



Kiel

Working Papers

**Kiel Institute
for the World Economy**



Firm Characteristics and Informal Governance of Business Operations in the PRD, China

by **Frank Bickenbach,
Wan-Hsin Liu**

No. 1728 | August 2011

Web: www.ifw-kiel.de

Kiel Working Paper No. 1728 | August 2011

Firm Characteristics and Informal Governance of Business Operations in the PRD, China

Frank Bickenbach and Wan-Hsin Liu

Abstract: This paper describes the Chinese economic and institutional reform process as a gradual transition of an informal, relation-based governance system into a more formal and rule-based governance system. The consequences of macro-level institutional reforms on the importance of personal relationships for the firm-level governance of business operations are discussed. Theoretical considerations based on the New Institutional Economics suggest that, in a transition economy such as China, companies' incentives to reduce the reliance on personal relationships should depend on firm characteristics such as the age, size and the internationalization of the firm. We confront these suppositions with empirical data obtained from a company survey performed among 222 (electronics industry) companies operating in the PRD, China. From this we obtain some, though often weak, evidence in favor of the suppositions.

Keywords: formal and informal institutions, relation-based governance, firm characteristics, China, company survey

JEL classification: L20, L63, P0

Frank Bickenbach

Kiel Institute for the World Economy
Hindenburgufer 66
24105 Kiel, Germany
Email: frank.bickenbach@ifw-kiel.de

Wan-Hsin Liu (Corresponding author)

Kiel Institute for the World Economy
Hindenburgufer 66
24105 Kiel, Germany
Email: wan-hsin.liu@ifw-kiel.de

Acknowledgement:

Liu would like to thank the German Research Foundation (DFG) for its financial support of the cooperative projects "Informal Dynamics of Agile Firm Organization in the Greater Pearl River Delta" and "Regional Agility and Upgrading in Hong Kong and the PRD" (Priority Program 1233: Megacities—Megachallenge: Informal Dynamics of Global Change).

The responsibility for the contents of the working papers rests with the author, not the Institute. Since working papers are of a preliminary nature, it may be useful to contact the author of a particular working paper about results or caveats before referring to, or quoting, a paper. Any comments on working papers should be sent directly to the author.

Coverphoto: uni_com on photocase.com

Firm Characteristics and Informal Governance of Business Operations in the PRD, China

1 Introduction

Over the last three decades, China has recorded very high economic growth rates and developed into one of the three largest economies in the world. This remarkable growth was accompanied and fueled by continuing reforms of formal legal and market institutions which together led to substantial changes in the institutional environment in which business firms operate in China. This reform process can be viewed as a gradual transformation of the Chinese economy from an informal, relation-based governance system to a more formal and rule-based governance system (LI, 2004; LI/PARK/LI 2004).

The importance and pervasive use of personal relationships in daily social and business life in China has attracted considerable attention among researchers from various disciplines. There has in particular been a growing economics and management literature on the role of personal relationships for doing business in China. Most of the empirical studies of that literature are based on surveys among Chinese managers or foreign managers with some experience in Chinese business (e.g., XIN/PEARCE 1996; DAVIES/LEUNG/LUK/WONG 1995; LUO 1997; PARK/LUO 2001). Generally, the survey results confirm the importance of personal relationships with other managers and/or with government officials (for a summary see LANGENBERG 2007 and LUO 2007). In a study related to the present one, BICKENBACH/LIU (2010) confirm this general observation for Hong Kong based companies with operations in the Pearl River Delta (PRD)¹, China. They also find evidence showing that personal relationships are less important than other more “objective” criteria for these companies’ decisions on business partners (and business locations).

This result can be interpreted as an indication that the improvements in the formal institutional environment induce companies operating in current China to gradually reduce their predominant reliance on informal relation-based governance instruments and turn to

¹ The Pearl River Delta (PRD) comprises nine municipalities of the Chinese Province of Guangdong (Dongguan, Foshan, Guangzhou, Huizhou, Jiangmen, Shenzhen, Zhaoqing, Zhongshan, and Zhuhai).

make increased use of rule-based governance instruments, such as formal contracting and public information institutions.

Theoretical considerations suggest that, in a transition economy such as China, not all companies will have equally strong incentives to move from informal relation-based to more formal, rule-based forms of governance. The incentives to reduce the reliance on personal relations may be stronger, in particular, for older, larger and faster growing firms. The same can be expected to be true for companies with more international business contacts (international suppliers or customers) or larger foreign ownership interests. This paper outlines the theoretical considerations underlying these suppositions and confronts them with data obtained from a company survey that we did among 222 (electronics industry) companies operating in the PRD, China.

The remainder of the paper is organized as follows. In Section 2, we present the institutional economics perspective on the nature of informal, relation-based and formal, rule-based modes of governance and their comparative (dis)advantages, both at the aggregate and at the firm level and derive our core suppositions regarding the relation between firm characteristics and firms' incentives to use of personal relationships for doing business in a "transition" economy. In Section 3, we outline the changing institutional environment in China in general and in the PRD in particular. In Section 4, we discuss the empirical results regarding the relation between firm characteristics and the role of personal relationships for doing business in the PRD. Section 5 concludes.

2 Theoretical Considerations

Institutions, i.e. rules and instruments to enforce these rules, matter for the efficiency of human exchange (NORTH 1990). By defining and protecting property rights, enforcing contracts, and providing reliable information, well functioning (economic) institutions can reduce the risks and transaction costs of investment and exchange. Economic activity is supported and shaped by both *formal* and *informal* institutions. Formal institutions include political, judicial and economic rules, ranging from written constitutions and statutory laws to specific regulations and bylaws and to individual contracts. Informal institutions include the social and religious norms and taboos, the mores, traditions and codes of conduct and the social networks that exist in a society (NORTH 1990, 36, 47).

It has proved useful for analytical purposes to distinguish between two levels of institutions, the *institutional environment* and *institutional arrangements*. The institutional environment is the overarching framework of rules and constraints, both formal and informal, that define the context in which economic and social interaction takes place. It encompasses the political, social and legal ground rules that establish the basis for production, exchange and distribution. Within this overarching framework, parties to a specific exchange set up institutional arrangements, i.e., formal and informal (micro-level) rules and forms of contracts, that govern the way in which they cooperate and/or compete (WILLIAMSON 1996, 378).

Three elements of the institutional environment, in particular, are of great importance for the level and the organization of economic exchange of an economy: *contracting institutions*, *property rights institutions* and *information institutions*. Contracting institutions are the rules that support the conclusion and the enforcement of contracts between (private) economic agents (ACEMOGLU/JOHNSON 2005, 955). Differences in contract laws and their implementation across countries introduce significant differences in the costs of drafting and enforcing contracts and consequently in the contracts and transactions realized.

Property rights institutions are the rules that protect (the returns to) the assets held by economic agents against expropriation by others, in particular, against the coercive power of the government and politically powerful elites (ACEMOGLU/JOHNSON 2005, 955; GREIF 2005, 728). In contrast to contracting institutions, property rights institutions mainly relate to the interactions between private economic agents and state actors. They determine the degree to which the politically powerful elites are constrained in their relationships with the rest of the society. They do not only affect the risk of direct government expropriation of private property but also the level to which regulations and public decisions determine a level playing field for all economic actors or favor and protect a small elite with close relationships with the government.

Information institutions are public or private institutions for gathering and distributing information. They affect the amount and the quality of information available to economic actors (and public agents) and the scope and the speed of its circulation. They affect, in particular, the cost of screening (potential) business partners and of monitoring their performance and

thus the cost of designing, managing and enforcing contractual agreements.² There are thus important interdependencies between information institutions and contracting institutions.³ There are also important interrelations between information institutions and property rights institutions: Economic actors will, for example, be reluctant to use institutions that reveal information regarding their wealth if this “information can be used by those with coercive power to identify and capture this wealth” (GREIF 2005, 728). At the same time, transparent, publicly available information about public laws and policies can help constrain government and protect private property rights.

There are substantial differences between societies in the nature and sophistication of their basic institutions and in the degree to which they are able to reduce the transaction costs and the risks associated with economic exchange and investments in private assets.⁴ In “Western” societies, over time, a complex system of *formal* institutions for public information provision, contract enforcement and property rights protection has been devised, on which people can build for governing economic exchanges. Many of these formal institutions are non-existent, weak or poorly devised in less developed countries (BARDHAN, 2005, 512). To govern economic exchanges people in these countries tend to rely more on *informal* institutions and personal relations, e.g., *guanxi* in China (LI/PARK/LI 2004, 63).

Based on this general observation, we can distinguish for analytical purposes between two modes of governance systems—relation-based and rule-based governance systems (LI 2003, LI/PARK/LI 2004, also see DIXIT 2004). The two systems differ both at the macro-level of the institutional environment and at the micro-level of the institutional arrangements chosen to govern individual transactions between economic agents. These differences have profound implications for the nature and size of transaction costs under the two governance systems.

