ISSN 1533-9211

DOI 10.5281/zenodo.7259798

INFLUENCES OF CULTURE AND STRUCTURE ON EFFICACY: ROLE OF STRUCTURE

QUANG LINH HUYNH

Ho Chi Minh City University of Food Industry, Vietnam. Email: linhhq@hufi.edu.vn

ABSTRACT

The influences of corporate culture and corporate structure on firm efficacy have been investigated in prior studies. However, none of them have examined the causal linkages in a combined research model. Especially, they have also not explored the mediation of corporate structure in effect of corporate culture on firm efficacy. The current research applied regression analyses to study the causal associations in a suggested combined model. It also scrutinized how corporate structure interferes between corporate culture and firm efficacy. The empirical results reveal corporate culture makes statistically significant effects on corporate structure as well as on firm efficacy; while corporate structure is also evidenced to be an important determinant of firm efficacy. The effect of corporate culture on firm efficacy is significantly interceded by corporate structures. The current work offers some implications on how executives should accept suitable corporate structures facing diverse kinds of corporate culture, so that they can obtain better firm efficacy.

Keywords: Culture, Structure, Efficacy

INTRODUCTION

Corporate culture has been documented as a vital cause of business value. Nevertheless, there are numerous unrequited research questions; for example: how does it define and measure corporate culture, what is the relationship between the items that establish corporate culture and firm efficacy (Graham et al., 2022). Corporate culture is a workplace environment which is formed from communication, cooperation and interplay among workers in a firm. The interplay and behaviors of staffs can contribute to an exclusive cultural environment in a firm. The active opinion recommends that corporate culture puts a vital role in allowing a firm to face its business environment. Corporate culture is connected with corporate structures which a firm adopts, can affect the way a firm controls their knowledge to attain firm efficacy.

The effects of corporate culture on firm efficacy have been empirically investigated in previous research (Berson et al., 2008). Nevertheless, the influence of corporate culture on corporate structure has been barely discovered. To the best of the author's knowledge, just a little research including Lincoln et al. (1978) inspected the effect of corporate culture on corporate structures. Nevertheless, they measured the items of corporate culture on the Japanese and American workers. The dimensions of corporate culture are grounded on national characteristics, whereas the characteristics refer to organizational attributes (Sivadas & Dwyer, 2000; Jaw & Liu, 2003). The current research accepts that definition of corporate culture to consider the causal link between corporate culture and corporate structure. In concurrence with Baron and Kenny (1986) on mediation, it can contend that corporate structure intervenes in the bond of corporate culture with firm efficacy. How corporate culture is related to other variables is complicated in which corporate culture affects several other variables such as corporate structure and firm

ISSN 1533-9211

DOI 10.5281/zenodo.7259798

efficacy. The link can be interfered by corporate structures. Preceding research has some limitations. When scrutinizing how corporate culture impacts corporate structure and firm efficacy, they only discovered the causal associations of corporate culture with other variables; nevertheless, have not empirically explored the mediation of corporate structures in the model. The current research applied the analyses of regression to inspect the casual associations among corporate culture, corporate structure, and firm efficacy. It employed mediating procedures to investigate how corporate structure intervenes and determines the casual connection.

The existing paper seems to be the first to employ mediating procedures to scrutinize the mediation of corporate structures on the connection between corporate culture and firm efficacy. The current work empirically conducted gathering the research data in Vietnam as an emergent country whose business setting is significantly unpredictable. The findings on the mediating impact of corporate structures and the causal relations between corporate culture and others in the research model can offer investigators and executives with a better understanding of complex effects of corporate culture on corporate structure, and firm efficacy as well as the causality of firm efficacy. Mainly, it can help executives in emergent economies make better decisions on corporate culture and structure in business, leading to better firm efficacy. The remainder of the current work is planned as below. The following part is a literature review to advance hypotheses. Research method is presented in a subsequent part, followed by a part of results. The last part offers conclusions.

LITERATURE REVIEW

According to Singh et al. (2013), firm efficacy is exaggerated by corporate structures and corporate culture. Grounded on prior research (Bamberger, 1983; Kotey & Meredith, 1997; Rockeach, 1973; Cooper, 1998), a theoretical framework summarizes the way where the independent factors could influence firm efficacy. It emphasizes the influence of these explanatory factors on firm efficacy, where the most important factors are corporate structure and corporate culture. The findings indicate the linkages among corporate structure, corporate culture and firm efficacy, which are regarded important factors to create a successful firm. Corporate structure is a vital factor that both supports and limits innovativeness (Subramanian & Nilakanta, 1996). Corporate structures put a vigorous role in business, because it offers a powerful system of work as well as communication. Chen and Huang (2007) referred to corporate structure as decentralization, mutual adjustment, and integration. Decentralization is the extent to that a firm tends to grant authority. Mutual adjustment is the degree to that the guidelines and events are formalized. Integration is the extent to that workers and task assignments are incorporated in dealing with work.

