

Examine Relationship Between Corruption and Transaction Governance Structure

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Abstract

A transaction governance structure (TGS) is a structure that mediates exchanges of goods or services (Williamson, 1979; 1981). According to traditional transaction cost theory, a transaction can be mediated by either the external market or the internal integrated firm (Coase, 1937; Williamson, 1979). A selection of TGS is based on a comparison of costs between market and firm. One influential factor, which can potentially increase transaction costs of market and favor selection of firm, is the opportunism in the market (Williamson 1985). There is no precedent of measuring opportunism in current literature. However, there are well defined indexes which measure corruption. This research explored the possibility and presented argument for using corruption to surrogate opportunism and to predict TGS accordingly. A statistical analysis indicated that corruption was significantly correlated with TGS based on the data of 154 countries.

Key Words: corruption, transaction governance structure, import and export, opportunism.

Introduction

Corruption as a cultural, political and economic phenomenon has attracted attention from industry, academia, and government. Corruption has been associated with slower productivity growth (Husted, 2005; Soon, 2006), lower level of foreign direct investment (Zhao, 2003), smaller stock market capitalization (Khumawala & Ramchand 2005) and undervaluing assets obtained through acquisitions or mergers (Gleason, Malgwi, Mathur & Owhoso, 2005). Corruption has been broadly observed across multiple countries (Ali & Isse, 2003) and intensely investigated in specific countries such as Russia (Kaufmann & Siegelbaum, 1997), Mexico (Husted 2002,1993), and China (Gong, 2003).

The majority of corruption studies was conducted by observing correlations without proposing any theoretical foundation. Corruption was frequently correlated with economic or cultural factors such as gross domestic product, foreign direct investment, power distance, masculinity, and individualism (Husted, 2005). A few studies provided formal theoretical models such as game theory (Svejnar & Smith, 1984), principal-agent model (Kiser & Tong, 1992), Cobb-Douglass production function (Mankiw, Romer & Weil, 1992; Everhart, Martinez-Vazquez & McNab, 2003), and rent-seeking theory (Lambsdorff, 2002; Kuncoro, 2006). This paper introduced transaction cost theory into corruption study. We explored the possibility and presented argument for using corruption to surrogate opportunism and to predict TGS accordingly. The rest of the paper covers the following issues – review of theoretical foundation, definition of construct, framework and hypothesis, variable measurement, statistical analysis, and conclusion.

Theoretical Foundation – Transaction Cost Economics

A transaction governance structure (TGS) is a structure that mediates exchange of goods or services (Williamson, 1979; 1981). According to traditional transaction cost theory, a transaction can be mediated by either the external market or the internal integrated firm (Coase, 1937; Williamson, 1979). A selection of TGS is based on a comparison of costs between market and firm. Market transaction costs are incurred because of opportunism in the market and limitations of decision makers in solving complex problems and processing information. On the other hand, firm transaction costs are based on agency costs associated with controlling, monitoring, and coordinating agents' activities within a firm's hierarchy. Figure 1 summarized the transaction cost theory.