In a *rule-based governance* system public rules (laws and regulations) and state policies are transparent, fair, and universally applied and economic transactions are largely based on impersonal and explicit formal contracts. Both, public rules and private contracts can be

² Institutions that can improve the availability of (reliable) public information on an economic agent’s past conduct and his ability to perform include accounting and auditing rules, credit rating and credit reporting institutions and land and liens registries.

³ Information institutions may even be considered an integral part of contracting institutions as in GREIF (2005).

⁴ In general terms, transaction costs include both the direct costs of carrying out a transaction as well as the opportunity costs incurred when an efficiency-enhancing transaction is not realized. For the different types of transactions costs see MILGROM/ROBERTS (1992, 25-30, 605) and STANDIFIRD/MARSHALL (2000, 24-28).

impartially enforced by the executive and the court system (LI 2003, 655; LI/PARK/LI 2004, 64). Economic agents have access to high quality publicly available and verifiable business information provided through a broad range of well established public information institutions (accounting and auditing rules, credit information institutions etc.). This reduces the costs of screening and monitoring (potential) business partners and of enforcing business contracts (LI 2004, 108; LI 2003, 657).

In a *relation-based governance* system public rules tend to be unfair and opaque, and the state is unable to enforce these rules impartially (LI/PARK/LI 2004, 64). Courts, due to the lack of independence and/or competence, are generally not able to enforce public rules or private contracts effectively. Most transactions between business partners are governed by personal and implicit agreements that are enforced outside the courtrooms (LI 2003, 652, 656). Publicly available information about (potential) business partners is rare and generally of low-quality. Key information about business partners has to be derived from personal relations. Information about business partners and business relationships tends to remain personal, and relational, i.e., mutually observable to the two transaction partners but unverifiable by people outside the relationship (LI/PARK/LI 2004, 64, 69; LI 2004, 108). In relation-based governance systems agreements are mostly enforced by *second-party enforcement* mechanisms: each party to an ongoing relationship is deterred from behaving opportunistically and from breaching the (implicit) agreement by the other parties' threat to retaliate and/or to terminate the relationship. Sometimes agreements and information about business partners' performance will be made partially explicit and verifiable to third-parties to allow for third-party enforcement, which may take one of two forms. In *relation-based third party enforcement*, the deterrent to breach an agreement is strengthened by the threat that the miscreant will be barred from future business not only with the particular partner (on which he acted opportunistically) but with the whole group of (potential) business partners. This threat may be further buttressed by social ostracism if the group fosters social ties among its business members (DIXIT 2004, 27-28). The second form is *third party enforcement by the state*, which will not generally be impartial in relation-based systems, however. Frequently, in case of conflict, the contracting parties' personal relations with politicians or state officials (political relations) will determine the enforcement outcome or the ex-post bargaining power of the parties (LI 2003, 657). In relation-based governance systems it is thus important information which personal relations transaction partners have in business networks and vis-à-vis powerful politicians.

It is widely recognized that the importance and the relative efficiency of formal institutions and rule-based systems governance increases relative to that of informal institution and relation-based governance as the scope of market exchange broadens and deepens (see, e.g., NORTH 1990 and DIXIT 2004). Relation-based governance systems work well in small or/and well-knit groups, whereas efficient exchange relations in large groups require more formal institutions for information dissemination and enforcement.

When the scale and scope of an economy is small, so that there are rather few economic transactions and a comparatively small number of agents involved, the average transaction costs can be smaller in relation-based governance than in rule-based governance (LI 2003; LI/PARK/LI 2004; DIXIT 2004). At the aggregate level relation-based governance is associated with comparatively low fixed costs as it avoids the high fixed costs of developing elaborate formal public information and contracting institutions. At the level of individual exchanges, parties with existing personal relationships will find relation-based governance to be less costly as it saves the costs of legal enforcement and information verification. However, relation-based governance exhibits comparatively high and increasing costs of extending business to new business partners. Extending business will increasingly require establishing relations with persons, to which agents have a priori only weak or no private relations which raises the costs of searching for competent and reliable partners and of establishing personal relations with them. Also, it is generally very difficult, to delegate the development of personal relationships and the relation-based governance of business transactions,⁵ so that the head of a firm has to take care of all (major) relations by himself (LI 2003, 657). Given his finite time there will thus be increasing marginal costs in establishing and using personal relations.

A rule-based governance system, in contrast, involves large fixed costs for establishing the necessary legal and informational infrastructure. However, once the necessary information and contracting institutions have been established the marginal costs of screening potential business partners and of negotiating and enforcing an (additional) contract between an (additional) pair of transaction parties, including strangers, are comparatively low due to the quality of publicly available information and the fact that the contracts are explicit, impersonal, and standardized (LI 2003, 657 and LI/PARK/LI 2004, 65). As the scale and scope

⁵ Delegation is problematic as the relations between the business partners are informal and person-specific and the information acquired during the relationships is mostly informal and implicit and thus difficult to transfer.

of the economy increases, the fixed costs of establishing a rule-based governance system can be spread over a larger number of transactions, thus lowering the average costs. Eventually an expanding economy will reach a point where the average transaction costs are smaller under rule-based governance than under relation-based governance and it would be advantageous for society to develop an institutional environment that supports rule-based governance.

In the real world, of course, most economic systems contain elements of both modes of governance (DIXIT 2004, 25, 83; LI 2003). In particular, even in the most developed economies, where well-functioning formal institutions of information provision and contract enforcement exist, formal institutions will never govern all economic exchanges. Informal arrangements and elements of relation-based governance continue to play an important—generally efficiency enhancing—role for many transactions between as well as within firms. For example, even in the most developed economies much person- and transaction-specific information remains unobservable or unverifiable to third parties. Many contract clauses that trading partners would like to agree upon may therefore be unenforceable by courts but still be enforceable by relation-based enforcement mechanisms. Personal relations between transaction partners and informal governance instruments may also reduce the cost of renegotiating contractual agreements and adjusting them to (unexpected) changes in the business environment (see BICKENBACH/LIU 2010). It is still true however, that relation-based governance of individual business transactions will be more important in economies with weaker formal information, contracting and property rights institutions.

The transition of an economy from a (more) relation-based to a (more) rule-based governance system will often face strong resistance and will generally take a considerable period of time during which there may be substantial conflicts between the old and the new institutions. The basic *informal* institutions that exist in a society are often embedded in cultural traditions and moral value systems. They therefore possess inertia that slows the pace of institutional change (ZENGER/LAZZARINI/POPPO 2002, 283-4).⁶ Even the effects of occasional broad and fast changes of *formal* institutions may be limited by tensions between the new formal rules and existing informal rules that cannot be changed by fiat and respond only gradually to changes in the formal institutions. These tensions may undermine compliance with formal rules and

⁶ The basic *formal* institutions of a society generally also tend to be quite persistent and their change mostly incremental. Occasionally, however, windows of opportunity arise, in which formal institutions can change very fast and in large discrete steps (NORTH 1990, 89-91).

may create a lag between the implementation of a new formal institutional structure and its overall functionality (NORTH 1990, 91; ZENGER/LAZZARINI/POPPO 2002, 283-4). Simply issuing new, “Western-type”, business laws and formal institutions may thus not be sufficient to substantially improve the quality of public information, of legal contract enforcement and of the effective protection of property rights. New rules may largely remain “ink on paper” (LI/PARK/LI 2004, 74). And even if the new formal institutions work reasonably well, persistent cultural norms may still induce (some) economic agents at the micro-level to stick to the use of relation-based forms of governance. This is true, in particular, where the cost advantages of formal rule-based forms of governance are not too large (and competitive pressures are not too strong).

The theoretical considerations about the working and the (relative) costs and benefits of the two modes of governance suggest, that firms’ incentives to move from relation-based to rule-based governance should depend on a number of firm characteristics, such as the size and the growth performance of the firm, its age, its ownership and the degree of its integration into national and international markets.

The marginal cost of rule based-governance will generally be higher for large firms than for small firms (see above). At the same time it will be easier for them to bear the firm-level fixed costs of rule-based governance—such as the costs of introducing new quality accounting and auditing systems or of acquiring the skills necessary to formulate and manage externally enforceable contracts. We should therefore expect that large firms have a greater propensity to engage in rule-based governance than small firms. Similarly, as the development of personal relations to new business partners is costly and time-consuming, firms that are growing quickly in size and in the number of business partners will have greater incentives to reduce their reliance on personal relationships. Firms that are able and willing to make use of formal, rule-based mechanisms for searching and screening new business partners and managing and enforcing contractual agreements will find it easier to quickly expand the number of their business partners and will thus be able to grow faster.