Hansen and Wernerfelt (1989) conduct research on the relative importance of economic and organizational factors in explaining firm performance. Their findings reveal that organizational factors, including corporate structure cause more variation in firm efficacy than economic factors. In addition, a study conducted by Cummins et al. (2003) indicated that corporate structure has an effect on organizational efficiency. Likewise, in a study on "corporate structure and performance", Meijaard et al. (2005) concluded that corporate structure is related to firm

ISSN 1533-9211

DOI 10.5281/zenodo.7259798

efficacy. They suggest that corporate structure should be taken into account in developing models of firm efficacy. A significant factor in improving firm efficacy, which is considered by numerous researchers as vital, is corporate culture (Loewe & Dominiquini, 2006; Tellis, et al., 2009). Scholars approved its positive importance in developing innovation (Aboramadan, 2020; Lau & Ngo, 2004).

Corporate culture refers to an innovative cooperative climate (Jaw & Liu 2003), trust, communication, and coordination among employees (Sivadas & Dwyer 2000). The impact of corporate culture on firm efficacy has been considered. They emphasized a "strong" culture can result in better performance; for instance, superior efficiency and success. A "strong culture" could yield much more harmony in workers. Berson et al. (2008) highlighted a positive influence of corporate culture on firm efficacy. Similarly, Hajipour et al. (2011), in their study of the associations amongst 'industry structure, strategy kind, firm characteristics, and firm efficacy', established firm efficacy is explained by corporate culture.

Lincoln et al. (1978) tried to investigate an effect of culture on corporate structure and sustained that corporate culture is connected with elements of corporate structure. They indicated specialization is determined by corporate culture, and asserted the relations of centralization, formalization, and differentiation to corporate culture. Some items of corporate culture are appropriate to some firms with various corporate structures. For instance, the cultures of communication and coordination can result in corporate structures of adjustment or integration. Overall, it can come to the following hypotheses.

H1: Corporate structure can affect firm efficacy.

H2: Corporate culture could determine firm efficacy.

H3: Corporate culture likely influences corporate structure.

Following Baron and Kenny (1986), Li (2011) argued: if (1) an explanatory factor significantly affects an explained factor and a third factor, and (2) concurrently the third factor is significantly linked to the explained factor; then the third factor intervene between the explanatory factor and the explained factor. Furthermore, Mia (1988) contended if a connection between two factors exists partially via a third factor, then the third factor can play a mediating role between the two factors. As above-mentioned discussed, H1 and H2 recommend corporate structure and corporate culture determine firm efficacy, while H3 proposes corporate culture affects corporate structure. The abovementioned arguments in occurrence with prior scholars (Baron & Kenny, 1986; Li, 2011; Mia, 1988) can lead to the hypothesis H4 where corporate structure is a mediator to convey the influence of corporate culture into firm efficacy.

H4: Corporate structure mediates the effect of corporate culture on firm efficacy.

RESEARCH METHOD

The sample for the current paper encompasses publicly listed firms on the main Stock Exchanges in Vietnam. For each of them, an executive involved in culture and structure was contacted to undertake a questionnaire. Of the 500 questionnaires delivered to the respondents.

The Seybold Report
ISSN 1533-9211
DOI 10.5281/zenodo.7259798

Only 381 useful replies with satisfactorily needed information for analyses were obtained. Corporate structure (COS) includes three kinds: decentralization (COS1), mutual adjustment (COS2), and integration (COS3). A five-point scale was utilized to evaluate corporate structure. (1) Decentralization from 1. Centralizing decision-making power to 5. Decentralizing decision-making power. (2) Mutual adjustment from 1. Formalized to 5. In formalized. (3) Integration from 1.no integration to 5. Integration; adapted from Chen and Huang (2007).

Corporate culture (COC) is made up of innovative climate (COC1), cooperative climate (COC2), trust (COC3), communication (COC4), and coordination (COC5). A five-point scale ranging from 1. Never occurred to 5. Always occurred was employed to compute corporate culture; adapted from previous research (Jaw & Liu, 2003; Sivadas & Dwyer, 2000). Firm efficacy (FIE) is judged with a five-point scale from no growth, a little growth, average growth, and fast growth to very fast growth. A comparison to industry-average was undertaken to measure the following elements: (1) returns on asset- FIE1, (2) returns on equity- FIE2, (3) innovativeness- FIE3, (4) quality in products or services- FIE4, and (5) customer satisfaction-FIE5, adapted from Huynh and Yaling (2013).

