

**Costs and Benefits of Business-Government Relations: An Explorative Study on a Firm's
Perceived Influence on Law and Regulation in Transition Economies**

Szeto Kit Ying

(B.A. in Management, HKPolyU)

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SUMMARY

This paper combines perspectives of business strategy and political science scholars to study the costs, benefits and potential long-term effects of building business government relation. Drawing on resource dependence theory and power dependence theory, I develop hypotheses on how firms build business-government relation through providing a stable economy, for example hiring more employees than needed and keeping tax revenues high, and how business government relation helps firms to deal with government officials easier and can, in turn, pay less bribes and enjoy lower operating costs. This paper also looks at the impact of business government relation on firm's subsequent investment and divestment behaviors. The hypotheses are tested by firm-level data in 25 transition economies. Empirical results show that firms reporting more tax and hire more unnecessary employees have stronger relation with government, i.e. are more capable in influencing policies and regulations related to their businesses. Firms with strong relation with government pay less bribery to government officials to get things done and to secure government contracts. Moreover, firms with strong relation with government are less likely to alter their production mix, which implies they are less likely to involve in innovations and new investment. Therefore, when building and maintaining business-government relation, firms should ensure that they can balance the costs and benefits in order to maintain reasonable future development.

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CHAPTER 1 INTRODUCTION

It has been widely accepted that firms receive economic benefit through building and maintaining a good relationship with their governments (Bertrand, Kramarz, Schoar, & Thesmar, 2004; Faccio, 2006; Johnson & Mitton, 2003; Li, Meng, Wang, & Zhou, 2008). Previous research suggests that business-government relations help firms in various ways: securing of favorable regulatory conditions (Agrawal & Knoeber, 2001) and access to resources, such as bank loans (Faccio, 2006; Khwaja & Mian, 2005). Yet few studies look into how business-government relations influence firms' future development. In this study, I will look into the costs of and benefits from building business-government relations with incumbent politicians and bureaucrats, and then I will analyze whether and how business-government relations influence firms' decisions on future development.

In studying business-government relations, business strategy scholars mainly talk about why business-government relations are important, what benefits firms can extract from them, and through what mechanisms these benefits can be obtained. Concerning costs of building government relations, business strategy scholars mostly limit themselves to activities that are easily visible and directly pointing to political connection building, such as social activities (drinking and dining) and bribery activities, and these activities mostly contribute to the receivers' personal pocket. Political science researchers on the other hand suggest that incumbent politicians expect something else from businessmen. One thing that

politicians want and businessmen can give is economic stability since it can help politicians to extend their tenure. To achieve optimum cost-effective operation and maximize profits, it is usual for firms to avoid redundant head counts and use strategic accounting to minimize tax payable. In order to maintain economic stability, firms can help reduce unemployment rates through excessive hiring and increase government income through paying more tax by reducing the amount of strategic accounting. By doing so, firms build stronger relationships with incumbent politicians and bureaucrats and thus become more powerful in influencing changes to laws and regulations that may have an important impact on their businesses.

This phenomenon is more apparent in transition economies since these countries undergo a series of changes and their governments target economic growth, thus providing more opportunities for firms and government officials to engage in exchange behavior. Hence, the transition process makes business-government relations an important topic in transition economies. Moreover, as transition economies have become more and more important in the global market and gain a lot of investor attention from all over the world, it is important to understand how the business-government relationship functions in these fast growing economies and understand how such relation influences firms' behavior and development in the long run.

Linking discussions on business-government relations from a business strategy perspective and political science perspective, this paper reveals some

government relation building costs that business scholars have long ignored and discusses, besides being able to influence government policies and regulations, some potential benefits that government relations can offer firms. The ultimate goal of this paper is to highlight the influence of business-government relations on firm behavior rather than only focus on the immediate economic or financial outcomes as in previous research. Understanding whether and how business-government relations impact firm behavior and its subsequent development can generate better knowledge of the long-term effect of such relations and lead to the discussion of whether and when business-government relations are worth building.

The structure of this paper is as follows. Chapter 2 will review the background and literature review on transition economies and business-government relations. Based on the literature review in Chapter 2, Chapter 3 will develop several testable hypotheses on the topic of interest. In Chapter 4, I will present the methodology of the study. Chapter 5 reports the results of empirical analysis. Finally, in Chapter 6, I will discuss the findings, limitations and future research direction, and conclude the paper.

CHAPTER 2 BACKGROUND AND LITERATURE REVIEW

This section will provide definitions, background and previous research relevant to business-government relations and transition economies. By reviewing these studies, this section will highlight the importance of studying business-government relations in transition markets and how business-government relations impact firm behavior in the long run. In this section, I will begin with the definition and process of transition economies and then discuss the roles of government in transition economies. Then, I will discuss the purposes of building business-government relations and how such relations are built. Finally, I will discuss how this paper is different from previous research studying business-government relations and highlight the potential contributions of this paper.

2.1 Transition Economies

2.1.1 Countries in Transition

A transition economy is one that is transforming from a centrally planned economy to market economy. While researchers studying transition economies always focus on countries in Central and Eastern Europe and the Former Soviet Union, the term “transition economies” indeed has a broader meaning than this. Countries which are outside Europe and transforming from a socialist-type command economy to a market-based economy, for example China, are also members of transition economies. In a study published in 2000, the International

Monetary Fund lists 29 countries as transition economies in four regional categories (see Table 1) (IMF, 2000).

Insert Table 1 here

In 2002, the World Bank added Bosnia and Herzegovina, and Serbia and Montenegro to the transition economies list (WorldBank, 2002a). Every now and then, IMF, the World Bank and some other economic monitoring organizations add and drop countries into and from the transition economies country list according to their economic environmental characteristics. Thus, before going into the study, we need to understand the process of market economy transformation and the roles of government in this process.

2.1.2 Process of Economy Transition

Based on Fischer and Gelb (1991), the IMF (2000) summarizes the following as components of the transition process: Liberalization, Macroeconomic stabilization, Restructuring and privatization, and Legal and institutional reforms. Liberalization refers to the transformation from controlled markets to free markets. This process includes allowing markets to determine most of the prices and lowering trade barriers that would inhibit contact with the price structure of the world's market economies.

Market liberalization opens up originally sealed markets and encourages investments from both domestic and world markets. The sudden increase in

investment creates an inflation surge (Ghosh, 1997); thus governments need to be disciplined over budget as well as fiscal and monetary policies in order to contain the inflation rate and this process is Macroeconomic stabilization (Debrun and Kapoor, 2010).

