

A Study of Application of Transaction Cost and Relational Capital Perspectives on Relationship between Institutional Governance and Institutional Performance ~ Comparison between Taiwan and Mainland China HEIs

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ABSTRACT

This study aims to understand the relationship between institutional governance and institutional performance by applying transaction cost and relational capital viewpoints. As institutional research (IR) has been an emerging interdisciplinary issue, this study analyzes the influence of internal governance of higher education institutions (HEIs) on their performance and efficiency from the viewpoints of organizational perspective by utilizing a quantitative method. Based on the comparative research methodology, questionnaires were delivered to purposively sampled HEIs in both Taiwan and mainland China to obtain the data. The results indicate that two types of HEIs governance linking transaction cost theory and relational capital theory to organizational commitment, job satisfaction and job performance revealed a general positivity in administrative and academic staff's responses. Finally, based on the findings, concrete conclusions and suggestions as well as future study are provided for HEI administrators and interested researchers as theoretical and practical references.

Keywords: higher education, institutional governance, relational capital, transaction cost

1. INTRODUCTION

The changing governance of higher education institutions (HEIs), from the state-controlled to the autonomy-oriented structure, which can be attributed to the economic recession, globally intense competitiveness and demographic development, makes scholars more interested in institutional research (IR) (Dobbins, Knill & Vögtle, 2011). With the constantly evolving HEIs, it is worth exploring how the operating system within institutions should be managed to fulfill the expected performance and internal control. Considering the internal dynamics may be

enormously impacted by the rapidly changing governance, institution administrators are compelled to have to strengthen the connection and integration of the institutional governance mechanism.

From the governance system, this study focuses on how this transformation impacts on the effectiveness in administrative management in HEIs since their performance has been highlighted due to limited financial resources. Hence, advanced administrative tools and reallocated human resources are required so that the resources can be deployed productively and increase efficiency and improve the quality of the activities at the same time.

Under the perception of increasingly required accountability, administration service mostly undertaken by administrative staff is strongly demanded to demonstrate its efficiency and appropriateness to ensure service quality and realize the institutional goals. Despite the internal governance of HEIs being interactively engaged with the variances caused by the environment, most studies mainly investigate the governance structure, institutional effectiveness, and others from the perspective of intuition or academic faculty, rather than discovering how the dynamics of governance existing in HEIs affect administrative staff (Choi & Rhee, 2013). Considering HEIs as organizations since they carry out designed goals (Kale, 2013), this study applies organization theory, including transaction cost and relational capital perspectives, to explain the relationship between institutional governance and institutional performance.

Transaction cost is seen as the fundamental theory to study organization-related issues, and to every organization, it is unanimously agreed that the main focus is to make exchange relations in each deal harmonious (Coase, 1937). It is on the basis

of the assumption that a transaction occurring in a pure market is deemed rational. However, market exchange is complicated by the political and social circumstances that the irrationality of both suppliers and consumers and other factors will lead to an additional cost to each transaction (Davenport & Prusak, 1998). Accordingly, the costs will be vastly and indispensably calculated if the condition of the obtained information remains incomplete or asymmetric. According to Coase (1937), he proposed three types of costs existing during transaction such as search costs, bargaining costs and enforcement costs, and Williamson (1985) distinguished the aforementioned as *ex ante* and *ex post* cost. *Ex ante* cost is of drafting, negotiating, and safeguarding an agreement; *ex post* cost, on the other hand, consists of maladaptation costs, haggling costs and the setup and running costs (Williamson, 1985). The following will continue the elaboration of four concepts of transaction cost theory and discuss how this theory applies to institutional research.

Transaction cost theory begins with opportunism since in every transaction, the incomplete information sets up an environment that people maximize their own profits at the cost of others. It is defined by Williamson (1987, p. 47) as "self-interest seeking with guile. This includes but is scarcely limited to more blatant forms, such as lying, stealing, and cheating. ...More generally, opportunism refers to the incomplete or distorted disclosure of information, especially to calculated efforts to mislead, distort, disguise, obfuscate, or otherwise confuse". Despite that opportunism does not necessarily exist in society, the problem is compounded because of lacking the detection of the intention of opportunistic behavior. (Carson, Madhok, & Wu, 2006). It is worth mentioning that in spite that the existence of opportunism may be harmful to transactions, Williamson (1987) argues that general rules will still be applied on basis of actions of a joint profit-maximizing kind. In HEIs, the similar behavior occurs when administrative employees exploit the authority to gain bureaucratic interests through the flawed design of governance mechanism.