The age of a firm is certainly correlated with its size and possibly with its growth rate. The age of a firm will therefore have an indirect effect on its incentives to use rule-based governance mechanisms. The age of a firm can be expected to also have a direct influence on these incentives, however. Longer established firms will have accumulated substantial experience with relation-based governance and will already have established long-term

personal relationships with a number of business partners and possibly public officials as well. Even as institutions of rule-based governance get gradually established at the level of the institutional environment, these firms will have an interest to continue to make use of their existing relationships, though it may become increasingly difficult to sustain these relationships as switching business partners becomes easier during the transition.⁷ On the other hand established firms may have built up some public reputation of being a reliable business partner which may help these firms to get into business with unknown partners more easily. By contrast, even with improving public information institutions newly founded firms will have great difficulties signalling reliability and competence. At least with respect to its role of getting into contact with *new* customers and suppliers (or creditors) we therefore expect existing personal relations with family members or friends (or early business partners) to be more important for younger firms than for older more established ones. As to the importance of personal relations for doing business more generally no clear conjecture about the role of firm age seems to be possible a priori. While it may be very difficult for young firms to establish themselves in the market without personal relations, older firms will simply have more well-established personal relations to business partners or public officials on that they can continue to build.

For heads of firms from a relation-based economy (in transition) it is generally much more difficult to establish and cultivate personal relations with foreign business partners (from rule-based economies) that are not acquainted with the specifics of relation-based governance than with business partners from their own region or country. Domestic firms will therefore be less likely to use relation-based governance mechanisms for business transactions with foreigners than for transactions with domestic business partners. As firms with many foreign business partners will get acquainted with using formal information and contracting institutions and will have to invest in their ability to use these institutions, they will also be more likely to reduce their reliance on relation-based governance even for transactions with domestic business partners. In a transition economy, relation-based governance will therefore be comparatively less important for firms that have more business relations with customers or suppliers from Western (rule-based) economies. Similar arguments apply to the comparison

⁷ As the number of potential competitors to existing transaction partners increases and formal institutions of information and contract enforcement are getting more effective, the benefits of switching business partners increase and the its costs decrease (Li 2003, 659, 660).

of domestically-owned and foreign-owned firms. Foreign owners (and managers) will generally not be familiar with the specifics of relation-based governance and it will be much harder for them to establish personal relations with executives of local firms. At the same time, they are familiar with rule-based governance instruments and have already developed the relevant skills. They will thus have an incentive to extend formal governance mechanisms to their local subsidiaries and their transactions with local business partners as well. In transition economies, foreign-owned (in particular Western-owned) firms can therefore be expected to make less use of personal relations in managing their business operations than domestically owned firms.

3. The Changing Institutional Environment for Doing Business in China and in the PRD

China today can be viewed as a society that is in a gradual process of transition from a relation-based to a more rule-based governance system (LI 2004; LI/PARK/LI 2004).

The (Traditional) Role of Personal Relationships in China

The importance and pervasive use of personal relationships in daily social and business life in China has been stressed by numerous observers and has attracted considerable attention among researchers from various disciplines.⁸ While the cultivation of long-term personal relationships in some form and to some extent exists in every society, its specific form, *guanxi*, and its pervasiveness and importance in daily social and business life are often considered distinctively Chinese (STANDIFIRD/MARSHALL 2000, 22).

Guanxi is cultivated through the repeated exchange of gifts and favors, which creates a sense of reciprocal obligation and indebtedness of the partners (STANDIFIRD/MARSHALL 2000, 22-23). By developing *guanxi* to several other persons that may also develop personal relationships among each other, the development of bilateral relationships ultimately leads to a network of relationships (the *guanxi* network). A failure to follow the rules of reciprocity and equity in a *guanxi*-based relationship results in loss of face and the identification as being untrustworthy. As the loss of face associated with opportunistic behavior with one exchange partner spreads through the whole network, it can easily result in the offending party's

⁸ LANGENBERG (2007) provides a partial overview with a focus on business economics and "sociological economics".

banishment from the network altogether (an example of relation-based third party enforcement). Within *guanxi* networks, the threat of network expulsion increases the cost of opportunistic behavior, thus providing an increased assurance that one's exchange partner will not act opportunistically. The flow of information within *guanxi* networks is not restricted to information of member's conduct for the purpose of sanctioning opportunistic behavior, however. There is also a vivid exchange of information about business opportunities and about the competence and reliability of potential business partners.⁹ These advantages do not come for free, however. Establishing and cultivating effective *guanxi* networks takes time and other resources. Moreover, having to choose, due to reciprocal obligations, transaction partners from within one's personal network may foreclose the choice of the most efficient trading partner and may inhibit potentially profitable transactions with people outside the network (LANGENBERG 2007).

The importance of *guanxi* in China is not restricted to relations between private persons. Given the paramount role that the state (government and bureaucracy) continues to play in the Chinese society and economy (see below), personal relationships with government and party officials (political relations) are considered to be of great significance for citizens' quality of life and businesses' success (see, e.g., LANGENBERG 2007).¹⁰ Citizens as well as businessmen may therefore have a strong interest in extending their networks to public officials.

There are two basic arguments on why the Chinese rely on personal relationships (see LI 2004, 107-8): The first argument is a cultural one. It maintains that personal relationships are indigenous to Chinese culture and deeply rooted in its Confucian legacy (see DUNNING/KIM 2007). The second argument builds on the institutional approach delineated in the previous section. It argues that the predominant reliance on personal relationships in China is due to the weakness of public information and formal contracting and property rights institutions, which implies that people have to rely on personal relationship to access relevant information, to enforce (business) agreements and to protect their property rights.¹¹ While the cultural

⁹ "The exchange of information favors in *guanxi* networks is so common that *guanxi* is said to act as an 'information bridge'" (LANGENBERG 2007, 46).

¹⁰ Political relations can be a "lubricant" for a wide variety of private or business-related activities: obtaining diver's licenses, getting access to medical treatment or to universities, gaining favorable verdicts in lawsuits, obtaining the permits required for all kind of business operations, getting access to scarce resources etc..

¹¹ The two arguments are not mutually exclusive. The cultural and institutional factors may mutually reinforce each other in defining the role of personal relationships in China (LI 2004, 108; also see Section 2 above).

argument suggests that personal relationships will remain essential in China, the institutional approach predicts a decline in the importance of personal-relationships as China's legal system and formal market institutions improve.

The Reform of the Formal Institutional Environment in China

Since the beginning of economic reforms in 1979 there have been dramatic changes in the institutional environment for doing business in China. Until 2007, the year of the company survey underlying our empirical analysis (see Section 4), formal contracting, information, and with some reservations also, property rights institutions have been improved considerably.

The first Economic Contract Law (passed in 1981) was intended largely to regularize relations between State-Owned Enterprises. As economic reforms gradually led to a great expansion in the number and importance of non-state enterprises the role of contract law shifted towards governing the interactions between independent economic agents. The overall scope of contract law was gradually broadened by passing specific contract laws and amending the Economic Contract Law. In 1999, the different contract laws were replaced by a new unified Contract Law that gave broad range to freedom of contract and provided a uniform legal framework for economic contracts by individuals and enterprises alike, regardless of ownership and nationality.¹² During the reform, the importance of courts for the resolution of disputes over contracts increased substantially. Despite their many remaining deficiencies¹³ courts are now playing a significant role in dispute resolution (CLARKE/MURRELL/WHITING 2008) and in comparison with other—developing and developed—countries, the ability of Chinese courts to solve disputes over *simple and clearly written contracts* has been rated quite favorably (in 2007).¹⁴

Like contract law, many of the public information institutions that are of great importance in modern market economies were (virtually) non-existent when the reform process began. Until 2007, China has made substantial progress in reforming or introducing some of these information institutions—though much remains to be done. An important example are

¹² For details see CLARKE/MURRELL/WHITING (2008).

¹³ Widespread corruption and a lack of legal training and competence among judges; dependence of judges on (local) politicians (for more on this see footnote 17 below).

¹⁴ In terms of the ease or difficulty of enforcing a simple commercial contract, China ranked 20th of 178 economies in the World Bank's "Doing Business 2008"-report (WORLD BANK 2007). Criteria used to determine the ranking are the time, the cost and the number of procedures involved from the moment a plaintiff files the lawsuit until actual payment in a specific, well defined commercial dispute.

accounting standards. In the early stages of the reform process, several different sets of accounting rules and regulation applying to firms with different ownership structures and from different industries were introduced. Generally these rules deviated substantially from international accounting standards. The new Accounting Standards for Business Enterprises that came into force in 2007 are broadly in line with international accounting standards but they are mandatory for listed companies only, at first. Thus, most enterprises in China still operate under the old accounting framework. Additional problems arise from a lack of adequate expertise among corporate accountants. Despite some convergence with international standards, the practical application of China's accounting principles is often a complex and opaque process, therefore.¹⁵ A second example relates to credit information. In the early 2000s the People's Bank of China established a rapidly expanding Corporate Credit Information Database that contains information on companies' bank and non-bank credit relationships (see JENTZSCH 2008). In 2006, it contained information on about 11 million enterprises of which about 5 million had a credit relationship. Later the system was extended to include credit information on individuals. With its official start in 2006, the Individual Credit Databank contained information on about 340 million consumers of which about 35 million had an established credit relationship (JENTZSCH 2008, 541, 545).¹⁶ These examples are meant to illustrate that public access to business information has expanded substantially during the reform period. Several important reform steps have been taken only rather recently, however, and much remains to be done before the quality of public information institutions in China can match the quality of these institutions in most Western countries.