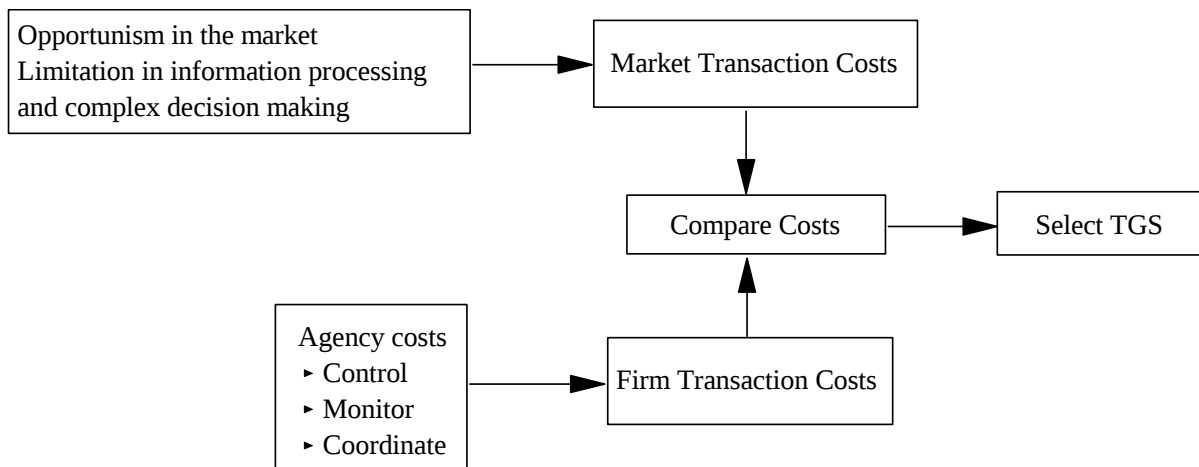


Figure 1. Transaction Cost Theory

Constructs – Opportunism and Corruption

One influential factor, which can potentially increase market transaction costs and favor selection of firm TGS, is the opportunism in the market. There is no precedent of measuring opportunism in current literature. However, there are well defined indexes which measure corruption. Before suggesting using corruption to surrogate opportunism, some questions arise regarding construct validity. Are there any similarities between the two constructs? Can corruption adequately represent the domain of opportunism? To answer the questions, let's see how these constructs are defined.

There are many definitions of corruption in the current literature. The meaning of corruption varies in different contexts. For instance, sociologists considered corruption as an effective way for Chicago mafia to establish themselves in the social system (Merton 1968). Political scientists examined corruption in relation with democracy and campaign finance (Hohenstein, 2004). Some economists saw corruption being detrimental to economic growth (Husted, 2005; Soon, 2006), while others studied corruption as a form cooperation which "grease the wheels" of commerce (Argandoña, 2005; Leff, 1964). Gift giving and favor exchange were considered as social norms in Chinese studies (Sun 2001), but investigated as bribery and corruption in Western studies (Husted, 2005; Soon, 2006).

In this paper, the construct of corruption was defined and addressed in the context of economic transactions. The definition is cited from Alemann (2004: 29).

Corruption is always an exchange process between two or more persons (or groups organized into two or more parties). The person who corrupts is in possession of economic goods or resources that are scarce; the person who is to be corrupted possesses power in its broadest

sense – power which was transferred to him or her by a defined public body to be used for the common good and according to fixed rules. The person who corrupts wants to get a concession or a contract or wants to avoid a punishment. He or she therefore bribes the person to be corrupted, i.e. the person who has got the power to issue the concessions or decide otherwise. It is, however, also possible that the person to be corrupted takes the initiative, making further demands on the person corrupting him or her.

Let's compare the definition of corruption with that of opportunism. Williamson, the founding father of transaction cost theory, defined opportunism as “self-interest seeking with guile” (Williamson 1985: 47). Is corruption self-interest seeking? Do parties carry out corruption with guile? Here we present the argument which leads to positive conclusions to the above questions.

Corruption is viewed as a particular type of rent-seeking activity by many researchers (Lambsdorff, 2002; Rose-Ackerman, 1999; Guo, 2004; Fan, 2006). Rent is defined as the return in excess of the opportunity cost of the resources devoted to the activity (Case, 2001). People are said to be rent seeking when they try to get higher wages, more profit, or any other payment over above the minimum they would be willing to accept. The corruption parties seek to pursue their interests in the competition for preferential treatment. Similar to other forms of self-interest seeking, corruption represents a way to escape the market supply-demand mechanism by influencing policies to their advantage such as obtaining a contract without competing with competitors.

Guile means insidious cunning in attaining a goal; crafty or artful deception; duplicity (Random House, 2005). According to Alemann (Alemann, 2004: 30), the condition of corruption exchange is that,

“the person corrupting and the person being corrupted had to have agreed to do something illegal. Only in the case of such a conspiracy was bribery assumed to have taken place. Often the corrupters and the corruptees act according to double standards. They know quite well that the public does not approve of their action. That is why they keep them secret.” (Alemann, 2004: 30).

Secrecy and duplicity are common in corruption. For instance, the president of America's National Association of Evangelicals, a vocal opponent of gay marriage, kept a secret sexual relationship with a male escort for three years.