Restructuring and privatization refer to the processes of establishing feasible financial institutions and reforming the enterprises in these economies such that the ownership of these enterprises can be transferred into private hands. Finally, these countries need to undergo legal and institutional reforms in order to redefine the role of the state in these economies, formulate laws and regulations, and introduce appropriate competition policies to achieve natural market efficiency.

2.1.3 The Role of Government in Transition Economies

While in the developed world, economists expect governments to take a limited role and allow the market to operate itself, countries which are in market economy transformation cannot take a similar approach as their more developed counterparts. In his paper based on the case of China, one of the large transition economies, Liou (1998) summarizes five major roles of government in the process of economic development: protector of citizen, distributor of income, manager of economy and business, regulator of industry, and promoter of growth.

As protectors, governments need public policies to protect citizens and businesses from hostile social unrest, hostile international relations and illegitimate

political appropriation. Only by doing so, can governments provide a peaceful and stable domestic environment for businesses to operate in and for the economy to grow. As distributors, governments need to balance classes and regional income inequality and to redistribute through formulating and implementing social welfare policies and initiating development projects in rural areas where its residents usually have relatively low incomes compared to people living in the urban area. A stable economic environment is a crucial factor for economic growth. To assure a safe and stable economic environment, governments need to adjust monetary policy and fiscal policy in order to minimize both the unemployment rate and inflation rate as a high unemployment rate creates burden for social welfare systems and a high inflation rate deters investment. In economic transition countries, private property rights are usually not protected. During the process of transition, governments begin to formulate and test rules and regulations to create an environment in which business can operate and individuals' rights are sufficiently protected. The final role of governments in transition economies is to act as promoters of economic growth and social development. To promote economic growth, governments need to implement public policies to invest in public infrastructure and to promote the development of business sectors in both domestic and international markets.

2.2 Purposes of Business-Government Relations

For the five government roles mentioned above, three of them are related to this study, they are manager of economy and business, regulator of industry,

and promoter of growth. The manager role explains why policy-making politicians want to build cooperative relationships with firms and the other two explain why firms want to establish relations with those politicians.

Business-government relations are a form of benefit exchange, and both firms and politicians are involved in such exchange for some reasons. There are several reasons for policy-making politicians to establish relationships with particular firms. Corruption in terms of bribery, i.e. benefits that go right into politicians' personal pocket, is an obvious but illegal reason and mechanism why and how politicians are involved in personal business-government relations (UNDP, 2003). In this study, however, corruption involving high-level officials is not the major focus; instead, this study will look at how the economy manager role of transition economy governments drives their high-level officials to establish business-government relations with firms.

Since people, investors and the rest of the world use economic development as one of the important benchmarks to evaluate the achievement of a government, an incumbent government, especially one that targets economic transformation and rapid growth, would therefore attempt to fulfill the roles proposed by Liou (1998). Tenure and promotion of policy-making government officials and politicians are highly associated with economic growth. In countries with voting systems, it is obvious to expect citizens to favor the incumbent government when the economy is booming and this explains why government officials care about the economic environment. Unexpectedly, for countries

without voting systems, even countries with only one political party, such as China, the story is more or less the same. In China for example, the Central government formulates national economic growth targets every year and distributes the target down to the provincial level and so on. Therefore, each province, each town and each regional industry has its own yearly target. At the end of each year, provincial, township and regional industrial leaders' achievements are evaluated against the targets. In about every five years, the Central government evaluates these leaders' overall performance and decides whether they should stay, get promotion or be kicked out of the game. Guo's (2009) study finds evidence that Chinese regional leaders do respond to the performance evaluation by stimulating economic growth through increasing public expenditure.

Mr. Vito Tanzi, Director of the IMF's Fiscal Affairs Department, comments that *"the transformation to a market economy is not complete until functioning fiscal institutions and reasonable and affordable expenditure programs, including basic social safety nets for the unemployed, the sick, and the elderly, are in place. Spending programs must be financed from public revenues generated—through taxation—without imposing excessive burdens on the private sector"* (Tanzi, 1999). Thus, the level of tax revenue is another indicator of government officials' performance.

To achieve outstanding performance in growth and successfully transform the economy, governments need firms to hire, invest and pay tax. As firms

continue to hire and invest, the unemployment rate goes down and government income, i.e. tax revenue, increases, and, in turn, regional leaders' appraisal scores go up. Thus, tenure extension and promotion can be expected.

When transforming from socialist economies to market economies, countries go through a long experimenting process to see how the market works best and how to stimulate the economy to grow faster. During such process, there are a lot of regulations and deregulations, and governments formulate various sets of economy boosting policies. Thus, this process provides a good opportunity for firms to influence their governments to formulate regulations and policies that are favorable for their businesses to operate in.

2.3 Comparison with Previous Studies

In business and economic fields, scholars studying business-government relations mostly start from firms' perspective. Thus, this line of study pays more attention to what firms can get from the relation while putting less effort into understanding what firms need to pay in return (Frye, 2002). Previous research has found that building relationships with government can help firms to create a favorable business environment (Agrawal & Knoeber, 2001) and to access resources such as bank loans (Faccio, 2006; Khwaja & Mian, 2005). Li and his colleagues (2008) explored whether political affiliation can help firm owners in China to borrow more money from banks and they found a positive relationship between the two.

In terms of what firms need to pay in order to build government relations, business scholars mainly focus on various forms of corruption, such as gifts, bribery or entertainment expenses (Cai, Fang & Yu, 2005). In the political science field, scholars do explore other ways that firms can use to build relationships with top-level officials; however, this line of study focuses on the behavior of the firms and its influence on politicians while paying less attention to what happens to firms afterwards (Bertrand et al., 2004; Gehlbach, 2006). This paper combines the two perspectives, business strategy and political science, and attempts to explore the relationship between firms' contribution to economic development and firms' relationships with government.

CHAPTER 3 HYPOTHESES DEVELOPMENT

In advancing the study of business-government relations at firm level, a number of research questions can be asked: 1) what does it take for firms to build relations with governments, in particular incumbent politicians and top-level, policy-making bureaucrats? 2) What benefits can firms get besides being able to influence regulations and policies which concern them? And 3) what are the consequences in the long run; in particular whether and how business-government relations influence firm behavior and development? In this part, we will look at these three questions and develop related hypotheses.