Compared to the progress made in improving formal contracting and information institutions, reform progress in formal property rights institutions has been slow and more limited. Only in 2007, after several years of considerable controversy and delay, a unified Property Law was passed. For the first time since the establishment of the People's Republic of China this law defines and introduces the concept of property rights in a unified way covering state property, collective property as well as private property. It defines the rights owners have over their property and the obligations assumed by others in respect of this property. However, to ensure that the law was passed, a number of areas—including modalities of legal redress—have been

¹⁵ For additional information see WORLD BANK 2009.

¹⁶ The scope, accessibility and quality of credit information available through either public or private credit registries and their coverage are central criteria in the World Bank's ease of „Getting Credit“-index. For this index, China ranked 84th of 178 economies in 2007 (WORLD BANK 2007).

left vague, limiting the effectiveness of the protection of private property rights in practice (OECD 2008, 23-27, MARECHAL/TEKIN/GULIYEVA 2009).

More generally, the current Chinese legal system is largely unable to provide secure property rights for two main reasons: the broad decision making powers of numerous (local and central) government bodies and the inability of courts to effectively constrain (arbitrary) government action. The possibility of court involvement cannot be generally assumed when a law is violated, and even if the courts became involved, their effectiveness is highly uncertain. Often other government agencies can ignore court decisions with impunity. One of the main reasons for this deficiency is the dependence of courts on local government.¹⁷ This makes it difficult for courts to take decisions that are against the wishes of local governments, and it allows local governments to influence courts, or to ignore their decisions, in order to accommodate the interests of companies with strong political relationships (CLARKE/MURRELL/WHITING 2008).¹⁸

In current China, local and central government officials' still hold numerous instruments and wide discretionary powers to intervene with business operations and affect business success. Business operations require licenses, permits and approvals from various governmental authorities and are subject to numerous business laws and regulations. The requirements for obtaining licenses and permits as well as the terms and interpretation of business regulations often lack transparency. They can differ substantially across provinces, districts and even towns and are subject to frequent changes. Business success is also affected by officials' decisions on the allocation of land-use rights and of other scarce resources, or by their decisions on subsidies, favorable tax treatments and government procurement contracts. Against this background personal relations with public officials can help smooth business operations and reduce the risk of expropriation by the politically powerful.

The Changing Institutional Environment for Doing Business in the PRD

¹⁷ The power to appoint and to dismiss (local) courts' leadership rests with government or Communist Party organizations at the same administrative level. Local governments also control court finances, material supplies, and welfare benefits for court officials (CLARKE/MURRELL/WHITING 2008, 395). Other reasons for the lack of an efficient application and enforcement of laws are the widespread corruption and the generally low level of legal training and competence of judges (TREBILCOCK/LENG 2006, 1554).

¹⁸ For examples, see LI (2004).

As a consequence of the substantial influence that local and regional politicians have on business relevant policies and on the enforcement of laws and contracts, the quality of the legal system and of formal market institutions can differ considerably across Chinese provinces. Our empirical analysis is restricted to firms located in the PRD in the province of Guangdong. Therefore, the quality of the institutional environment of Guangdong is of particular interest to our analysis. Guangdong has been a pioneer region of the Chinese economic reforms over the last three decades. Since the beginning of reforms the business and investment environment in Guangdong has been more developed and more business friendly than in many other Chinese provinces. This has recently been confirmed by a World Bank report (WORLD BANK 2008) that compared the business and investment environments of 30 major cities in China (the capitals of all Chinese provinces, with the exception of Tibet, and the four centrally administered municipalities). Four indicators of a business-friendly environment were compared: the ease of starting a business, of registering property, of getting credit, and of enforcing contracts. Guangzhou, the capital of Guangdong, ranked among the top three cities for all four indicators and it even ranked first for contract enforcement. Thus, legal and formal market institutions are generally more developed in Guangdong (and in the PRD in particular), than in most other Chinese provinces. Still, as compared to advanced “Western” countries (or to neighboring Hong Kong) formal legal and market institutions in Guangdong are still clearly deficient and certainly much less favorable to a rule-based governance of individual business operations.

It is worth mentioning that the comparatively advanced institutional reform process in Guangdong has gone hand in hand with an expansion and internationalization of (private) economic activity that is outstanding even for Chinese standards. Guangdong had the highest GDP (2621 billion RMB) of all Chinese provinces and its growth rate (15%) was also among the highest in China in 2006.¹⁹ In the same year, the number of state-owned and non-state-owned industrial enterprises with annual revenues of over 5 million RMB was about 37500, the second largest number of all Chinese provinces, and these companies gross industrial output value and industrial value added were higher than the corresponding figures in all other provinces. Having the second highest openness index²⁰, Guangdong’s economy was also

¹⁹ All data in this paragraph are from NBSC (2007).

²⁰ The openness index is defined as the value of external trade (exports plus imports) over GDP. Its value for Guangdong was 1.604 in 2006 (second only to that of Shanghai with a value of 1.750).

more strongly integrated into the international markets than all other Chinese provinces, with the exception of Shanghai.

For an institutional and economic environment such as that of Guangdong, or the PRD, (in 2007) the institutional approach (see section 2) suggests that personal relations with business partners and with public officials are still playing an important role for many firms' business operations. However, with continuously improved formal institutions and with increasing scale and complexity in business operations on site, certain firms may already begin to reduce their dependence on personal relations and to increasingly rely on formal institutions for governing their business operations.

4 Empirical Analysis

The PRD Company Survey 2007 on which our empirical analysis is based was addressed to executives of electronics companies in the PRD.²¹ As the economically dominant region within Guangdong province with its comparatively advanced institutional reform process and its vivid private enterprise sector, the PRD constitutes a suitable research region for our research purpose. The focus on a single industry helps to reduce industry-level firm heterogeneity and allows our analysis to focus on those firm characteristics that are, according to the theoretical considerations of Section 2, likely to affect the firms' decision to use relation-based or rule-based governance instruments. The electronics industry was selected due to its substantial importance for the regional economy in the PRD. The gross output of the electronics industry's enterprises (state-owned enterprises and non-state-owned enterprises with annual business revenues of at least 5 million RMB) amounted to 41% of all industries in 2006 (GPBS 2007). Moreover, the electronics industry is a very dynamic industry—characterized by short product life-cycles, quick product-related process modifications, and large research and development expenditures (TUAN/NG, 1995). In combination with the high intensity of global competition within the industry, these features force companies to continuously optimize the governance of their business operations.

²¹ The survey was carried out under the cooperative project “Informal Dynamics of Agile Firm Organization in the GPRD” financially supported by the Deutsche Forschungsgemeinschaft. The four partner institutions of the project were the Department of Geography at the University of Cologne, the Department of Geography at the Justus-Liebig-University of Giessen, the Institute of Economic and Cultural Geography at the Leibniz University of Hanover, and the Kiel Institute for the World Economy. The survey was conducted by our local partner, Prof. Li and his team from the Geography and Planning School at the Sun Yat-Sen University in Guangdong.

For our survey a total of 400 electronics companies were randomly selected from the comprehensive company catalogue “Guangdong Electronics 2007”. Overall 222 of these companies completed and returned the questionnaire. Our empirical analysis is based on the responses to a subset of the questions of these questionnaires.²² In the following we first present our results on the general role of personal relationships for doing business in the PRD (Section 4.1). We then turn to the results on the importance of personal relationships (relative to other more formal and impersonal alternatives) for three critical business functions, namely for getting into contact with customers and with suppliers and for obtaining short-term finance (Section 4.2). Finally, we present evidence on how the importance of personal relationships for individual firms varies with firm characteristics such as age, ownership structure, size and growth performance (Section 4.3).

4.1 Role of Personal Relationships for Doing Business in General

Within the questionnaire two questions relate to the general importance of personal relationships for companies’ business operations in the PRD, with the first one considering personal relationships in general and the second one focusing on political relations. As to the importance of personal relationships in general, executives were asked to use a five-level Likert scale to assess the importance of six specified reasons for their firms’ decisions to fulfill some business tasks in the PRD via personal networks: to “substitute for missing laws and regulations” (SubMLaw), to “respond quickly to customer demands” (ResCus), to “increase company’s operational flexibility” (IncFlex), to “reduce risks and uncertainties” (RedRisk), to get “access to business-related information” (AccInfo), and “to solve business disputes” (SolDis). In total, about two thirds of respondents consider responding quickly to customer demands as a very important or important reason for their company to fulfill some tasks via personal relationships, whereas only about a quarter of them do so for substituting missing laws/regulations, or for solving business disputes. The shares of respondents that consider the other three reasons as very important or important are at intermediate levels (Table 1).²³

²² The whole questionnaire of the PRD Company Survey 2007 is available upon request.