Before checking the causal relations in the research model, reliability analyses were employed to examine the properties of constructs and their own items (Cronbach, 1951). It delivers information related to the links among individual elements within the construct. If the bond is strong, the construct will produce consistent results and therefore is dependable. To investigate the elements of the constructs, the analysis of factors was undertaken to judge the construct validity (Hair et al. 2012). To examine causal relationships, regression analyses were undertaken. Then, the mediating role of corporate structure between corporate culture and firm efficacy was analyzed by employing mediating procedures.

RESULTS

Reliability analyses are offered in Table1. The figures are established to elucidate how it recognize reliability of 3 constructs (Corporate culture – COC; Corporate structure – COS; and Firm efficacy –FIE) that are adopted in the research model.

Table 1: Reliability analyses

Scales	Smallest total correlations	Cronbach's α if an element is removed	Cronbach's α	No. of elements
Corporate structure (COS)	0.742	0.831	0.872	3
Corporate culture (COC)	0.751	0.826	0.868	5
Firm efficacy (FIE)	0.719	0.858	0.895	5

Regarding the constructs of corporate culture, and firm efficacy, each of them includes five items, while corporate structure is composed of three items. The Cronbach's αs of the constructs all exceed the 0.7 value as a satisfactory threshold suggested by Cronbach (1951).

All of the Cronbach's αs if element is removed are below their own Cronbach's αs. In addition, all of the total correlations are greater than the 0.5 value as a satisfactory limit. Consequently, all of the 13 elements are consistent with their own constructs (3 constructs as COS, COC, and

ISSN 1533-9211

DOI 10.5281/zenodo.7259798

FIE) and are dependable for next analyses. The 13 elements were entered into the analysis of factors to check the validity of constructs.

Table 2: Factor Loadings

Item	Factor			Communalities
	1	2	3	
COS1	0.861			0.785
COS2	0.847			0.764
COS3	0.856			0.799
COC1			0.736	0.615
COC2			0.841	0.756
COC3			0.879	0.812
COC4			0.843	0.762
COC5			0.872	0.785
FIE1		0.869		0.782
FIE2		0.851		0.778
FIE3		0.861		0.801
FIE4		0.758		0.643
FIE5		0.813		0.762
KMO	0.829			

The results of factor analysis that suppress numbers less than the 0.3 value are exhibited in Table 2. The validity of constructs is the extent to that a set of measured elements really reflect their own hypothetical latent scale. To judge the validity of constructs, the validity of convergent and the validity of discriminant are investigated based on the 0.4 level of factor loadings, and the 0.3 value of cross-loadings (Cronbach, 1951). The validity of convergent refers to the extent to that the elements of a specific construct converge a high amount of variance in common, whereas the validity of discriminant is the degree to that a scale is truly different from others (Hair et al. 2012). Moreover, the KMO and Communalities should be larger than the 0.7 and 0.5 values, as the smallest limits suggested by Hair et al. (2012). The findings indicate that the factor loadings are all well over the 0.4 value. All of the cross-loadings exceed the 0.3 level with the KMO of 0.829. Additionally, all of the communalities exceed the 0.5 threshold. Henceforth, it can judiciously be sure all of the elements satisfy the validity and reliability of constructs; so it can retain all of these 13 elements for next stages.

Subsequently, regression analyses were employed to examine the casual relations among corporate culture, corporate structure, and firm efficacy. It also analyzes how corporate structure intervenes between corporate culture and firm efficacy. New composite constructs for each factor are calculated. The 13 elements generate three new composite factors- namely COS, COC and FIE- that represent “corporate culture”, “corporate structure”, and “firm efficacy”. The findings of regression analyses are revealed in Table 3 as a causal model of firm efficacy.

The Seybold Report
ISSN 1533-9211
DOI 10.5281/zenodo.7259798

Table 3: Regression Analyses

Dependent	Independent	Coefficients	S.E.	t	Pt	F	P_F	R2
FIE	C	0.848	0.175	4.846	< 1%	99.578	< 1%	0.571
	COS	0.198	0.062	3.194	< 1%			
	COC	0.155	0.048	3.229	< 1%			
COS	C	1.223	0.150	8.153	< 1%	81.672	< 1%	0.562
	COC	0.226	0.044	5.136	< 1%			

With regard to the research model, where firm efficacy functions as a dependent variable, the goodness of fit attains the 1% significance level. The independent variables explain 57.1% of variation in the dependent variable- firm efficacy (FIE). Both of the independent variables- namely corporate structure (COS) and corporate culture (COC) - statistically influence firm efficacy at the 1% significance level. While COS has a positive effect on firm efficacy (FIE) with the coefficients of 0.198; COC imposes a positive impact with the coefficient of 0.155. These results above are in statistical support for the hypotheses H1 and H2 that corporate structure and culture improve firm efficacy.