3.1 Building Relationships with Policy-Making Politicians

Many business strategy scholars use resource dependence theory (Pfeffer & Salancik, 2003) to explain the business-government relationship and discuss various ways used by firms to manage this relationship. According to this perspective, all organizations, including business firms situated in an open system, are dependent on external resources for survival and growth. Government is definitely one of the most important sources of external resources in transition economies. Due to the “institutional voids” prevailing in the transition economies, which are characterized by the absence of well-developed regulatory systems and the dearth of well-functioning contract-enforcing mechanisms and intermediaries in product, labor and capital markets (Khanna, Palepu, & Sinha, 2005), government agencies control more resources and discretionary power and create more uncertainties for

business activities than their developed economy counterparts. When the institutional environment is less predictable, business-government relations help firms to cope with policy changes and even allows firms to influence such changes to favor their operations (Agrawal & Knoeber, 2001). Therefore, business-government relations, or political connections, are very important in transition markets. Scholars studying business-government relations from the business perspective always emphasize what firms can extract from such relations while paying less attention to what firms need to pay in return; however, firms do not receive benefits from government without paying anything back (Frye, 2002). Even if some scholars try to delineate the costs of building government relations, topics are mainly limited to visible ones, such as bribery and entertainment expenses.

Although resource dependence theory (Pfeffer & Salancik, 2003) highlights a mutual dependency relationship, most business strategy scholars take it as a one-way relationship by only looking at what firms can get from government but ignoring what resources governments depend on that can be provided by business entities. From evidence around the world, it is clear that business-government relations are a form of “exchange” between firms and politicians. In such exchange, economic rewards are transferred to firms and then firms offer politicians with politically-valuable services in return. One thing that government or incumbent politicians want and the business sector can give is economic stability (Quinn & Woolley, 2001). Economic stability is crucial to a government because it is highly related to tenure of incumbent politicians who are running the government right

now. For instance, the Pro-Russian party, a political party that is believed to be unpopular in Latvia, a country which is trying to distance itself from its communist past subsequent to its independence from Russia, wins Latvian elections because the previous government did not do well when it faced a financial crisis (Buehrer, 2011). Bertrand et al. (2004) find that business leaders from politically connected firms in France create more jobs to build “re-election favors” for incumbent politicians.

Other than that, politicians also expect a certain form of financial support from politically connected firms, such as political contribution or tax revenue. In the 1990s, politically connected Russian businesses were more likely to be subject to price controls and more frequent inspections because it was beneficial to politicians (Frye, 2002). Not just politicians require payback from firms, but firms are willing to give as well. According to Gehlbach’s (2006) study on the tax compliance of firms in Eastern Europe and in the former Soviet Union, firms hide revenue from tax authorities is associate with the firm-level satisfaction with state-provided goods and services. Since larger and politically connected firms receive better service from the government, they are less willing to hide revenue, i.e. they are willing to pay more tax.

Firms help politicians to stay in power through excessive hiring and pay more tax and, thus, enjoy the privilege of being influential over government policies and regulations that they are interested in. More contribution from the

focal firm, i.e. spending more on maintaining a stable economy, would therefore lead to a stronger relationship with incumbent politicians and bureaucrats, i.e. higher level of influential power.

H1: The more firms contribute to the national economy (from a government perspective), the stronger business-government relations they are likely to have.

3.2 Dealing with Government Officials

In China, firms with political connections enjoy higher bank loans, have access to more capital sources and can borrow capital cheaper when compared with their non-connected counterparts (Li et al., 2008). Pakistan shows the same evidence (Khwaja & Mian, 2005). The difference in access to capital is due to the lending practice of state-owned banks and this difference increases as business-government relations grow stronger (Brandt & Li, 2003; Che, 2002). A cross-national study shows that firms with controlling shareholders or top managers who are members of legislatures or national governments enjoy easier access to debt financing and lower taxation (Faccio, 2006). Thus, firms which do not have such political connections might need to bribe their way out.

In transition countries where institutions are absent and government operating procedures are not so transparent, government officials can easily get in the way of business operations as they virtually have full control of licensing and government contract bidding. For politicians and top-level bureaucrats who are

already benefiting from firms' contribution in lowering the unemployment rate and increasing tax revenue, they cannot be too aggressive when taking personal financial benefits from these firms since they may risk losing support from these firms. For lower-level government officials whose tenure and promotion are less related to economic environment, they are more likely to seek personal benefits, i.e. bribes, from firms when firms are looking up to them for all kinds of licensing and government contract bidding. As there are few institutions or monitoring mechanisms in transition countries to monitor operating government officials, the relationship between these officials and business firms is particularly imbalanced. To balance an imbalanced dyadic relation, we can introduce an additional actor as any two actors in a triadic relation can form a coalition to act against the third actor (Emerson, 1962). Therefore, firms may build good relationships with politicians and top-level bureaucrats who make decisions on policy changes and, more importantly, "rule" the low-level government officials who implement policies and procedures. Since policy-making politicians usually are supervisors of lower-level operating government officials, firms having strong relations with these politicians have relatively stronger bargaining power than firms which do not have such relations when dealing with low-level government officials. For the above reasons, firms which contribute more and have stronger relations with government may be able to pay lower bribes to government officials and have higher priority in the line when waiting for some administrative work to be done. Therefore, I hypothesize

that firms with stronger business-government relations are likely to have lower costs in dealing with government officials.

H2: The stronger business-government relation firms have, the lower the costs they need to pay when dealing with government officials.

3.3 Influence of Business-Government Relations

In previous sections, we discussed how firms build and maintain relations with politicians and government through providing a stable economy, and how firms may benefit from these relations when they need to deal with government officials. It is expected that firms benefitting from lowered costs of business and a less competitive environment will transform these advantages into opportunities for growth and investment. On one hand, firms with strong government relations do benefit from those advantages. On the other hand, however, these relations do not come for free and firms need to pay certain costs to build and maintain these relations. In the first hypothesis, I considered tax compliance and excessive hiring costs for building and maintain government relations. Paying more tax means that firms are left with less profit, and hiring more redundant employees means that firms are more inefficient and the payroll is relatively high compared to firms' sales. As a result, building business-government relations through contributing to national economies could result in firms making less profit and thus having less money left to put into innovation and reinvestment.

Having strong government relations means that firms are capable of influencing policies and regulations in their industry and the regions that they operate in, so they can create a relatively less competitive environment and the approaching monopoly environment usually hinders motivation in investing in innovation. Moreover, the relations built are usually location and industry-specific as firms' contributions to the economy are mainly observed by politicians and bureaucrats who are working in that specific geographical and industrial area. When firms move outside their attached geographical and industrial areas, the benefits they can get from the relations built diminish or even disappear. Thus firms with established relationships with politicians and bureaucrats have less incentive and motivation to innovate or diversify than other firms without such relations. Therefore, I argue that firms with strong government relations are less likely to alter their production lines and production plants.

H3: Firms with stronger business-government relations are less likely to restructure their production mix.