²³ This ranking of the importance of the different reasons is confirmed by two-tailed pair-wise Wilcoxon Signed-Rank Tests (WSRTs). According to these tests ResCus (IncFlex) is the most (second most) important reason for companies in the PRD to use personal relationships for business, while SolDis and SubMLaw are the two least important ones. The results of all WSRTs and all other numerical results mentioned but not explicitly documented in the paper are available upon request.

[Table 1 about here]

Of the 212 executives that answered this question, 170 executives (about 80%) considered at least one reason as very important or important for their company to fulfill some tasks in PRD via personal relations (not documented in Table 1). This suggests that personal relations are, for one reason or another, playing an important role for most companies in the PRD. It is less clear, however, how this relates to the weakness of formal legal and market institutions in current China. The two most important reasons for using personal relations, improving the ability to quickly respond to customer needs and increasing companies' operational flexibility²⁴, are essentially performance objectives and relation-based governance instrument may be advantageous for achieving these objectives even if formal institutions were well developed (see Section 2). And the one reason that explicitly refers to weak formal institutions, namely using personal relations as a "substitute for missing laws and regulations" has been considered important or very important by a minority (25%) of respondents only. This seems to suggest that most companies in PRD do not see the deficiencies in the institutional environment but general transactions costs advantages of relation-based governance (see Section 2) as the main reason for their use of personal relations.²⁵

Given the fact that public officials in China still have ample opportunities to directly or indirectly interfere with business operations affect business success companies may not only consider personal relationships with private economic agents important for doing business in the PRD but also personal relationships with public officials (political relations). Executives were therefore asked to assess the importance of political relations for carrying out five business "activities"²⁶: "getting permissions for production/investment" (GetPermProd), "getting export/import concessions or licenses" (GetExImCon), getting "access to buildings and/or land" (AccBuild), getting "access to materials and resources" (AccRes), getting

²⁴ The executives' assessments of the importance of these two reasons are highly correlated across firms (Spearman correlation coefficient of almost 0.6).

²⁵ In a related study among executives of Hong Kong based companies operating in the PRD (BICKENBACH/LIU 2010) institutional deficiencies were considered important or very important by a substantially larger share of executives (55%). A possible explanation is that executives from Hong Kong are more familiar with the working of well developed formal rules and are therefore also more aware of the substitutive role of formal and informal governance instruments.

²⁶ In this one question executives were asked to evaluate the importance of political relations in PRD in general—not just for their company. We chose to formulate this one question in a less "personal" way as it may be considered highly sensitive by executives (due to a possible association of political relations with bribery and corruption). We still think that executives' responses are largely determined by their own experience, however.

“access to financial support from government” (AccGovSup). Of the 212 companies that have answered the question, 144 companies (about 68%) considered political relations very important or important for at least one of the “activities” considered. Table 2 summarizes the responses for the different activities. While more than half (54%) of all respondents considered personal relationships with public officials very important or important for companies in PRD to get permissions for production and investment, only about 27% and 31% of them considered political relations important or very important for getting access to materials and resources and to financial support from government, respectively. The shares for the other two alternatives take intermediate values. These results suggest that political relationships are still important for companies to get access to “production factors” that are crucial for companies’ operations and are still under the control of government.

[Table 2 about here]

An analysis of the pair-wise correlations between the assessments of the alternatives from the preceding two questions reveals that those executives that considered political relations more important (than other executives) also tended to consider “missing laws and regulations” as a more important reason for using personal relations in general. This may be taken as an indication that firms tend to consider the importance of *political* relations a consequence of weak formal institutions.

4.2 The Role of Personal Relationships for Critical Business Functions

Getting into Contact with Customers

It has been argued in Section 2 that in relation-based economies personal relations are playing an important role in selecting business partners, while other impersonal alternatives of searching for and screening (potential) business partners are becoming more important as formal information and contracting institutions are getting more effective. In order to investigate the relative importance of relation-based governance mechanisms for companies to find new customers, we asked the executives to assess—again by using a five-level Likert scale—the importance of four different channels for getting into contact with their customers. (We also asked them to indicate if their companies did not use the respective channel at all.) Two of the four channels are non-relation-based—namely “bidding competitions”, and “active searching (e.g., exhibitions, internet, sales agents)” —, while the other two are

relation-based—using “business contacts (e.g., recommendation from business partners)” or “private contacts (e.g., recommendation from family members and friends)”.

The results (Table 3) paint a mixed picture of the (relative) importance of personal relations for getting into contact with customers. While one formal channel “bidding competition” was the least frequently used channel among the companies in the PRD, the other formal channel “active searching” was the most frequently used one with only 10% of companies not using this channel at all. The share of executives assessing “active searching” as very important or important (65%) is also the highest one among the four channels considered. Interestingly, an almost equal share of executives (61%) considered “business contacts”, very important or important. In contrast, only about a third of respondents assigned the same importance levels to the other two channels—private contacts and bidding competition, respectively.²⁷

[Table 3 about here]

Overall, these results suggest that for a majority of firms in the PRD personal relations, in particular existing business contacts, still play an important role for searching for and screening new customers. However, despite remaining deficiencies in the formal institutional environment, most firms do not exclusively rely on relation-based channels to get into contact with customers but make important use of more formal, impersonal instruments for searching new customers as well.

Part of an explanation for the substantial importance of impersonal (formal) instruments for getting into contact with new customers may be the importance of foreign customers (exports) for many electronics companies in the PRD. As argued in Section 3 personal relations can be expected to be of much less importance for these customers. On average, firm in our sample sold roughly half of their products (in value terms) to customers in mainland China and slightly less than a quarter of products to “advanced countries” (North America, Western Europe, Australasia and Japan). We expect that the two relation-based contacting channels tend to be more important for companies with higher shares of product sales in the mainland China. To test this supposition, we calculated the pair-wise Spearman correlations between the executives’ assessment of the importance of the two relation-based channels of contacting

²⁷ Two-tailed WSRTs (considering only firms that make use of the respective channels) support this ranking: “active searching” and “business contacts” are the 1st and 2nd most important channels, respectively. The other two channels are significantly less important (with no statistically significant difference between the two).

customers on the one hand and their firms' shares of sales in mainland China on the other hand. The results confirm our supposition. With respect to the share of sales in mainland China, both correlation coefficients are negative—though only the one for private contacts is statistically significant—suggesting that the higher the share of sales realized in mainland China, the more important the two relation-based channels for contacting customers.

Getting into Contact with Suppliers

Similar arguments as above also apply to companies' search for potent and reliable suppliers. Therefore the questionnaire also contained a question on the importance of different channels for getting into contact with suppliers. The same four channels as in the case of customers were considered and the same five-level Likert scale was applied. The responses summarized in Table 4 are generally quite similar to those obtained for the case of customers.²⁸ "Bidding competition" turns out to be the least frequently used channel, while "active searching" is the most frequently used one. As to the importance of the four channels considered, the responses suggest that "active searching" is the most important channel for getting into contact with suppliers (with about 70% of respondents considering this channel as very important or important), followed by "business contacts" (about 56%). "Private contacts" and "bidding competition" are considered the least important channels.

[Table 4 about here]

As for the case of customers, we expect the two relation-based channels of getting into contact with suppliers to be more important for companies sourcing a greater share of inputs from Chinese suppliers. On average, companies source about 73% of their inputs from mainland Chinese but only 8% from the "advanced countries". To test this supposition, we calculated the pair-wise Spearman correlations corresponding to the case of customers. Contrary to our supposition, none of the correlation was found to be statistically significant. One possible explanation for this is that there is too little variation between firms with respect to the locations of their suppliers (73% from mainland China). Differences between firms in the importance of the two relation-based channels for getting into contact with suppliers thus have to be attributed to differences in other firm characteristics (see Section 4.3).

²⁸ Correlation analyses between the responses to the questions on customer contacts and on supplier contacts show that executives that emphasize the importance of private contacts (business contacts) for contacting suppliers also tend to do so for contacting customers.

Financing

For relation-based economies in transition such as current China (or PRD) we expect personal relations to also play an important role for companies' efforts to secure adequate finance and, in particular, for their ability to obtain short-term finance. In order to investigate this issue, executives were asked to assess the accessibility of six different sources for meeting their firms' short-term financial needs: "Chinese banks", "HK banks", "Foreign banks", "affiliated companies/business partners", "customers", and "family members and friends". The last three sourcing alternatives may be considered relation-based. A five-level Likert scale was applied, with "1" indicating "very easily accessible" and "5" "not accessible". According to the executives' responses (Table 5), only about 26% of companies never obtained short-term finance from a Chinese bank, while about 45% never obtained short-term finance from each "family members and friends" and from "affiliated companies", and about 37% never did so from "customers". Generally, to obtain short-term finance is not an easy task for most companies. After all, only about 29% considered it easy or very easy to obtain short-term finance from a Chinese bank. For the other (potential) sources this number is even lower. To obtain short-term finance from family and friends was easy or very easy for only about 17% of the companies. The corresponding numbers for customers and affiliated companies are 22% and 12% respectively.²⁹

[Table 5 about here]

The result that many PRD companies face substantial difficulties when trying to obtain short-term finance from Chinese or even foreign banks should not be surprising, given the deficiencies in, e.g., accounting and credit information institutions (see Section 3). It is not generally true, however that it is easier for firms in the PRD, and therefore more widespread, to obtain short-term finance by using personal relationships (either with family members, affiliated companies or customers) to. In particular, only slightly more than half of all firms ever obtained short-term finance from family members or friends and only about one out of six of these firms considered it (very) easy to obtain finance from this source. In the following

²⁹ Pair-wise WSRTs (considering only firms that make use of the respective sources) indicate that the differences between Chinese banks, family and friends and customers are *not* statistically significant. However, these three sources are statistically significantly easier to access than either HK banks, affiliated companies, or foreign banks.

section we will see, however, that there are significant differences between different “types” of firms with respect to their assessment of relation-based finance.