Regarding the research model examining the linkage between corporate structure and corporate culture, the independent variable (COC) explains 56.2% of variance in corporate structure at the 1% significance level. COC- corporate culture affects corporate structure with the 0.226 coefficient at the 1% significance level. The findings provide statistical evidence for the hypothesis H3 that corporate culture has an effect on corporate structure. Overall, the results of regression analyses recommend firm efficacy is determined by corporate structure and corporate culture which is in turn a vital determinant of corporate structure.

Corporate culture and corporate structure have statistically significant direct effects on firm efficacy at the 1% significance level. The direct correlations are 0.155 and 0.198 respectively, which indicates that corporate structure impacts on firm efficacy more profoundly than corporate culture. Besides the direct impacts, corporate culture still makes indirect influences on firm efficacy through corporate structure, where the total impact is a totality of the direct and indirect impacts. Accordingly, in concurrence with Baron and Kenny (1986), Li (2011) and Mia (1988), it can argue that corporate structure intercedes between corporate culture and firm efficacy.

The results also infer that a strong corporate culture, and a good corporate structure will bring about better performance for businesses. It could maintain a firm with a strong culture and a good structure more likely sustain competitive advantages over the opponents. Additionally, corporate culture will determine the kinds of structure a firm would adopt to suit its business.

The abovementioned findings did not deliver procedures to study the statistical significance of the mediating impact. The current work applied procedures stipulated by Sobel (1982) to investigate the significance for the mediating impact. The procedures scrutinize the statistical significance of the mediating indirect effect by investigating the null hypothesis that no

ISSN 1533-9211

DOI 10.5281/zenodo.7259798

difference between the total impact and the direct impact. The mediating impact of corporate structure on the association of corporate culture with firm efficacy is investigated with a set of equations: (1) FIE = a_1 + b_1*COC + c_1*COS; (2) COS = a_2 + b_2*COC.

Table 4: Mediating analyses

Mediator	Link	t	P_t
COS	COC and FIE	4.297	< 1%

The mediating findings are displayed in Table 4. The figures indicate the effect of corporate culture on firm efficacy is interceded by corporate structure at the 1% value of statistical significance. Therefore, the mediating hypothesis H4 is significantly supported, indicating that when corporate structure is included to determine firm efficacy, it can decline the direct effect of corporate culture on firm efficacy.

CONCLUSION

Earlier projects have analyzed the impact of corporate culture on corporate structure, and firm efficacy in separate models. Investigating the bond between corporate culture and corporate structure, they just used the percentage of workers by nationality as a proxy of corporate culture. The current work employed the five elements (as innovative climate- COC1, cooperative climate- COC2, trust- COC3, communication- COC4, and coordination- COC5) to form corporate culture. It applied regression analyses to explore the effects of corporate culture on corporate structure and firm efficacy in a joint research model. Additionally, it is the first research to explore how corporate structure mediates the bond between corporate culture and firm efficacy.

The outcomes reveal that corporate culture affects the kind of corporate structures. Firms with strong culture can achieve better firm efficacy. The types of corporate structure that a firm adopt can affect differently firm efficacy. The findings are reliable with previous research that discovered how corporate culture affects corporate structure, and firm efficacy. The findings also infer that corporate structure declines the direct link between corporate culture and firm efficacy. The research findings are expected to provide executives in emergent nations with better understand the multifaceted relations among corporate culture, corporate structure and firm efficacy. Hereafter, it can help them to make better decisions on applying the kinds of corporate culture and corporate structure; therefore, their firm could attain the best possible efficacy.

The Seybold Report
ISSN 1533-9211
DOI 10.5281/zenodo.7259798

References

[1] Aboramadan, M., Albashiti, B., Alharazin, H., & Zaidoune, S. (2020). Organizational culture, innovation and performance: a study from a non-western context. Journal of Management Development, 39(4), 437-451.

[2] Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology 51, 1173–1182.

[3] Bamberger, I. (1983). Value systems, strategies and the performance of small and medium-sized firms. European Small Business Journal, 1(4), 25–39

[1] Berson, Y., Oreg, S., & Dvir, T. (2008). CEO values, organizational culture and firm outcomes. Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 29(5), 615-633.