CHAPTER 4 METHODS

4.1 Data and Sample

To test the costs and benefits of business-government relations and further analyze its impact on firm development, I use data from World Bank's Enterprise Surveys (WorldBank, 2002b). The Enterprise Surveys consist of data from over 120,000 manufacturing and service providing firms in 125 developing countries. The dataset has been used in other research, such as in entrepreneurship (e.g. Muravyev, Talavera, & Schafer, 2009) and in corruption (e.g. Kenny & Soreide, 2008). As business-government relations are still a sensitive topic in many countries especially when there are questions about bribes and gifts that firms give to government officials, not all participating firms reveal their information on this topic. The survey used, however, attempts to solve this problem by asking sensitive questions indirectly. Questions concerning sensitive activities require respondents to comment on a hypothetical similar firm rather than admitting that the firms have engaged in these activities.

Although the World Bank Group conducts the Enterprise Surveys (WEBS) every three years since 2002, in 2006 it changed the questionnaire dramatically so that some constructs of interest in this study are omitted. Thus I can only use survey data from 2002 to 2006. This paper focuses on transition economies. The empirical analysis includes all the 25 transition economies surveyed by WEBS: Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, China, Croatia,

Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyz Republic, Latvia, Lithuania, Moldova, Poland, Romania, Russian Federation, Serbia and Montenegro, Slovenia, Tajikistan, Ukraine, and Uzbekistan. After dropping observations with meaningless values and missing key independent variables, there are 5,094 observations from 25 industries.

To increase data quality, WEBS was conducted through face-to-face interviews with company managers and owners. However, as some questions in the surveys like bribery activities, ability to affect government policies, and investment activities of firms are sensitive questions, the number of firms that responded to all these sensitive questions was smaller than the number of respondents. I conducted a standard mean comparison test to assess the non-response bias and found that non-response bias happens across countries but not within countries. Thus, the inclusion of a country dummy variable can potentially solve the problem. I also used logistic regression models to control for baseline information to estimate the probability of response for each dependent variable. The reciprocals of these probabilities are used as non-responding weights in the empirical analysis.

4.2 Variables and Measures

In the first stage analysis, I study the relationship between firms' involvement in maintaining a stable economy and strength of business-government relations. The dependent variable, business-government relations, measures firm-

level relations with incumbent politicians and bureaucrats. Firms with better relationships with incumbent politicians and bureaucrats are more likely to influence government policies and regulations. Thus, the influential power of firms towards changes in laws and regulations is a good proxy for business-government relations. In the survey, there is a question asking respondents about the perceived influence on changes in laws and regulations that the focal firm has. The question is “How much influence do you think the following groups actually had on recently enacted national laws and regulations that have a substantial impact on your business?” Respondents could choose from 0 (No impact) to 4 (Decisive impact). Besides asking about the influence of (a) the focal firm, the question also asked about perceived influence of (b) other domestic firms, (c) dominant firms or conglomerates in key sectors of the economy, (d) individuals or firms with close personal ties to political leaders, and (e) foreign firms. Firms’ perceptions of influence are potentially affected by differential item functioning (DIF) such that identical firms may have unequal probabilities in answering questions about their own influence on government regulations and policies in the same way (Embretson, & Reise, 2000). The responses of the perceived influence questions show that the item has a high possibility of DIF as most firms responded that no one has any influential power and that the perceived own influence is associated with ratings of other firm categories. To account for the possibility of DIF, we used other firms’ influential power perceived by the focal firm as a reference. To reduce the effect of

bias towards any firm category, I used the average of four firm categories (b) to (e) as the reference. The perceived influence score is calculated as follows:

$$\text{Gov. Relation (perceived influence)} = a - \frac{b + c + d + e}{4}$$

The main independent variables for the first stage analysis are the costs that firms need to pay to build business-government relations. This set of independent variables includes tax compliance and excess employees that a firm hires.

Tax compliance is the percentage of annual sales reported for tax purposes. It is captured by the question “Recognizing the difficulties many enterprises face in fully complying with taxes and regulations, what percentage of total sales would you estimate the typical establishment in your area of activity reports for tax purposes?” This variable measures the level of strategic accounting. The less strategic accounting the focal firm performs, the more tax a firm needs to pay, and value of the tax compliance variable increases. This variable is predicted to have a positive association with perceived influence, i.e. the more tax a firm pays, the more influential a firm is.

Excessive hiring is the percentage of excess employees that a firm has compared to its perceived optimal size. The measure is derived from 100% minus the answer to the question “If you could change the number of regular full-time workers you currently employ without any restrictions (i.e. without seeking

permission, making severance payments, etc.), what would be your optimal level of employment as a percent of your existing workforce?" I used a dummy variable, i.e. whether a firm hires non-necessary employees, and natural log of the excess percentage for empirical analysis. The excessive hiring variables are predicted to have positive associations with perceived influence. Firms which hire excess (non-necessary) employees are more influential than firms which do not hire more than the amount they need, and the more non-necessary staff hired, the more influential a firm is.

In the second stage, business-government relations are used as the key independent variable instead to investigate the benefits from building relationships with incumbent politicians and bureaucrats, and to study the impact of government relations on firm behavior and development.

In this stage, there are two sets of dependent variables. The first set of dependent variables measures costs in dealing with government officials. This set of variables includes the bribes that firms pay to government officials to "get things done", bribes that firms pay to secure government contracts, and efficiency of senior management dealing with government administrative paper work and procedures.

Bribery is captured as a percentage to annual sales to the question "We've heard that establishments are sometimes required to make gifts or informal payments to public officials to "get things done" with regard to customs, taxes,

licenses, regulations, services, etc. On average, what percent of annual sales value would such expenses cost a typical firm like yours?"

Contract bribery is captured as a percentage of contract value to the question "When establishments in your industry do business with the government, how much of the contract value is typically expected in gifts or informal payments to secure the contract?"

Efficiency is captured as a negative value of a percentage of time in a week to the question "In a typical week, what percentage of senior management's time is spent on dealing with requirements imposed by government regulations [e.g. taxes, customs, labor regulations, licensing and registration] including dealings with officials, completing forms, etc.?"

Firms with stronger business-government relations are expected to have lower operational costs. Thus, coefficient signs of key independent variables in relation to bribery and contract bribery are expected to be negative and the coefficient sign of efficiency is expected to be positive, i.e. stronger relations reduce the bribes that need to be paid and the company is more efficient in administrative work.

The second set of dependent variables measures the consequences of having business-government relations. This set of variables includes: started new production line, closed obsolete production line, opened new plant and closed old plant. The question asks whether the firms were involved in these activities in the

past three years. Firms with strong government relations on one hand benefit from paying less bribes, but on the other hand they need to pay more tax and hire excessive numbers of employees thereby becoming inefficient with less money to reinvest. Firms having strong government relations can operate in less competitive environments through influencing policy-making officials to create a more favorable business environment for the firms and the relations built are usually location and industry-specific as firms' contributions to the economy are mainly observed by high-level officials who are working in that specific geographical and industrial area; thus these firms have less incentive and motivation to innovate or diversify than other firms in a more competitive environment. Thus, coefficient signs of the key independent variables are predicted to be negative.

