what industry is in question.

The general finding of this study is that the form of political capital matters when determining the value of political capital in an industry. And that determination depends on what market-supporting institution that industry depends on and what institution is lacking. Generally, speaking, in more marketized industries that are not too dependent on market supporting institutions, political capital is not valued highly. But since most industries have weak institutions, one form of political capital or another still has market returns.

## 6 REFERENCES

- Ayyagari, M.; Demirguc-Kunt, A.; & Maksimovic, V. (2007). Formal versus informal finance: Evidence from China. Retrieved May 30, 2007 from:[http://siteresources.worldbank.org/INTFR/Resources/Formal\\_verus\\_Informal\\_Finance\\_Evidence\\_from\\_China.pdf](http://siteresources.worldbank.org/INTFR/Resources/Formal_verus_Informal_Finance_Evidence_from_China.pdf)
- Bai, Chong-En, Yingjuan Du, Zhigang Tao, and Sarah Tong. 2004. "Local Protectionism and Regional Specialization: Evidence from China's Industries." *Journal of International Economics* 63(2):397-417.
- Bian, Yanjie. 2002. "Chinese Social Stratification and Social Mobility." *Annual Review of Sociology* 28:91-116.
- Bian, Yanjie and John Logan. 1996. "Market Transition and the Persistence of Power: The Changing Stratification System in Urban China." *American Sociological Review* 61:739-58.
- Bian, Yanjie, Xiaoling Shu and John Logan. 2001. "Communist Party Membership and Regime Dynamics in China." *Social Forces* 79:805-841.
- Domanski, Henryk and Barbara Heyns. 1995. "Toward a Theory of the Role of the State in Market Transition: From Bargaining to Markets in Post-Communes." *European Journal of Sociology* 36:317-351.
- Gerber, Theodore. 2000. "Membership Benefits or Selection Effects? Why Former Communist Party Members Do Better in Post-Soviet Russia." *Social Science Research* 29;25-50.
- Gerber, Theodore and Michael Hout. 1998. "More Shock Than Therapy: Market Transition, Employment, and Income in Russia, 1991-1995." *American Journal of Sociology* 104:1-50.
- Hellman, Joel, Geraint Jones and Daniel Kaufman. 2003. "Seize the State, Seize the Day: State Capture and Influence in Transition economies." *Journal of Comparative Economics* 31: 751-773.
- Johnson, Simon, Daniel Kaufmann, Andrei Shleifer, Marshall Goldman and Martin Weitzman. 1997. "The Unofficial Economy in Transition". *Brookings Papers on Economic Activity* 1997(2): 159-239.
- Lau, Lawrence, Yingyi Qian, and Gerard Roland. 2000. Reform with Losers: An Interpretation of China's Dual-Track Approach to Transition." *Journal of Political Economy* 108(1):120-43.

- Li, David. 1996. "A Theory of Ambiguous Property Rights in Transition Economies: The Case of the Chinese Non-state Sector." *Journal of Comparative Economics* 23:1-19.
- Li, Hongbin, Lingsheng Meng, and Junsen Zhang. 2006. "Why Do Entrepreneurs Enter Politics? Evidence from China." *Economics Inquiry* 44(3):559-576.
- Lindbeck, Assar. 2006. "An Essay on Economic Reforms and Social Change in China." *World Bank Policy Research Working Paper* 4057.
- Nee, Victor. 1989. "A Theory of Market Transition: From Redistribution to Markets in State Socialism." *American Sociological Review* 56:663-81.
- \_\_\_\_\_. 1991. "Social Inequalities in Reforming State Socialism: Between Redistribution and Markets in China." *American Sociological Review* 56:267-82.
- \_\_\_\_\_. 1992. "Organization Dynamics of Market Transition: Hybrid Forms, Property Rights, and Mixed Economy in China." *Administrative Science Quarterly* 37:1-27.
- \_\_\_\_\_. 1996. "The Emergence of a Market Society: Changing Mechanisms of Stratification in China." *American Journal of Sociology* 101:908-49.
- \_\_\_\_\_. 1998. "Norms and Networks in Economic and Organizational Performance." *American Economic Review* 88(2):85-89.
- \_\_\_\_\_. 2000. "The Role of the State in Making a Market Economy." *Journal of Institutional and Theoretical Economics* 156:64-88.
- Nee, Victor, and Peng Lian. 1994. "Sleeping with the Enemy: A Dynamic Model of Declining Political Commitment in State Socialism." *Theory and Society* 23:253-96.
- Nee, Victor, and Rebecca Matthews. 1996. "Market Transition and Societal Transformation in Reforming State Socialism." *Annual Review of Sociology* 22:401-35.
- Nee, Victor and Yang Cao. 1999. "Path Dependent Societal Transformation: Stratification in Hybrid Mixed Economies." *Theory and Society* 28:799-834.
- Nee, Victor and Yang Cao. 2000. "Comment: Controversies and Evidence in the Market Transition Debate." *American Journal of Sociology* 105:1175-89.
- Nee, Victor and Yang Cao. 2004. "Market Transition and the Firm: Institutional Change and Income Inequality in Urban China." *Management and Organization Review* 1(1):23-56.
- Oberschall, Anthony. 1996. "The Great Transition: China, Hungary and Sociology