In spite of the above similarity, there are differences between corruption and opportunism. First, corruption is a violation of rule or law (World Bank, n.d.; United States Sentencing Commission, 2005), while opportunism might be a fair game of the market (MacNeil, 1981). For instance, a lemon car sold under “as is” is not protected by lemon laws; it is a fair trade. Uncertainty and risk is the fact of the market. Some neoclassical economists believe that “what legal scholars call contract is nothing more than a sale with a time lag, ...a gambling arrangement with a long time lag, so that there is always a loser who wants to shirk, cheat, or in some way evade his obligation of paying.” (MacNeil, 1981:1020).

Frequently, the distinction between corruption and opportunism gets blurred when it comes to whether or not a law is violated. A violation of law in one market might be a fair game in another. For instance, in 17 of the 25 bribery settings, Singaporean participants believed that

corruptions were committed at a greater degree than the Chinese counterparts believed (Lim, 2001). The concept of corruption is interpreted differently in different countries. In the United States, corruption is clearly defined as offering, giving, receiving or soliciting of anything of value to influence the action of an official in the procurement or selection process or in contract execution (World Bank, n.d.; United States Sentencing Commission, 2005). However, in China punishment for corruption is normally given to the official who receives the bribe, not to the person who offers it (Levy, 2002). The person who offers a bribe is often portrayed as a victim who suffered an economic loss (“How Can Be So Many New Medicines,” 2006).

The second difference between corruption and opportunism is the types of participant. Opportunism can exist in various kinds participant relations (i.e., private-to-private, private-to-public, or public-to-public). Corruption is widely believed to have at least one participant being public. Private-to-public corruption has been widely studied. Private-to-private corruption, by contrast, has been relatively neglected and only recently introduced by Argandona as

“the type of corruption that occurs when a manager or employee exercises a certain power or influence over the performance of a function, task or responsibility within a private organization or corporation. Because he has a margin of discretion, he can choose to act contrary to the duties and responsibilities of his post or job, and thus in a way that directly or indirectly harms the company or organization, for his own benefit or for that of another person, company or organization.” (Argandona, 2003:255).

We have presented the distinction between corruption and opportunism. As the discussion of corruption expands into private sector and as transaction context embraces the

global market, the distinction is diminishing. Let's assume that law violation and public party participation are additional features above and beyond the features of opportunism. It is still safe to argue that corruption is a subset of opportunism and opportunism has a broader domain than corruption. As a subset, a corruption case can be considered as a special case of opportunism. Based on this argument, our research takes an inductive reasoning approach and uses corruption to surrogate opportunism and to predict TGS accordingly. We need to point out that using special cases to represent general population raises a concern of generalizability, i.e. the ability to generalize the finding to the population at large.

Research Framework and Hypothesis

With transaction cost economics as our theoretical foundation, we took a black box approach where certain factors were treated as a black box (see factors contained in dotted line in Figure 2). This approach singles out the relation between corruption and TGS for a close examination. Our hypothesis is that the level of corruption in transaction environment has significant impact on selection of TGS.