In both stages, I control for other factors that may influence the dependent variables, including firm age, firm size, two ownership dummy variables – foreign dominant ownership and government dominant ownership since firms owned by foreign shareholders and government tend to be more influential in relation to business-related policies, industry controls, country controls and year controls. As total asset of a firm was not available from the survey, firm size is measured in logarithms of the number of employees.

4.3 Method of Analysis

I test the hypotheses using pooled OLS for most analysis and a pooled logit model for dummy independent variable, R&D involvement. Although the survey is conducted in different years and it is highly possible that some firms have more than one record in the dataset, the dataset does not provide a firm identifier which is required for longitudinal analysis. An OLS model is used to analyze the relationship between level of political contribution, in terms of excessive hiring and tax compliance, and business-government relations.

Business – Government Relations_i

$$\begin{aligned}
 &= \beta_0 + \beta_1 \text{Political Contribution} + \beta_2 \text{Age (control)} \\
 &+ \beta_3 \ln (\text{Size}_{t-1}) \text{ (control)} + \beta_4 \ln (\text{Size}_{t-1})^2 \text{ (control)} \\
 &+ \beta_5 \text{Foreign (control)} + \beta_6 \text{Government (control)} \\
 &+ \beta_j \text{industry}_j \text{ (control)} + \beta_k \text{country}_k \text{ (control)} \\
 &+ \beta_n \text{year}_n \text{ (control)} + \varepsilon
 \end{aligned}$$

Political Contribution: Tax compliance, Excessive Labor dummy, Excessive Labor (in percentage)

Simple OLS and logistic models are used to analyze the benefits that firms can get from business-government relations when dealing with government officials and impact of business-government relations on firm behavior. The general model specification is as follows:

$$\begin{aligned}
y_i = & \beta_0 + \beta_1 \text{Business – Government Relations} + \beta_2 \text{Age (control)} \\
& + \beta_3 \ln (\text{Size}_{t-1}) \text{ (control)} + \beta_4 \ln (\text{Size}_{t-1})^2 \text{ (control)} \\
& + \beta_5 \text{Foreign (control)} + \beta_6 \text{Government (control)} \\
& + \beta_j \text{industry}_j \text{ (control)} + \beta_k \text{country}_k \text{ (control)} \\
& + \beta_n \text{year}_n \text{ (control)} + \varepsilon
\end{aligned}$$

y_i : Bribe, Contact Bribe, Efficiency (OLS model)

y_i : Started new production line, Closed obsolete production line, Opened new plant, Closed old plant (logit model)

The coefficient of interest is β_1 . All analyses are regressed on a country-industry level cluster to generate robust standard error.

CHAPTER 5 RESULTS AND INTERPRETATIONS

Table 2 summarizes the statistics of the variables and table 3 presents the correlation matrix. Table 3 shows that business-government relations are positively correlated with tax compliance and excessive labor, and negatively correlated with total bribes, bribes paid for government contracts, efficiency, and operational restructuring. While the two variables capturing bribes, total bribes and bribes paid for government contracts are generally expected to be highly correlated since they are used to capture the same underlying firm behavior, i.e. bribery, the actual data show the contrary. This is because bribes paid to secure government contracts is associated with the industry which the focal firm is in, while the value of total bribes is not. In some industries, most firms do not involve themselves in government-related contracts and thus do not need to pay any bribes; however they still need to pay bribes to help their operations run smoothly.

Insert Table 2 and Table 3 here

5.1 Providing Support to Policy-Making Politicians

Politicians rely on firms to provide a stable economy so that they can enjoy longer tenure. In return, politicians make and change policies and regulations according to these firms' interests. H1 predicts that firms devote more resources to maintaining a stable economy are more likely to have stronger business-government relations. Table 4 shows the estimations of this hypothesis. Columns (1)

and (2) show that firms reporting more tax have stronger business-government relations. The result is statistically significant; the magnitude of the result, however, is small. Columns (3) and (4) test whether having excessive labor helps firms to secure business-government relations and the result is positive. Columns (7) and (8) show that, although the excessive labor variable has the corrected predicted sign, it is not statistically significant. There are two plausible explanations. The first is that firms with more excessive labor are more likely to have higher numbers of employees, i.e. the effect of excessive labor may overlap with that of firm size. The second reason is that there are two groups of firms in the sample and they behave differently and cancel each other's effect. Thus, I separate the sample into state-owned firms and private firms and re-estimate the excessive labor models. The results (columns 5 and 9) show that having excessive labor does not affect business-government relations of state-owned firms. For private firms (columns 6 and 10), having excessive labor does strengthen their relations with the government, and the more excessive labor they have, the stronger the relation is and the more able the firms are to influence government policies and regulations that they are interested in. Such results provide further evidence that contributions to reducing the unemployment rate help private firms to build and sustain relations with policy-making politicians and bureaucrats. Therefore, H1 is supported.

Insert Table 4 here

5.2 Dealing with Operating Government Officials

H2 predicts that business-government relations help firms to deal with government officials easily and, in turn, reduces firms' operational costs. I analyze the relationship of business-government relations with three types of costs: bribery paid to "get things done", bribery paid to secure government contracts and time spent on dealing with government officials and procedures with administrative works. The results are shown in Table 5. Columns (1) and (2) show the relationship between business-government relations and estimated bribes paid to government officials. I find that firms are more influential over law and regulations, i.e. have stronger business-government relations and pay less bribes to "get things done". Columns (3) and (4) show that firms with stronger business-government relations pay less to secure government contracts. From columns (5) and (6), senior management from firms with strong business-government relations spend less time on dealing with government officials and procedures with administrative works; the result, however, is not statistically significant. Thus we can conclude that firms with strong government relations benefit from lower operational costs by paying less bribes while there is no guarantee that they can enjoy more efficient service from government officials. Thus, H2 is only partially supported.

Insert Table 5 here

5.3 Impact on Firm Behavior

After looking at the costs of and benefits from building business-government relations, let's turn to how these government relations influence firm behavior. Table 6 shows the analyses of consequences of business-government relations in terms of production mix (production lines and production plants) restructuring. Firms with stronger relations with government are less likely to introduce or shut down production lines, and they are less likely to open new production plants. Although the relationship between business-government relations and closing production plants has the correct sign, the result is not statistically significant. H3 is partially supported.