- Exit Socialism Into the Market.” *American Journal of Sociology* 101:1028-1041.
- Opper, Sonja, Sonia Wong and Ruyin Hu. 2002. “Local Party Power in China’s Listed Companies: Evidence on CCP Persistence.” *Research in Social Stratification and Mobility* 19:105-38.
- Parish, William and Ethan Michelson. 1996. “Politics and Markets: Dual Transformations.” *American Journal of Sociology* 101:1042-59.
- Rona-Tas, Akos. 1994. “The First Shall Be Last? Entrepreneurship and Communist Cades in the Transition from Socialism.” *American Journal of Sociology* 100:40-69.
- Szelényi, Iván and Eric Kostello. 1996. “The Market Transition Debate: Toward a Synthesis?” *American Journal of Sociology* 101:1082-96.
- Verhoeven, Wj, Flap, H, Jos Dessens, and Wim Jansen. 2008. “Income Advantages of CP Members Before and During the Transformation Processes.” *European Societies*
- Verhoeven, Willem-Jan, Wim Jansen, and Jos Dessens. 2005. “Income Attainment During Transformation Processes: A Meta-Analysis of the Market Transition Theory.” *European Sociological Review* 101:1060-1073.
- Verhoeven, Willem-Jan, Wim Jansen, and Jos Dessens. 2008. “Market Transition or Path Dependency? Changing Effects of Income in Determinants in the Czech Republic, Hungary, Poland, Russia, and Slovakia, 1991-2002.” *Research in Social Stratification and Mobility* 26:141-159.
- Walder, Andrew. 1992. “Property Rights and Stratification in Socialist Redistributive Economies.” *American Sociological Review* 57:524-39.
- \_\_\_\_\_. 1995. “Local Governments as Industrial Firms: An Organizational Analysis of China’s Transitional Economy.” *American Journal of Sociology* 101:263-301.
- \_\_\_\_\_. 1996. “Markets and Inequality in Transitional Economies: Toward Testable Theories.” *American Journal of Sociology* 101:1060-73.
- \_\_\_\_\_. 2002. “Markets and Inequality in Rural China: Political Advantage in an Expanding Economy.” *American Sociological Review* 67:231-253.
- \_\_\_\_\_. 2003. “Elite Opportunity in Transitional Economies.” *American Sociological Review* 68:899-916.
- Walder, Andrew, Bobai Li, and Donald Treiman. 1999. “Politics and Life Chances in a State Socialist Regime: Dual Career Paths Into the Urban Chinese Elite, 1949-1996.” *American Sociological Review* 65:191-209.

- Xie, Yu and Emily Hannum. 1996. "Regional Variation in Earnings Inequality in Reform-Era Urban China." *American Journal of Sociology* 101(4):950-92.
- Zhou, Xueguang. 2000a. "Economic Transformation and Income Inequality in Urban China: Evidence from Panel Data." *American Journal of Sociology* 105(4):1135-74.
- \_\_\_\_\_. 2000b. "Reply: Beyond the Debate and Toward Substantive Institutional Analysis." *American Journal of Sociology* 105(4):1190-95.
- Zhang, Xiaobo and Kong-Yam Tan. 2007. "Incremental Reform and Distortions in China's Product and Factor Markets." *World Bank Economic Review* 21(2):279-299.