Unpredictability and complexity on the analysis of transaction cost mean the externally uncertain changes and environmental instability cannot be specifically determined, which makes the governance unable to make decisions with ample and complete information. Menard and Shirley (2005) state that the increasing degree of complexity and ambiguity will make the information more asymmetric between suppliers and consumers, and further diminish the effectiveness of competition. In other words, individuals or organizations encountered with unanticipated events and unforeseen outcomes are forced to acquire more information, and this activity will thus incur transaction costs (Menard & Shirley, 2005). We argue that the changing structural governance in HEIs directly puts the institutions in a condition with uncertainty, volatility and ambiguity, and of which will inevitably increase transaction cost emerging from more detailed negotiation and communication. As a result, the achievement of the goals set by institutions will invariably be hindered by the costs coupled with the lowering performance of administrative staff. Therefore, information disclosure mechanisms are critical to administrative effectiveness and in particular needed since it can be against the risk of opportunistic behaviors.

To tackle the issue of information asymmetric, or so-called information impactedness, which means "one of the parties to a transaction has more complete knowledge than does the other, which asymmetry condition is costly to overcome and gives rise

to a trading hazard" (Williamson, 1985), the concept of contractual commitment has been applied to deal with the 'black box' of the economic organizations. Contract enforcement can open the "black box" of firms and further minimize transaction costs in that the detailed and specific information is fully disclosed with the relevant protective laws and regulations, and the information impactedness between the parties are accordingly solved as a consequence. With the application of this concept, the mutual agreement can be legally enforced so that the possibility of violation on contracting commitment can be enormously reduced by the constraints of forms of penalty, and also the costs are vastly lowered due to comprehensive details being able to be specified in advanced with regard to the associated terms of exchange between parties.

Stakeholders linkages, customer bonding, alliance partnerships, joint ventures and so forth are invaluable assets for organizations to gain competitiveness and resources via establishment of relationship with other organizations. (Kale, Singh, & Perlmutter, 2000). Despite recognizing the importance of building up associations with other organizations, it is no doubt that internal relationship, especially with employees plays an equal or even more crucial role in the success of organizational management since human capital is regarded as corporate asset which is the accumulation of professional knowledge, education and experiences to facilitate organizational operation. As a consequence, maintaining the human capital appears to be a consequential issue in management theory and practice. Bontis, Keow and Richardson (2000) point out that regardless of the employees' capabilities and skills filling the firm with immense advantages to succeed, they are not eternal possession or propriety belonging to the corporate, and thus, the departure can pose a great threat to the organization.

Keeping employees staying in corporates heavily relies on healthy relationships with individuals. It also requires the quality of relationships, which has to be fostered by long-term trust, shared values and norms and reciprocal identification. Kale et al. (2000) state that relational capital formed by close interaction, respect and friendship not merely helps companies with acquisition of competitive advantages, but also diminish the probability and problems of opportunistic behaviors. Therefore, it can be argued that accruing relationship capital, other than contracting commitment, can decrease transaction costs occurring in the interaction with the other organizations (Kale et al., 2000).

Nahapiet and Ghoshal (1998) mention that relationship capital consists of four attributes: trust, norm, obligation and identification. From the first concept, Uzzi (1997) notes that trust is a fundamental element of a social network, its existence can lower the risks of exchanging activities and costs of monitoring process. The high level of trust is suggested to help employees become more engaged in exchange activities such as collaborative behaviors and intense interaction. Several findings have revealed that trust embedded in social capital is able to encourage cooperative behavior and even functions as an aid to increase employees' efficiency (Putnam, 1993). The second feature is norm, by which positive effects can impact on individual or/and group performance in that the socially defined right can regulate people toward a convergence by controlling actions initiated by the group. This approach is believed, by forming a consensus of agreed functioning system, to work as channel for effective information disclosure and openness (Nahapiet & Ghoshal, 1998). Obligation, the third attribute,