4.3 Firm Characteristics and Personal Relationships for Doing Business

Based on Sections 2 and 3, we expect that different “types” of firms may differ systematically in their use of relation-based versus rule-based instruments for governing their business operations. More specifically, larger firms or faster growing firms and foreign-owned firms in China should tend to make less use of relation-based governance than smaller, stagnant and Chinese-owned firms. We also expect younger, less established, firms to rely more on personal relations than older firms for getting into contact with new customers or suppliers or obtaining short-term finance. This should be true in particular for private relationships with family members and friends. (As to the influence of company age on the “overall” importance of relation-based governance no clear supposition has been derived in Section 2.) In this section we therefore look into the empirical relation between the executives’ assessment of the importance of personal relationships (as reflected by their answers to the questions discussed above) on the one hand and their firms’ age, ownership structure, size, and growth performance on the other hand.

Firm Characteristics and Personal Relationships for Doing Business in General

In order to investigate the role of firm characteristics for the importance of personal relations we first analyze the pair-wise correlations between firm characteristics and executives’ responses to the two questions on the general role of personal relationships for doing business in the PRD and on the importance of political relations (cf. Table 1 and Table 2). The firm characteristics considered are defined as follows: (1) company age (Age) is equal to the difference between the survey year (2007) and the founding year of a company (plus 1); (2) ownership (ForeignOwn) is an ordinal variable ranging from 0 to 3 and referring to Chinese-owned enterprise, Chinese-foreign cooperative joint venture, Chinese-foreign equity joint venture and wholly foreign-owned enterprise, respectively; (3) the first size variable (Employ) is equal to the average number of total employees during the year before the survey; (4) the second size variable (Sales)³⁰ is an ordinal variable ranging from 0 to 5, with values corresponding to different levels of sales in 2006, defined by the following intervals in

³⁰ The two size variables are strongly and positively correlated (Spearman correlation = 0.652). Correlations between the other variables are also positive but generally substantially lower.

million RMB (0, 1), [1, 5), [5, 10), [10, 50), [50, 100), and [100, ∞); (5) the growth performance is measured by an ordinal variable (GroSales) with four classes (0 to 3) for the average annual growth rates since 2002, where classes are defined as ($-\infty$, 0%), [0%, 2%), [2%, 10%), [10%, ∞).³¹

The Spearman correlations between firm characteristics and the importance of the six reasons for using personal relations are reported in Table 6. For the age variable five of the six correlations are positive, though only two of them (“responding quickly to customer demands” and “reducing risks and uncertainties”) are statistically significant.³² Still, the predominantly positive correlations could be considered as (weak) support for the view that personal relations are generally more important for younger firms, e.g. because it is relatively more difficult and costly for them to use formal institutions and reputation mechanisms to govern their business relations.

[Table 6 about here]

As to the ownership structure, correlation results give strong support for our hypothesis that greater foreign participation in company ownership is associated with a lower general importance of personal relationships for that company. As suggested in Section 2 this effect may (partially) be attributed to the fact that foreign owners will generally be more (less) acquainted with rule-based governance (relation-based governance). Legal and cultural norms of the foreign owners’ home country may aggravate reservations against the use of informal, relational institutions.

Correlation results for the size variables, particularly those for the employment variable, give support to our supposition that personal relations tend to be less important for larger firms. All correlations with respect to “Employ” are positive and four out of six are statistically significantly so. Correlations with respect to the other variable used to proxy firm size, “Sales”, are also uniformly positive, though only one of them is significant. As to firm growth there is no supportive evidence for our supposition of a positive relation between a company’s growth performance and the general relevance of personal relationships, however. Almost all

³¹ For information on descriptive statistics of these variables see Appendix.

³² With respect to firm age, two-tailed significance tests were used, as it is unclear a priori whether we should expect a positive or a negative relation between firm age and the general importance of personal relationships for doing business. With respect to the other firm characteristics one-tailed significance tests were used as we have formulated unambiguous hypotheses about the expected sign of the relations.

relevant correlations are negative (though generally quite small), suggesting that a better growth performance of firms is—if anything—associated with a greater importance of (the various reasons for using) personal relationships. A possible explanation is that fast growing firms may have to mobilize all their resources, including their personal networks, and use all available formal and informal governance instruments to support their expansion.³³

Turning next to the importance of *political relations* for doing business in the PRD, there seem to be (almost) no associations of this with the different firm characteristics (see Table 7). Given the severe deficiencies of the institutional environment in China in terms of protecting private property rights against expropriation by the government and the ample opportunities that public officials have to interfere with firms' business operations and success, political relations seem to be of similar importance for all types of companies.³⁴

[Table 7 about here]

Firm Characteristics and the Role of Personal Relationships for Critical Business Functions

In this section we, finally, investigate the association between firm characteristics and the importance of personal relations for contacting new customers and new suppliers as well as for obtaining short-term finance. Based on Section 2 we expect each of the firm characteristics—firm age, firm size, growth performance and foreign ownership—to be negatively related to the importance of relation-based governance instruments.³⁵ (Due to our importance scale, “1” being very important, this implies that we are expecting positive correlation coefficients). In order to test these suppositions, we calculated pair-wise Spearman correlations between the different firm characteristics and the importance of relation-based governance for getting into contact with customers and with suppliers and for obtaining short-term finance (as introduced in Section 4.2).

³³ The fact that the companies' growth performance is positively correlated with companies' size measured by sales (Spearman correlation = 0.29) does not seem to explain the result. The predominantly negative correlations can be observed within most (5 out of 6) size classes.

³⁴ It may be worth noting, however, that all correlations with the age variable are negative though not significant (with one exception). This may be considered weak evidence for older firms tending to rely more on political relations than younger firms. This is different from the case of personal relations in general (see Table 6), where age tends to have the opposite effect.

³⁵ Note that contrary to the case of the general role of personal relationships for doing business we do expect a negative effect of age on the importance of personal relations here (see Section 2).

The results (Table 8) suggest that firm age, in particular, is playing an important role for firms' decisions to use relation-based governance in the business context considered here. Most age-related correlations are significantly positive, suggesting that younger firms tend to consider relation-based channels more important (more easily accessible) than older firms for getting into contact with their customers and suppliers (for obtaining short-term finance). Moreover, the correlations between firm age and the importance of private contacts to get into contact with customers and suppliers are (slightly) larger than the correlations with respect to business contacts. This suggests that as firms get older the importance of private (e.g., family) relations tends to decline faster than that of relations to business partners in general. This may reflect the simple fact that younger firms, can build on a limited network of business contacts but a relatively larger pool of private contacts, whereas the business network tends to increase as firms get older. This effect seems to be even substantially stronger for firm size.

[Table 8 about here]

For both measures of firm size the correlations with the importance of private relations for making contacts with both customers and suppliers are positive and statistically highly significant, while correlations with the importance of business contacts are insignificant. This suggests that larger firms tend to rely more on personal contacts but no less on business contacts for screening new customers and suppliers than smaller firms. When firms are small, existing private contacts may be sufficient for supporting their business operations. However, as firms grow and their operations become more numerous and manifold, existing private contacts may become an insufficient basis for expanding the business. Contrary to our expectations, there seems to be no systematic effect of firm size on the importance or accessibility of relation-based sources of short-term finance. In addition, as above (and possibly also for the same reasons) we do not find any support of our supposition of a negative association between firms' *growth performance* and the importance of personal relations.

As to foreign ownership, there is, again contrary to our expectations, no statistically significant effect of the ownership structure on the importance of private or business relations for contacting new customers and suppliers. At least the sign of the correlations suggests, however, that private contacts but not business contacts might be slightly less important for

firms with foreign ownership participation.³⁶ With respect to financing, the effect of the ownership pattern is more clear-cut and consistent with our supposition. All three relation-based sources are less important for short-term financing for firms with stronger foreign ownership interests and the coefficients regarding “customers” and “family and friends” are statistically significant or even highly significant.