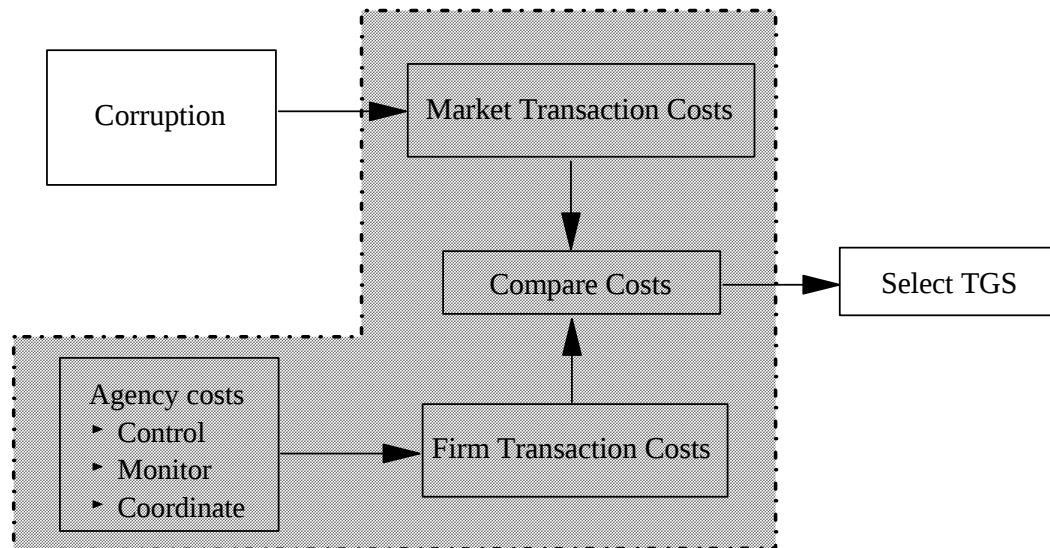


Figure 2. Research Framework

Measurements

Dependent Variable – Transaction Governance Structure

Although the concept of TGS is coined in the 1930's, the measurement of TGS is not well established. A review of 81 TGS studies from 1982 to 2004 indicated little consensus among instruments used for measuring TGS (Zhang, 2005). 46% of the studies used dichotomous scales (0 and 1) or multichotomous scales (0,1,2, ...) to measure TGSs into discrete categories such as market, joint venture, partner relationship, or firm. Another 18% of the studies used single metric measurement such as a percentage of shipments delivered by own fleet, a percentage of private warehouse use, or a ratio of outside spending over total spending. This study followed the thesis of Ettlie and Sethuramn (2002). In their study, global outsourcing was measured as the percentage of purchases from outside the economic region as contrasted to purchases within the region. In our study, we considered international market as external

market and domestic market at internal market. We measured TGS as the level of using international market as contrasted to using domestic market, i.e. the percentage of import and export as percentage of total gross domestic product. We abbreviated this dependent variable as TGS. The data was extracted from the World Development Indicators database at the website of the World Bank.

Independent Variable – Corruption

The Corruption Perception Index published by Transparency International was used in this study. This index is a composite index that draws from 12 different surveys conducted by 9 independent institutions (such as World Bank, United Nations, Freedom House) and covers 163 countries. The countries included in the index must have scores from at least three sources. This index is the most complete and has the greatest scope of any index to date. The scores of the index range from zero to ten (with zero indicating high levels of perceived corruption and ten indicating low levels of perceived corruption). In this study, we used the Corruption Perception Index as the independent variable and abbreviated as CPI. 154 out of 163 countries were included in this study. Nine countries which had no import and export data were eliminated from the analysis.

Analysis

Table 1 shows the statistical result generated by SPSS when we regressed TGS on CPI for 154 countries. The regression equation is $TGS = \beta_0 + \beta_1 (CPI) + \varepsilon$. The coefficient of CPI is

4.384 which is significant with t value of 2.472 and p value of 0.015. The positive coefficient indicates that CPI is positive correlated with TGS. In other words, when CPI is low which means high corruption, TGS is low which means the percentage of import and export is low. The low import and export represents less in favor of using external international market as TGS and more preference of internal production and consumption. The statistics support our hypothesis that the level of corruption in transaction environment has significant impact on selection of TGS.

Based on the sums of squares provided in Table 2, we estimated statistical power of the regression analysis. With single predictor, $\alpha=0.05$, and $\eta^2 = 0.0449$, the statistical power is 0.74 which is satisfactory for social studies.

Table 1. Coefficients^(a)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	71.473	8.187		8.730	.000
CPI	4.384	1.773	.197	2.472	.015

a. Dependent Variable: TGS

Table 2. Analysis of Variance^(b) – decomposition of sums of squares

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	13439.237	1	13439.237	6.112	.015 ^(a)
Residual	334203.458	152	2198.707		
Total	347642.695	153			

a. Predictors: (Constant) and CPI

b. Dependent Variable: TGS

Conclusion

The social and economic costs of corruption have drawn significant attention from government, business, and academia. Research effort has been emphasizing effects of corruption on investment and economic growth. However, no attempt has been made to elaborate the impact of corruption on TGS. This article introduced transaction cost economics into corruption study and used corruption to explain the difference in selection of TGS. Corruption is found to be significantly correlated with the selection of TGS. This finding has strategic implication for businesses which venture into global market and face the decision of selecting TGS. A suggestion based on our finding would be that vertical integrated TGS are suitable for the transactions in countries where corruption is high, and market oriented TGS is suitable for the transactions in the countries where corruption is low. For instance, when operating in high corruption market, a manager may want to maintain or create an integrated TGS such as joint venture and partnership. When entering a low corruption market, a manager may want to take the advantage of free market and leverage on free competition to choose suppliers or partners.

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