refers as “a commitment or duty to undertake some activity in the future.” (Nahapiet & Ghoshal, 1998). Obligation can be distinguished from norms as ‘credential’. It can be explicated that obligation is emerged in the networks of reciprocal acquaintance and recognition; thus, obligation can be regarded as “expectations developed within particular personal relationships” (Coleman, 1990). Nahapiet and Ghoshal (1998) suggest that this attribute allows both parties or individuals to involve in exchange activities with more committed intendancy and beyond personal interests. The last attribute proposed by Nahapiet and Ghoshal (1998) is identification, explained as an individual who recognizes the shared values of a certain group and emotionally committees to it and conforming behaviors being formed. Highly identified members are proved to display more cohesive attitude and increase the opportunities and intensity of resources exchange.

Based on the theoretical development as described above, our study, from outset of organizational perspective, investigates what impacts on institutional performance of HEIs by applying both theories of transaction cost and relational capital. We also examined organizational commitment as an independent variable to understand its effects on job performance and satisfaction.

2. METHODOLOGY

2.1 Data source and sample

To understand more fully how institutional governance correlates with institutional performance, the research conducts a survey by using purposive sampling method. The data from Taiwan were collected by mailing the questionnaires to the sampled universities. In mainland China case, purposive sampling methods were also adopted to distribute the questionnaires. However, in order to increase the number and percentage of valid surveys, all the surveys completed in mainland China were collected on site. The variables of the questionnaire were developed on the basis of examining relevant literature and two fundamental theories as elaborated in previous section in order that the institutional governance and practice can be comparably analyzed. All the information of the respondents and sampled institutions was anonymous as guaranteed.

2.2 Instruments

Five dimensions are included in the questionnaires listed as: contractual governance, relationship governance, organizational commitment, and job satisfaction, which are measured with a five-point Likert scale (1 = totally disagree; 5 = totally agree).

2.3 Framework

We establish the conceptual framework by employing transaction cost theory and relational capital theory to construct the dimension of this study. The framework is displayed as Figure 1.

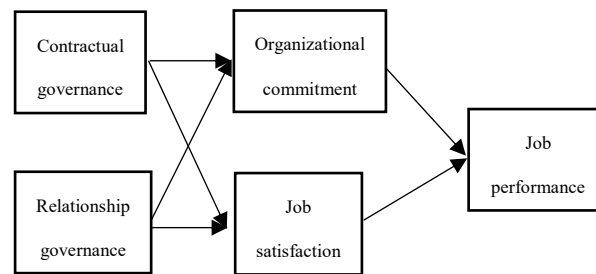


Figure 1 Conceptual framework

3. RESULTS

3.1 Descriptive analysis

In a brief portrait of the demographic analysis in Taiwan, in total of 317 questionnaires are valid, women represent 54.9% while men account for 45.1%; the respondents are mostly between 31-35 years old, in total of 28.7%; rough 4 in 10 had graduated with a bachelor degree. In mainland China sample, on the other hand, 279 surveys are valid ones, among which, male accounts for 59.1 %; most of the respondents’ age ranges from 31 years old to 35 years old; more than 90 % of respondents hold bachelor degree.

3.2 Reliability and validity measures

To attest the relationship between institutional governance and institutional performance, regression analysis was employed to analyze the survey results. As suggested by Hair, Black, Babin, Anderson, & Tatham (2010), the scores of Cronbach’s α value being more than 7.0 would be considered as an adequate degree of a questionnaire. In the current study, the scores range from .77 to .85 in Taiwan’s sample, and .73 to .85 in the other, which demonstrates a relatively high level of reliability.

In terms of validity, we utilized convergent validity method to examine the fitness of the constructs in this study. Standard factor loading (SFL), average variance extracted (AVE), and composite reliability (CR) were performed. The SFL of all constructs are more than 0.5; the value of AVE in all variables are relatively low except for contractual governance and organizational commitment in mainland China’s sample; the value of CRs ranges from 0.683 to 0.889. Moreover, discriminant validity was also employed to determine the validity of the constructs by comparing squared correlation between the constructs with AVE. The value of AVE is higher than the squared correlation for adequate discriminant validity. Following the recommendation of Hair et al. (2010), all above the criteria are properly met.