In summary, for most firms personal relationships with business partners and with political officials seem to be of substantial importance for doing business in the PRD in general. For critical business activities—getting into contact with new customers and suppliers and accessing short-term finance—relation-based mechanisms and sources are not generally more important than more formal or impersonal ones, however. Finally, there is some, though generally rather weak, evidence that firm characteristics, such as company age, size and foreign ownership are, as expected, negatively associated with firms’ reliance on personal relationships for at least some of the business functions considered. In contrast, no systematic (negative) relation was found in general between firms’ growth performance and the importance of personal relationships.

5 Conclusions

China today can be viewed as a society that is in a gradual process of transition from an informal and relation-based to a more formal and rule-based governance system. At the macro-level of the institutional environment there have been, over the last decades, remarkable improvements of the formal contracting, information and (with some reservations) property rights institutions. This is true, in particular, for the province of Guangdong, which has been a pioneer region of economic and institutional reform in China, and for the PRD, Guangdong’s core economic region. Even there, however, the quality of many formal legal and market institutions is still far from what it is in most advanced economies.

In light of the gradual character of the reform process and the remaining deficiencies in the institutional environment, theoretical considerations suggest that informal institutions and personal relations with private business partners and with political officials can be expected to be still of considerable importance for the firm-level governance of business operations in the

³⁶ This may be interpreted as an indication of a substitutive relation between private and business contacts. The limited number of private contacts on site may induce foreign-owned firms to more strongly rely on existing business contacts for extending their business to new customers and suppliers.

PRD, in general. Given the continuing improvements of formal institutions at the macro-level and an increasing scale and scope of firms' business operations, firms' marginal costs of developing personal relations will increase and their benefits will decrease. As a consequence, firms operating in China will tend to gradually reduce their reliance on informal relation-based governance and make increased use of rule-based governance instruments, such as formal contracting and public information institutions, instead. Not all firms will have equally strong incentives to move from relation-based to more formal governance mechanism, however. Rather, we expect the incentives to reduce the reliance on personal relations to be stronger, in particular, for older, larger and faster growing firms as well as for firms with more international business contacts (international suppliers or customers) or with larger foreign ownership interests.

We have confronted these suppositions with firm-level data obtained from a survey that we performed among 222 (electronics industry) companies operating in the PRD. Though most of the empirical results—as summarized and the end of Section 4—seem to be broadly in line with our theoretically founded suppositions, the empirical evidence is generally rather weak. This weakness may be partially attributed to a small sample size and the limited number of relevant variables we could construct from the available database. The paper should thus be taken only as a first, exploratory attempt to obtain (empirical) evidence on the relation between firm characteristics and the firm-level importance of relation-based governance during China's institutional reform process. Future research may build and improve upon the current study by employing a larger and richer database on an issue that is of considerable importance to the future economic development of China and other transition economies.

References

- ACEMOGLU, D./JOHNSON, S. (2005): Unbundling Institutions. In: *Journal of Political Economy*, (113)5, 949-995.
- BARDHAN, P. (2005): Institutions Matter, but Which Ones? In: *Economics of Transition*, (13)3, 499-532.
- BICKENBACH, F./LIU, W.-H. (2010): The Role of Personal Relationships for Doing Business in the GPRD, China – Evidence from Hong Kong Electronics SMEs. Kiel Working Paper 1589, Kiel.
- CLARKE, D./MURRELL, P./WHITING, S. (2008): The Role of Law in China's Economic Development. In: Brandt, L./Rawski, T.G. (eds.): *China's Great Economic Transformation*. Cambridge/UK, New York, 375-428.
- DAVIES, H./LEUNG, T.K.P./LUK, S.T.K./WONG, Y. (1995): The Benefits of 'Guanxi': The Value of Relationships in Developing the Chinese Market. In: *Industrial Management Marketing*, (24), 207-214.
- DIXIT, A.K. (2004): *Lawlessness and Economics. Alternative Modes of Governance*. Princeton/ New Jersey.
- DUNNING, J.H./KIM C. (2007): The Cultural Roots of Guanxi: An Exploratory Study. In: *The World Economy*, (30)2, 329-341.
- GPBS, Guangdong Provincial Bureau of Statistics (2007): *Guangdong Statistical Yearbook 2007*. Beijing.
- GREIF, A. (2005): Commitment, Coercion, and Markets: The Nature and Dynamics of Institutions Supporting Exchange. In: Ménard, C./Shirley, M.M. (eds.): *Handbook of New Institutional Economics*. Dordrecht, 727-786.
- JENTZSCH, N. (2008): An Economic Analysis of China's Credit Information System. In: *China Economic Review* (19), 537-550.
- LANGENBERG, E.A. (2007): *Guanxi and Business Strategy. Theory and Implications for Multinational Companies*. Heidelberg.
- LI, S. (2004). Why is Property Rights Protection Lacking in China? An Institutional Explanation. In: *California Management Review*, (46)3, 100-115.
- LI, S./PARK, S.H./LI, S. (2003): The Great Leap Forward: The Transition from Relation-based Governance to Rule-based Governance. In: *Organizational Dynamics*, (33)1, 63-78.
- LI, J.S. (2003): Relation-based versus Rule-based Governance: an Explanation of the East Asian Miracle and Asian Crisis. In: *Review of International Economics*, (11)4, 651-673.
- LUO, Y. (1997): Guanxi and Performance of Foreign-invested Enterprises in China: an Empirical Inquiry. In: *Management International Review*, (37), 51-71.
- LUO, Y. (2007): *Guanxi and Business*, Second Edition. Singapore.
- MARECHAL, V./TEKIN, P./GULIYEVA, H. (2009): China's new Property Rights Law—an Important Step Towards Improving Access to Credit for Small and Medium Enterprises. http://www.doingbusiness.org/documents/casestudies/2009/DB09_Reforms_China.pdf (accessed Sept. 20, 2010).

- MILGROM, P./ROBERTS, J. (1992): *Economics, Organization, and Management*. Englewood Cliffs/ New Jersey.
- NBSC, National Bureau of Statistics of China (2007): *China Statistical Yearbook 2007*. Beijing.
- NORTH, D. (1990): *Institutions, Institutional Change and Economic Performance*. Cambridge.
- OECD (2008): *OECD Investment Policy Reviews—China 2008: Encouraging Responsible Business Conduct*. Paris.
- PARK, S.H./LUO, Y. (2001): Guanxi and Organizational Dynamics: Organizational Networking in Chinese Firms. In: *Strategic Management Journal*, (22)5, 455-477.
- STANDIFIRD, S.S./MARSHALL, R.S. (2000): The Transaction Cost Advantage of *Guanxi*-based Business Practices. In: *Journal of World Economics*, (35)1, 21-42.
- TREBILCOCK, M./LENG, J. (2006): The Role of Formal Contract Law and Enforcement in Economic Development. In: *Virginia Law Review*, (92), 1517-1580.
- TUAN, C./NG, L.N.Y. (1995): Evolution of Hong Kong's Electronics Industry under a Passive Industrial Policy. In: *Managerial and Decision Economics*, (16)5, 509-523.
- WILLIAMSON, O.E. (1996): *The Mechanisms of Governance*. New York.
- WORLD BANK (2007): *Doing Business 2008*. Washington DC September 2007. http://www.doingbusiness.org/documents/FullReport/2008/DB08_Full_Report.pdf (accessed Sept. 20, 2010).
- WORLD BANK (2008): *Doing Business in China 2008*. Washington DC. <http://www.doingbusiness.org/subnational/exploreconomies/China.aspx>.
- WORLD BANK (2009): *Report on the Observance of Standards and Codes (ROSC) – Accounting and Auditing*. People's Republic of China. (The World Bank. Financial Management – Central Operational Services Unit, East Asia and Pacific Region) (October 2009). http://www.worldbank.org/ifa/rosc_aa_chn.pdf (Accessed, Sept. 20, 2010).
- XIN, K.R./PEARCE, J.L. (1996): Guanxi: Connections as Substitutes for Formal Institutional Support. In: *Academy of Management Journal*, (39)6, 1641-1658.
- ZENGER, T./LAZZARINI, S./POPPO, L. (2002): Informal and Formal Organization in New Institutional Economics. In: Ingram, P./Silverman, B. (eds.): *Advances in Strategic Management: The New Institutionalism in Strategic Management*. Oxford, 275-303.

Appendix

Table A1: Basic information on firm characteristics

Age (Age): The youngest companies in the sample were founded in the year of survey (2007), the oldest one in 1952. Half of the companies were founded after 2000, thus having less than 8 years of experience in doing business in the PRD. On average, companies interviewed have about 10 years of business experience in the PRD.

Ownership Structure (ForeignOwn): About 57% of companies are Chinese-owned companies, of which about 94% are private companies (the rest being state-owned or collectively-owned). Among the companies with foreign ownership participation (about 43% of all companies), 80% were wholly foreign owned, 17% were Chinese-foreign equity joint ventures, and 3% Chinese-foreign cooperative joint ventures.

Employment (Employ): The mean value is 742 employees. The variation of the variable is substantial ranging from 2 employees in the smallest firm to 30000 employees in the largest (standard deviation 2867). In about 85% of companies the number of employees is below the average. The first, second and third quantile of the number of total employees of companies interviewed is 51, 150, and 500 persons, respectively.