Insert Table 6 here

CHAPTER 6 DISCUSSION AND CONCLUSION

6.1 Discussion

This paper presents the costs of and benefits from building business-government relations and analyzes the consequence of business-government relations on firms' further development in the context of transition economies. Although business-government relations are a form of benefit exchange, previous studies mostly focus on the benefit side of firms, while comparatively few studies look into the costs that firms need to pay for such exchange and the consequence of paying such costs in the long run.

Empirical results show that in transition economies, firms putting more resources into providing a stable economy and helping politicians to stay in their positions for a little longer, have stronger relations with the government and are more capable of influencing policies and regulations that are related to their business. The results also show that in transition economies business-government relations can help firms to deal with government officials since having strong relations with policy-making politicians can deter rent-seeking behavior of government officials and ensure that they provide an efficient service. Firms with strong business-government relations in transition economies are less likely to innovate or restructure their production mix although such relations reduce their operational costs and increase their efficiency. There are several possible reasons for this firm behavior. First, there are costs in building relations; second, the ability to influence policies and regulations may create a less competitive environment for

the firm; and finally, business-government relations of this type are geographical and industrial-specific. For all these reasons, firms with strong relations with high-level government officials have less motivation in innovation and reinvestment. Further research can explore this subject matter deeper and attempt to find out the underlying reasons for this behavior.

Some may argue that these firms do not invest in innovation and reinvestment simply because it is unnecessary as their influential power over high-level government officials provides them a good business environment to operate in and these firms are doing fairly well. However, firms which underinvest in innovation and reinvestment in the long run may become rigid in operations and will be less capable of dealing with sudden market or political environment changes.

The paper also has important managerial implications. It has been widely accepted and believed that business-government relations can help firms to access resources, get things done easier and even help improve performance. However, managers may not be aware that the benefits from business-government relations come with a cost that is so high that it would affect a firm's investment decision-making and hinder future development. Thus, when building and maintaining business-government relations, managers should ensure that they can balance the costs and benefits so as to maintain reasonable future development.

6.2 Limitations and Further Studies

This study suffers a number of limitations and awaits refinements in further study. This paper has its merits in that it presents an empirical test for some government relation building costs that are understudied by business scholars and the potential long-term effects of business-government relations on firm behavior, but the cross-sectional nature of the data does not allow the conclusion of a causal relationship. Furthermore, the lack of a firm identifier in the dataset results in multiple observations of some firms in different years. Further study needs to collect longitudinal data to explore the causal relationship between high-level and low-level business-government relations and use a firm identifier to control for unobserved firm effects in panel data analyses.

Since information about bribery is sensitive, survey questions of this type sometimes are ignored by respondents and the validity of the data is usually questioned even though respondents provide answers. Although the Enterprise Surveys asks sensitive questions in an indirect way such that respondents do not admit that they engage in these sensitive issues and this method potentially increases item response rate and validity, further study should explore other possible research methods or survey designs, e.g. the Unmatched Count Technique (Ahart & Sackett 2004; Coutts & Jann, 2009), that can further enhance item response rate and evaluate item validity.

Despite the fundamental differences between high and low-level government officials, management and business strategy scholars seldom

distinguish the two when they are studying business-government relations. Economic, financial, social science, political science fields and some business ethics studies do indeed distinguish between the types of corruption committed by these two types of government official respectively (e.g. Rose-Ackerman, 1996; Rose-Ackerman, 2002; Wilson & Damania, 2005). In these corruption studies, the term “grand corruption” refers to large-scale transactions that involve high-level politicians and the term “petty corruption” refers to corruption cases involving smaller sums and typically more junior officials. These studies, however, did not go further in exploring how business-government relations with high-level and low-level government officials are inter-related. In the development of H2, I present different reasons for how business-government relations help firms to deter rent-seeking behavior from high-level and low-level government officials respectively. Due to the limitation of the data used in this study, it is not possible to test whether and how business-government relations with high-level and low-level government officials are inter-related. With the available data, further study on this area should be encouraged as better knowledge of such interrelations can help firms to balance their costs when dealing with government officials.

The results of this study provide momentum for understanding the consequences of business-government relations and its effect on firms’ long-term development. Future research can incorporate country-level institutional variables, e.g. the Bertelsmann Stiftung Transformation Index (BTI) (Bertelsmann-Foundation,

2012), into the analysis to determine how the progress in economy transition influences business-government relations in different stages.

6.3 Conclusion

To conclude, this paper explores indirect costs for firms in building good relations with policy-making politicians and studies how these relations help firms when dealing with policy implementing government officials. It also goes a step further to better understand the influence of business-government relations on firm decision-making and firm development. Future studies can build on these ideas and go deeper into discovering more firm decisions or behavior that are influenced by business-government relations and come to a better conclusion on how business-government relations impact firms in the long run. Moreover, studies on how firms' relations with high-level and low-level government officials are interrelated are called for.

REFERENCES

- Agrawal, A., & Knoeber, C. K. (2001). Do some outside directors play a political role? *Journal of Law and Economics*, 44, 179-198.
- Ahart, A. , and Sackett, P. (2004). A New Method of Examining Relationships between Individual Difference Measures and Sensitive Behavior Criteria: Evaluating the Unmatched Count Technique. *Organizational Research Methods*, 7 (1), 101–114.
- Bertelsmann-Foundation. (2012). Transformation Index BTI 2012 Retrieved 22 April, 2012, from <http://www.bti-project.de/?&L=1>
- Bertrand, M., Kramarz, F., Schoar, A., & Thesmar, D. (2004). *Politically Connected CEOs and Corporate Outcomes: Evidence from France*.
http://www.mit.edu/~aschoar/politics_fulldraft4.pdf.
- Brandt, L., & Li, H. (2003). Bank discrimination in transition economies: ideology, information or incentives. *Journal of Comparative Economics*, 31(3), 387-413.
- Buehrer, J. (2011, September 21, 2011). Region: Pro-Russian party wins Latvian elections, *The Prague Post*.
- Cai, H., Fang, H., & Yu, L.C. (2005). Eat, Drink, Firms, and Government: An Investigation of Corruption From Entertainment and Travel Costs of Chinese Firms, *NBER Working Paper # 11592*
- Che, J. (2002). Rent seeking and government ownership of firms: an application to China's township–village enterprises. *Journal of Comparative Economics*, 30, 781-811.
- Coutts, E., & Jann ,B. (2009). Sensitive Questions in Online Surveys: Experimental Results for the Randomized Response Technique (RRT) and the Unmatched Count Technique (UCT). *General Online Research Conference in Vienna*.