We further examine the issue of multicollinearity among constructs. In terms of AVE, the correlation under .80 suggests no multicollinearity in the data; whereas, multicollinearity would not be considered existing when the value of variance inflation factor (VIF) is below 10 (Grewal, Cote, & Baumgartner, 2004). Our analysis results confirm that multicollinearity was not an issue in the data.

3.3 Regression analysis results

This study aims to verify the association between institutional governance and institutional performance. For the first stage, we examined the effect of contractual governance on organizational commitment. The regression analysis was designed as the combination of four models, in which demographics are included as control variables. Among the four models, the first one is to explain the impact of control variables on organizational commitment; model two is set in a bid to understand the impact of contractual governance on the organizational commitment; relationship governance was added into the third model to understand its influence on organizational commitment; lastly, contractual governance and relationship governance were jointly included to understand their influences on organizational commitment. The results are presented below. Our test indicates that the sample of Taiwan proved a stronger explanation between constructs and variables than mainland China, in particular the effect of gender, education and the number of students on organizational commitment. Also, contractual governance and relationship governance positively affect organizational commitment. In mainland China's sample, however, only one of the control variables, job position, and contractual governance show significant effects on organizational commitment.

Table 1 The regression analysis of organizational commitment

	Dependent variable: Organizational commitment							
	Model 1		Model 2		Model 3		Model 4	
	TW	MC	TW	MC	TW	MC	TW	MC
Gender	-.106*	-.016	-.079	-.005	-.084†	-.020	-.070	-.009
Age	.073	.072	.073	.073	.055	.075	.059	.075
Education	-.236***	-.078	-.195***	-.074	-.219***	-.062	-.192***	-.061
Work experience	.053	-.020	.062	-.011	.041	-.019	.051	-.011
Service unit	-.029	.054	-.073	.048	-.032	.044	-.065	.040
Job position	-.006	.119†	.036	.119†	-.006	.121†	.026	.121
No. of students	.208**	-.020	.209**	-.016	.165**	-.030	.178**	-.025
Job promotion	.002	-.018	.010	-.035	.036	-.020	.033	-.036
CG			.316**	.110†			.240**	.100
RG					.300**	.086	.220**	.073
F-value	8.09**	0.909	12.33***	1.167	11.91***	1.026	13.49***	1.191
Adj-R ²	.152	.026	.244	.038	.237	.033	.283	.043
Max VIF	1.285	1.2	1.285	1.2	1.289	1.2	1.289	1.2

TW: Taiwan; MC: Mainland China; CG: Contractual Governance; RG: Relationship Governance

In the second exploration of relationship between institutional governance and institutional performance, the analysis was conducted to determine whether the control variables, contractual governance and relationship governance can yield positive results on job satisfaction. As shown in Table 2, there were only a few significant main effects found (gender and relationship governance) on job satisfaction in Taiwan. On contrary, job satisfaction was found to be significantly affected by contractual governance and relationship governance. Nonetheless, amid model 2 and model 3, the degree of job satisfaction appeared to be higher than mainland China's regardless of which type of governance is.

Table 2 The regression analysis of job satisfaction

	Dependent variable: Job satisfaction							
	Model 1		Model 2		Model 3		Model 4	
	TW	MC	TW	MC	TW	MC	TW	MC
Gender	-.131*	-.037	-.117*	-.023	-.113*	-.043	-.107†	-.029
Age	-.032	-.098	-.032	-.096	-.047	-.093	-.046	-.092
Education	-.055	-.081	-.034	-.076	-.041	-.056	-.031	-.054
Work experience	-.035	-.006	-.030	.006	-.044	-.005	-.041	.005
Service unit	.019	.012	-.004	.004	.016	-.004	.004	-.009
Job position	.025	.048	.047	.048	.025	.051	.037	.050
No. of students	-.011	-.067	-.010	-.061	-.046	-.082	-.042	-.075
Job promotion	-.075	.016	-.071	-.007	-.047	.013	-.048	-.007
CG			.163**	.145*			.089	.130*
RG					.246***	.135*		
F-value	0.307	0.506	1.961*	1.451	3.257***	1.364	3.159***	1.693†
Adj-R ²	0.030	0.026	0.054	0.046	0.087	0.044	0.094	0.059
Max VIF	1.285	1.280	1.285	1.281	1.289	1.294	1.28	1.297