[4] Chen, C. J., & Huang, J. W. (2007). How organizational climate and structure affect knowledge management: The social interaction perspective. International Journal of Information Management 27(1), 104–118.

[5] Cooper, A. C. (1998). Findings on predictors of performance from a large-scale research program, Small Enterprise Research. The Journal of SEAANZ, 6(1), 3–9.

[6] Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16(3), 297-334.

[7] Cummins, J. D., Rubio-Misas, M., & Zi, H. (2003). The Effect of Corporate structure on Efficiency: Evidence from the Spanish Insurance Industry. The Wharton Financial Institutions Centre, Spain.

[8] Graham, J. R., Grennan, J., Harvey, C. R., & Rajgopal, S. (2022). Corporate culture: Evidence from the field. Journal of Financial Economics, 146(2), 552-593.

[9] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2012). Multivariate Data Analysis. New Jersey: Prentice Hall, USA.

[10] Hajipour, B., Talari, M., & Shahin, A. (2011). An investigation of the relationships between industry structure, strategy type, organizational characteristics and firm efficacy: A case study of the food and chemical industries of Iran. African Journal of Business Management, 5(16), 7085-7098.

[11] Hansen, G. S., & Wernerfelt, B. (1989). Determinants of Firm Performance: The Relative Importance of Economic and Organizational Factors. Strategic Management Journal, 10(5), 399-411.

[12] Huynh, Q. L., & Yaling, L. (2013). Mediation of Computerized Accounting System (CAS) adoption on relationship between environmental uncertainty and organizational performance. Journal of Modern Accounting and Auditing, 9(6), 747-755.

[13] Jaw, B. S., & Liu, W. (2003). Promoting organizational learning and self-renewal in Taiwanese companies: The role of HRM. Human Resource Management, 42(3), 223–241.

[14] Kotey, B., & Meredith, G.G. (1997). Relationships among owner/manager personal values, business strategies, and enterprise performance. Journal of Small Business Management, 35(2), 37–64.

[15] Koufaris, M., & Hampton-sosa, W. (2002). Customer Trust Online: Examining the Role of the Experience with the Web Site. Information Systems Journal, 5(1), 1-22.

[16] Lau, C. M., & Ngo, H. Y. (2004). The HR system, organizational culture, and product innovation. International business review, 13(6), 685-703.

[17] Lincoln, J. R., Olson, J., & Hanada, M. (1978). Cultural Effects on Corporate structure: The Case of Japanese Firms in the United States. American Sociological Review, 43(6), 829-847.

ISSN 1533-9211

DOI 10.5281/zenodo.7259798

[18] Loewe, P., & Dominiquini, J. (2006). Overcoming the barriers to effective innovation. Strategy and Leadership, 34(1), 24-31.

[19] Meijaard, J., Brand, M. J., & Mosselman, M. (2005). Organizational structure and performance in Dutch small firms. Small Business Economics, 25(1), 83-96.

[20] Mia, L. (1988). Managerial attitude, motivation and the effectiveness of budget participation. Accounting, Organizations and Society, 13(5), 46 5-475.

[21] Rockeach, M. (1973). The Nature of Human Values, the Free Press, New York, USA.

[22] Schmidt, J. (2002). Making mergers work: The strategic importance of people, 3 -21. Alexandria. VA: SHRM Foundation and Towers, Perrin, Foster & Crosby Inc.

[23] Singh, S., Pathak, R. D., Shee, H., Kazmi, A., & Parker, D. (2013). Interplay between entrepreneurial characteristics, organizational structure, corporate culture and SME performance: empirical results from Fiji Islands. International Journal of Entrepreneurship and Small Business, 18(2), 229-246.

[24] Sivadas, E., & Dwyer, F. R. (2000). An Examination of Organizational Factors Influencing New Product Success in Internal and Alliance based Processes. Journal of Marketing, 64(1), 31–50.

[25] Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. Sociological Methodology 13(1), 290–312.

[2] Li, S. D. (2011). Testing mediation using multiple regression and structural equation modeling analyses in secondary data. Evaluation review, 35(3), 240-268.

[3] Subramanian, A., & Nilakanta, S. (1996). Organizational innovativeness: Exploring the relationship between organizational determinants of innovation, types of innovations, and measures of organizational performance. Omega, 24(6), 631-647.

[26] Tellis, G. J., Prabhu, J. C., & Chandy, R. K. (2009). Radical innovation across nations: The preeminence of corporate culture. Journal of marketing, 73(1), 3-23.