- Debrun, X., & Kapoor, R. (2010). Fiscal Policy and Macroeconomic Stability: Automatic Stabilizers Work, Always and Everywhere. *IMF Working Paper*, No. 10/111.
- Embretson, S. E., & Reise, S. P. (2000). *Item Response Theory for Psychologists*, Mahwah, EUA : Lawrence Erlbaum Associates
- Emerson, R. M. (1962). Power - Dependence Relations. *American sociological review*, 27(February), 31-41.
- Faccio, M. (2006). Politically connected firms. *American Economic Review*, 96(1), 369-386.
- Fischer, S., & Gelb, A. (1991). Issues in Socialist Economy Reform. *Journal of Economic Perspectives*, 5(Fall), 91-105.
- Frye, T. (2002). Capture or Exchange? Business Lobbying in Russia. *Europe-Asia Studies*, 54, 1017-1036.
- Gehlbach, S. (2006). The Consequences of Collective Action: An Incomplete-Contracts Approach. *American Journal of Political Science*, 50, 802-823.
- Ghosh, A. R. (1997) Inflation in Transition Economies: How Much? and Why? *IMF Working Paper*, No. 97/80.
- Guo, G. (2009). China's Local Political Budget Cycles. *American Journal of Political Science*, 53(3), 621-632.
- IMF. (2000). Transition Economies: An IMF Perspective on Progress and Prospects Retrieved 20 April, 2012, from <http://www.imf.org/external/np/exr/ib/2000/110300.htm>
- Johnson, S., & Mitton, T. (2003). Cronyism and capital controls: evidence from Malaysia. *Journal of Financial Economics*, 67, 351-382.
- Kenny, C., & Soreide, T. (2008). *Grand corruption in utilities*. World Bank. Policy Research Working Paper.

- Khanna, T., Palepu, K., & Sinha, J. (2005). Strategies that fit emerging markets. *Harvard Business Review*, 83(6), 63-76. doi: citeulike-article-id:6384494
- Khwaja, A., & Mian, A. (2005). Do lenders favor politically connected firms? Rent provision in an emerging financial market. *Quarterly Journal of Economics*, 120(4), 1371-1411.
- Li, H., Meng, L., Wang, Q., & Zhou, L.-A. (2008). Political connections, financing and firm performance: Evidence from Chinese private firms. *Journal of Development Economics*, 87(2), 283-299. doi: 10.1016/j.jdeveco.2007.03.001
- Liou, K. T. (1998). The Role of Government in Economic Development: The Chinese Experience. *International Journal of Public Administration*, 21(9), 1257-1983.
- Muravyev, A., Talavera, O., & Schafer, D. (2009). Entrepreneurs' Gender and Financial Constraints: Evidence from International Data. *Journal of Comparative Economics*, 37, 270-286.
- Pfeffer, J., & Salancik, G. (2003). *The External Control of Organizations: A Resource Dependence Perspective (Stanford Business Classics)*: Stanford Business Books.
- Quinn, D. P., & Woolley, J. T. (2001). Democracy and National Economic Performance: The Preference for Stability. *American Journal of Political Science*, 3, 634-657.
- Rose-Ackerman, S. (1996). Democracy and 'grand' corruption. *International Social Science Journal*, 48(149), 365-380.
- Rose-Ackerman, S. (2002). "Grand" corruption and the ethics of global business. *Journal of Banking & Finance*, 26(9), 1889-1918.
- Tanzi, V. (1999). Transition and the Changing Role of Government. *Finance and Development*, 36(2).

- UNDP. (2003). UNDP Practice Note: Anti-Corruption Retrieved 21 April, 2012, from http://km.undp.sk/uploads/public/File/AC_Practitioners_Network/Anti_corruption_practice_note.pdf
- Wilson, J. K., & Damania, R. (2005). Corruption, political competition and environmental policy. *Journal of Environmental Economics and Management.*, 49(3), 516-535.
- WorldBank. (2002a). The first ten years. Analysis and Lessons for Eastern Europe and the Former Soviet Union. The International Bank for Reconstruction and Development Retrieved 20 April, 2012, from <http://siteresources.worldbank.org/ECAEXT/Resources/complete.pdf>
- WorldBank. (2002b). Productivity and the Investment Climate: Private Enterprise Survey. Washington, DC.

APPENDIX

Table 1: List of Transition Economies

Transition economies in Europe and the former Soviet Union

CEE Albania, Bulgaria, Croatia, Czech Republic, FYR Macedonia, Hungary, Poland, Romania, Slovak Republic, Slovenia

Baltics Estonia, Latvia, Lithuania

CIS Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan

Transition economies in Asia

Cambodia, China, Laos, Vietnam

Source: IMF (2000) Transition Economies: An IMF Perspective on Progress and Prospects

Table 2: Summary statistics

Variable	N	Mean	Std. Dev.	Min.	Max.
Gov. Relation	5094	-0.977	1.205	-4	4
Firm age (years)	5094	25.189	19.470	10	212
Firm Size (Permanent workers ln, t-1)	5072	3.281	1.743	0	10.363
Foreign Firm	5094	0.067	0.251	0	1
State-owned firm	5094	0.128	0.334	0	1
Tax compliance (% of sales reported)	4567	83.398	24.452	1	100
Excess labor	4950	0.264	0.441	0	1
% Excess labor (ln)	4950	5.032	12.295	0	100
Total bribes (% sales)	4647	1.693	3.728	0	70
Bribes for Gov. contracts (% of value)	4522	1.783	4.579	0	50
Efficiency	4853	8.406	12.406	0	90
Opened new product line in past 3 years	5071	0.396	0.489	0	1
Closed obsolete product line in past 3 years	5066	0.222	0.416	0	1
Opened new production plant in past 3 years	5066	0.146	0.354	0	1
Closed old plant in past 3 years	5062	0.119	0.324	0	1

Table 3: Correlation Matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Gov. Relation	1														
Firm age (years)	0.0739	1													
Firm Size (Permanent workers ln, t-1)	0.1140	0.3873	1												
Foreign Firm	0.1167	0.3947	0.9651	1											
State-owned firm	0.0003	0.0418	0.1394	0.1297	1										
Tax compliance (% of sales reported)	0.1395	0.3792	0.2932	0.2987	-0.1077	1									
Excess labor	0.0244	0.1027	0.1396	0.1380	0.0182	0.1022	1								
% Excess labor (ln)	0.0674	0.1742	0.2799	0.2737	0.0425	0.1245	0.0378	1							
Total bribes (% sales)	0.0564	0.1665	0.2487	0.2467	0.0359	0.1216	0.0334	0.9660	1						
Bribes for Gov. contracts (% of value)	-0.0802	-0.0860	-0.1007	-0.1093	-0.0125	-0.119	-0.2061	-0.0285	-0.0146	1					
Efficiency	-0.106	-0.0709	-0.0638	-0.0747	-0.0095	-0.0757	-0.1472	-0.0230	-0.0127	0.3241	1				
Opened new product line in past 3 years	-0.0452	0.0191	0.0409	0.0319	0.0269	0.0113	-0.0774	0.0322	0.0325	0.1425	0.1165	1			
Closed obsolete product line in past 3 years	-0.0365	0.0407	0.1812	0.1575	0.0146	-0.0105	-0.0190	0.0171	0.0122	0.0306	0.0487	0.0481	1		
Opened new production plant in past 3 years	-0.0571	0.0453	0.1421	0.1269	0.0309	0.002	-0.0317	0.0489	0.0403	0.0236	0.0434	0.0507	0.2665	1	
Closed old plant in past 3 years	-0.0609	-0.0275	0.1577	0.1489	0.0400	-0.0349	0.0045	0.0306	0.0188	0.0141	0.0267	0.0133	0.2204	0.1339	1