Sales (Sales): The greatest share of firms (30%) falls in the category with sales between 10 million and 50 million RMB. The company shares realizing sales in other categories $(-\infty, 1)$, $[1, 5)$, $[5, 10)$, $[50, 100)$, and $[100, \infty)$ are about 9%, 23%, 16%, 9%, and 13%, respectively.

Growth Performance (GroSales): The shares of firms in categories 0 to 3 are 3.4%, 17.9%, 48.3% and 30.4%, respectively. This implies that almost 80% of firms increase sales by an average rate of more than 2% per year.

Tables

Table 1: Importance of reasons for using personal relationships – company distribution

	SubMLaw	ResCus	IncFlex	RedRisk	AccInfo	SolDis
1 very important	24 (13.3%)	76 (37.4%)	56 (29.3%)	40 (21.1%)	49 (25.5%)	19 (10.4%)
2 important	24 (13.3%)	60 (29.6%)	42 (22.0%)	39 (20.5%)	28 (14.6%)	26 (14.2%)
3 of normal importance	41 (22.8%)	38 (18.7%)	54 (28.3%)	62 (32.6%)	62 (32.3%)	53 (29.0%)
4 a little important	26 (14.4%)	9 (4.4%)	14 (7.3%)	17 (9.0%)	14 (7.3%)	35 (19.1%)
5 not important	65 (36.1%)	20 (9.9%)	25 (13.1%)	32 (16.8%)	39 (20.3%)	50 (27.3%)
Total	180 (100%)	203 (100%)	191 (100%)	190 (100%)	192 (100%)	183 (100%)

Note: Numbers in parentheses refer to the corresponding company shares.

Table 2: Importance of political relations – company distribution

	GetPermProd	GetExImCon	AccBuild	AccRes	AccGovSup
1 very important	82 (40.0%)	51 (26.3%)	44 (22.5%)	35 (18.0%)	36 (18.7%)
2 important	30 (14.6%)	28 (14.4%)	33 (16.8%)	18 (9.3%)	24 (12.4%)
3 of normal importance	36 (17.6%)	47 (24.2%)	39 (19.9%)	48 (24.7%)	39 (20.2%)
4 a little important	16 (7.8%)	20 (10.3%)	25 (12.8%)	27 (13.9%)	27 (14.0%)
5 not important	41 (20.0%)	48 (24.7%)	55 (28.1%)	66 (34.0%)	67 (34.7%)
Total	205 (100%)	194 (100%)	196 (100%)	194 (100%)	193 (100%)

Note: Numbers in parentheses refer to the corresponding company shares.

Table 3: Importance of channels used to get into contact with customers – company distribution

	Bidding Competition	Active Searching	Business Contacts	Private Contacts
1 very important	38 (17.4%)	96 (43.6%)	67 (30.5%)	38 (17.3%)
2 important	26 (11.9%)	48 (21.8%)	67 (30.5%)	36 (16.4%)
3 of normal importance	27 (12.4%)	38 (17.3%)	41 (18.6%)	49 (22.3%)
4 a little important	13 (6.0%)	11 (5.0%)	10 (4.6%)	25 (11.4%)
5 not important	29 (13.3%)	5 (2.3%)	9 (4.1%)	21 (9.6%)
Not used	85 (39.0%)	22 (10.0%)	26 (11.8%)	51 (23.2%)
Total	218 (100%)	220 (100%)	220 (100%)	220 (100%)

Note: Numbers in parentheses refer to the corresponding company shares.

Table 4: Importance of channels used to get into contact with suppliers – company distribution

	Bidding Competition	Active Searching	Business Contacts	Private Contacts
1 very important	34 (15.7%)	93 (42.7%)	57 (26.2%)	24 (11.1%)
2 important	21 (9.7%)	58 (26.6%)	64 (29.4%)	34 (15.7%)
3 of normal importance	27 (12.4%)	35 (16.1%)	52 (23.9%)	52 (24.0%)
4 a little important	15 (6.9%)	8 (3.7%)	7 (3.2%)	30 (13.8%)
5 not important	37 (17.1%)	7 (3.2%)	6 (2.8%)	23 (10.6%)
Not used	83 (38.3%)	17 (7.8%)	32 (14.7%)	54 (24.9%)
Total	217 (100%)	218 (100%)	218 (100%)	217 (100%)

Note: Numbers in parentheses refer to the corresponding company shares.

Table 5: Short-time Accessibility of finance by source – company distribution

	CNBank	HKBank	ForBank	AffComPart	Customer	FamFrd
1 very easily access.	36 (17.1%)	16 (7.6%)	5 (2.4%)	10 (4.7%)	17 (8.1%)	15 (7.1%)
2 easily accessible	25 (11.9%)	22 (10.4%)	13 (6.2%)	15 (7.1%)	29 (13.7%)	20 (9.5%)
3 normal accessible	36 (17.1%)	12 (5.7%)	11 (5.2%)	38 (18.0%)	40 (19.0%)	33 (15.7%)
4 a little accessible	28 (13.3%)	8 (3.8%)	10 (4.7%)	21 (10.0%)	25 (11.9%)	22 (10.5%)
5 not accessible	31 (14.7%)	48 (22.8%)	54 (25.6%)	32 (15.2%)	21 (10.0%)	26 (12.4%)
Not used	55 (26.1%)	105 (49.8%)	118 (55.9%)	95 (45.0%)	79 (37.4%)	94 (44.8%)
Total	211 (100%)	211 (100%)	211 (100%)	211 (100%)	211 (100%)	210 (100%)

Note: Numbers in parentheses refer to the corresponding company shares.

Table 6: Relation between firm characteristics and the importance of reasons for relation-based governance – Spearman correlations

	Age	ForeignOwn	Employ	Sales	GroSales
SubMLaw	-0.024 (179)	-0.065 (177)	0.078 (177)	0.020 (175)	-0.186 (172)
ResCus	0.117* (202)	0.123** (198)	0.142** (197)	0.057 (197)	-0.023 (192)
IncFlex	0.048 (189)	0.080 (187)	0.094* (187)	0.041 (185)	-0.050 (184)
RedRisk	0.129* (188)	0.108* (187)	0.074 (186)	0.072 (184)	-0.058 (182)
AccInfo	0.062 (191)	0.176*** (189)	0.123** (186)	0.098* (187)	-0.061 (183)
SolDis	0.022 (181)	0.156** (180)	0.109* (180)	0.085 (177)	0.008 (176)

Note: Numbers in parentheses refer to numbers of corresponding observations. ***/**/* refer to the 1%/5%/10% significance level in two-tailed (Age) or one-tailed significance tests.

Table 7: Relation between firm characteristics and the importance of political relations – Spearman correlations

	Age	ForeignOwn	Employ	Sales	GroSales
GetPermProd	-0.053 (203)	0.003 (200)	0.100* (199)	0.061 (198)	0.064 (193)
GetExImCon	-0.115 (192)	-0.144 (191)	-0.101 (190)	-0.071 (188)	-0.029 (184)
AccBuild	-0.165 (194)*	-0.046 (192)	-0.085 (192)	-0.119 (190)	-0.028 (186)
AccRes	-0.094 (192)	-0.039 (190)	-0.001 (191)	0.147** (189)	0.066 (185)
AccGovSup	-0.036 (191)	0.029 (190)	0.082 (191)	0.099* (188)	0.054 (185)

Note: Numbers in parentheses refer to the numbers of corresponding observations. ***/**/* refer to the 1%/5%/10% significance level in two-tailed (Age) or one-tailed significance tests.

Table 8: Relation between firm characteristics and the importance of relation-based instruments for critical business functions – Spearman correlations

	Age	ForeignOwn	Employ	Sales	GroSales
Contacting customers					
Business contacts ^a	0.104* (217)	-0.072 (216)	0.001 (211)	0.063 (211)	-0.117 (205)
Private contacts ^a	0.203*** (217)	0.084 (216)	0.223*** (211)	0.188*** (211)	-0.012 (205)
Contacting suppliers					
Business contacts ^a	0.161*** (216)	-0.049 (214)	0.032 (209)	-0.041 (210)	-0.020 (202)
Private contacts ^a	0.185*** (215)	0.037 (213)	0.158** (209)	0.158** (210)	0.024 (204)
Short-term financing					
AffComPart ^a	-0.043 (209)	0.040 (207)	-0.085 (203)	0.060 (203)	0.054 (197)
Customer ^a	0.020 (209)	0.113* (207)	-0.023 (203)	0.032 (203)	-0.009 (197)
FamFrd ^a	0.124** (208)	0.234*** (206)	0.090 (202)	0.087 (202)	0.051 (196)

Note: Numbers in parentheses refer to the numbers of corresponding observations. ^aCoding as in Table 3, Table 4, and Table 5, respectively; with “not used = 6”. ***/**/* refer to the 1%/5%/10% significance level in one-tailed significance tests.