TW: Taiwan; MC: Mainland China; CG: Contractual Governance; RG: Relationship Governance

Subsequent analysis was to test the association between organizational commitment and job satisfaction and job performance. Significant relationships between control variables and job performance were only limited to the number of students in Taiwan, and service unit in mainland China respectively. With

respect to main effects, positive relationships existed between organizational commitment and job satisfaction and job performance either in Taiwan or mainland China. The results are reported below (see Table 3).

Table 3 The regression analysis of job performance

	Dependent variable: Job performance							
	Model 1		Model 2		Model 3		Model 4	
	TW	M C	TW	MC	TW	MC	TW	MC
Gender	-.035	.029	.002	.034	.026	.047	.051	.050
Age	.057	-.032	.032	-.056	.072	.016	.050	-.007
Education	.059	-.063	.142*	-.037	.085	-.024	.150*	-.007
Work experience	-.016	.004	-.035	.011	.000	.007	-.016	.012
Service unit	.019	.112†	.029	.094	.010	.106*	.019	.093
Job position	-.057	.074	-.055	.034	-.069	.051	-.066	.021
No. of students	-.227**	-.050	-.300***	-.043	-.222***	-.017	-.281***	-.015
Job promotion	.030	.075	.029	.081	.064	.067	.061	.072
OC			.350***	.338***			.285**	.263**
JS					.464**	.489**	.427**	.445**
F-value	2.312*	1.056	6.409***	4.940***	12.342***	10.699***	15.159***	13.138***
Adj-R ²	0.032	0.002	0.133	0.113	0.244	0.239	0.309	0.304
Max VIF	1.285	1.280	1.291	1.280	1.286	1.284	1.293	1.284

TW: Taiwan; MC: mainland China; OC: Organizational Commitment; JS: Job Satisfaction

4. DISCUSSION

Overall, the examination of two types of governance linking transaction cost theory and relational capital theory to organizational commitment, job satisfaction and job performance revealed a general positivity in administrative and academic staff's responses. From our first analysis, the findings of Taiwan's sample indicate that either contractual or relationship governance has significant impacts on organizational commitment, meaning that HEIs in Taiwan intend to demonstrate a supportive organizational climate. In line with previous literature, the intense interaction between organization and employees will help facilitate successful collective action due to the content of the ties in their work-related network (Luthans, Norman, Avolio, & Avey, 2008).

From the perspective of contractual governance, the results show that this approach delivers a message of employment security by which employees can demonstrate more commitment toward the organization. As noted by previous scholarly work (Montes, Moreno, & Fernández, 2004), lacking job security makes the employees unintended to establish confidence in organization, leading less devoted work ethic to it. In comparison with the findings in Taiwan, the results from mainland China survey revealed that positive association between the two constructs and organizational commitment does not exist; however, both of them can significantly influence employees' job satisfaction. A possible explanation can be drawn that contractual governance, for mainland China employees in HEIs, is regarded as a high level of likelihood to obtain a permanent job. Therefore, holding a secure job will satisfy the employees with their work (Faeathe & Rauter, 2004).

As proven by several researches in the past (Fletcher & Williams, 1996; Meyer, Paunonen, Gellatly, Goffin, & Jackson, 1989), the results indicate that organizational commitment and job satisfaction can positively affect job performance in both Taiwan and mainland China. Our data suggest that the higher the degree of psychological connection between employees and organization enable them to be satisfied with the job, and further boosts up their effectiveness in their job performance. Therefore, as Mayer et al. (1989) put, nurturing affective commitment in employees is much recommended since the intrinsically value possessed by the employees can be translated into individual effectiveness, or even a firm's success. Testa (2001) also suggested that despite the direct effect between job satisfaction and job performance, it is undeniably that satisfaction is still deemed as a powerful tool to enhance job performance.

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