Table 4: Tax Compliance, Excess Labor and Business-Government Relations

	Gov. Relation (Perceived Influence)									
	All (1)	All (2)	All (3)	All (4)	State-Owned (5)	Private (6)	All (7)	All (8)	State-Owned (9)	Private (10)
Tax compliance	0.002** (0.001)	0.002** (0.001)								
Excessive Labor (Dummy)			0.081* (0.043)	0.072* (0.042)	-0.086 (0.113)	0.095** (0.044)				
Excessive Labor (ln, %)							0.022 (0.016)	0.019 (0.016)	-0.028 (0.041)	0.029* (0.017)
Age	0.003* (0.002)	0.003* (0.001)	0.002* (0.002)	0.002* (0.002)	0.001 (0.002)	0.003* (0.002)	0.002* (0.002)	0.002* (0.002)	0.002* (0.280)	0.003* (0.078)
Size	-0.011 (0.040)	-0.009 (0.040)	-0.037 (0.039)	-0.034 (0.039)	-0.058 (0.137)	-0.017 (0.041)	-0.035 (0.039)	-0.033 (0.039)	-0.062 (0.136)	-0.015 (0.041)
Size ²	0.009 (0.006)	0.008 (0.005)	0.011* (0.006)	0.010* (0.006)	0.019 (0.015)	0.007 (0.006)	0.010* (0.006)	0.010* (0.006)	0.020 (0.015)	0.007 (0.006)
Foreign	-0.010 (0.072)	-0.012 (0.071)	0.012 (0.069)	0.007 (0.068)		-0.001 (0.068)	0.012 (0.069)	0.007 (0.068)		0.001 (0.069)
State-Owned	0.212*** (0.065)	0.202*** (0.065)	0.229*** (0.060)	0.220*** (0.060)			0.229*** (0.060)	0.219*** (0.060)		
Constant	-0.692*** (0.209)	-1.667*** (0.219)	-0.455** (0.206)	-1.131*** (0.215)	-0.946 (0.684)	-1.253*** (0.217)	-0.461** (0.206)	-1.136*** (0.215)	-0.945 (0.687)	-1.260*** (0.216)
Non-response weighting	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes
N	4269	4269	4630	4630	624	4006	4630	4630	624	4006
k	426	426	429	429	238	411	429	429	238	411
R ²	0.158	0.159	0.147	0.147	0.177	0.142	0.147	0.147	0.177	0.141
RMSE	1.109	1.105	1.113	1.101	1.223	1.090	1.114	1.110	1.223	1.091

Notes: Results from OLS regressions, with industry, country and year dummies (not reported). Robust standard errors clustered by k country-industry clusters are in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.10

Table 5: Business-Government Relation and Costs in Dealing with Government Officials

	Bribe (% of sales)		Contract Bribe (% of contract value)		Efficiency	
	(1)	(2)	(3)	(4)	(5)	(6)
Gov. Relation	-0.214*** (0.046)	-0.215*** (0.048)	-0.356*** (0.065)	-0.36*** (0.068)	-0.112 (0.168)	-0.119 (0.178)
Age	-0.001 (0.004)	-0.002 (0.004)	-0.009*** (0.004)	-0.011*** (0.004)	-0.003 (0.011)	-0.003 (0.012)
Size	-0.098 (0.103)	-0.056 (0.105)	0.231 (0.152)	0.227 (0.164)	0.774 (0.472)	0.663 (0.506)
Size ²	-0.01 (0.013)	-0.014 (0.013)	-0.044 (0.018)	-0.044** (0.019)	-0.079 (0.059)	-0.067 (0.064)
Foreign	-0.160 (0.166)	-0.177 (0.171)	0.101 (0.274)	0.108 (0.283)	1.189 (0.815)	1.373 (0.851)
State-Owned	-1.063*** (0.134)	-1.087*** (0.139)	-0.762*** (0.227)	-0.741*** (0.230)	0.288 (0.568)	0.300 (0.590)
Constant	3.148*** (0.717)	1.22*** (0.404)	1.626** (0.692)	1.812** (0.732)	5.143** 2.175	11.742*** 2.483
Non-response weighting	No	Yes	No	Yes	No	Yes
N	4405	4092	4366	4053	4524	4211
k	421	382	425	386	352	313
R ²	0.089	0.089	0.069	0.069	0.064	0.064
RMSE	3.210	3.199	4.460	4.502	11.562	11.691

Notes: Results from OLS regressions, with industry, country and year dummies (not reported). Robust standard errors clustered by k country-industry clusters are in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.10

Table 6: Business-Government Relations and Firm Behavior

	Started new production line	Closed obsolete production line	Opened new plant	Closed old plant
	(1)	(2)	(3)	(4)
Gov. Relation	-0.100** (0.043)	-0.274*** (0.053)	-0.139** (0.071)	-0.133 (0.083)
Age	-0.007** (0.004)	0.003 (0.004)	-0.014** (0.006)	0.013*** (0.005)
Size	0.561*** (0.121)	0.394*** (0.14)	0.755*** (0.226)	0.426** (0.188)
Size ²	-0.044 (0.016)	-0.022 (0.018)	-0.051* (0.027)	-0.028 (0.023)
Foreign	-0.321 (0.220)	-0.291 (0.232)	-0.118 (0.316)	0.082 (0.344)
State-Owned	-0.322** (0.151)	-0.048 (0.187)	-0.487 (0.307)	-0.484* (0.252)
Constant	-0.541 (0.340)	-1.286*** (0.440)	-5.010*** (0.857)	-2.584*** (0.513)
N	2284	2243	1969	1965
k	203	191	145	145
R ²	0.094	0.102	0.132	0.077

Notes: Results from logistic regressions, with industry, country and year dummies (not reported). Robust standard errors clustered by k country-industry clusters are in parentheses. R² values reported are pseudo R². *** p < 0.01, ** p < 0.05, * p < 0.10