Perceived Impact of Corporate Entrepreneurship on Operational Performance: Evidence from Municipal Organizations

Muhammad Faisal Sultan[1]
Muhammad Asim[2]
Sadia Shaikh[3]*

ABSTRACT

Corporate Entrepreneurship (CE) is the form of entrepreneurship which has been experienced by firms for almost the past five decades, but there is a lack of empirical studies on this contemporary concept relating to Pakistan. A few studies have been conducted on CE in private sector organizations however it pertains to a unique significance in the public sector domain which has its own importance in economy and growth. Previous research has also indicated a dearth of CE studies relating to public limited companies in eastern countries. Therefore, the major purpose of this study is to check the impact of Corporate Entrepreneurship in municipal organizations of Karachi, Pakistan. Besides, this study has also incorporated a moderating variable, Organizational Culture, in an attempt to devise a robust model relationship. Nevertheless, due to the limitations of data collection from government employees, especially from municipal corporations, the study has adopted the quota sampling technique and a sample of one hundred respondents was selected. The data was analyzed through SMART-PLS software and results highlighted that the changing organizational dynamics require Corporate Entrepreneurship to be adopted by municipal organizations and it has transpired as a dominant element for the growth and performance of firms.

JEL Classification: *M13, M14, L33*

Keywords: *Corporate Entrepreneurship (CE); Municipal Organizations; Public & Private Sector Organizations; SMART-PLS; Organization Culture.*

INTRODUCTION

Corporate Entrepreneurship (CE) is a contemporaneous premise which has been practiced by organizations for decades (Morris et al., 2010). It first appeared in a scholarly periodical in 1984 as "Intrapreneurship" introduced by one of the eminent management consultant Pinchot (Bouchard & Basso, 2011). The term continues its popularity in management science studies and has resulted in the creation of mass literature under the domain of corporate entrepreneurship, due to its importance and fame (Srivastava & Agarwal, 2010). This contemporary philosophy of management is designed to transform administration-oriented employees into intrapreneurs (Kraus & Kauranen, 2009).

Morris and Kuratko (2002), prescribed intrapreneurship as the entrepreneurial actions made by managers in any systematized organization. CE is supplemented with strategic agility, flexibility, and continuous creativity that not only transforms employee attitude towards work (Kraus & Kauranen, 2009), but also fosters entrepreneurial activities in association with company's vision (Abou-Moghli & Al-Abdallah, 2018). CE is also a form of a competitive tool by the virtue of which organizations survive in a competitive environment. Hence it is endorsed as a

1- KASBIT, Karachi, Pakistan.
2- University of Karachi, Pakistan.
3- Benazir School of Business, Karachi, Pakistan.
*Corresponding author email: sadiakhurram@live.com

contemporary competitive strategy through which companies have better opportunities to innovate their products, services, processes and formulate new sub-ventures within the company (Bavil, 2017). CE has been rigorously researched by several authors such as Bavil (2017); Bouchard and Basso (2011); Lumpkin and Dess (1996); Sebora and Theerapatvong (2009); Umrani et al. (2015); Umrani, et al. (2018); Venter and Urban (2008); and others. Although most of the studies on corporate entrepreneurship tried to answer the difference between intrapreneur and entrepreneur, highlighting major obstacles in implementing entrepreneurship in large organizations, or how intrapreneurship intent may become successful? (Bouchard & Basso, 2011); and to investigate the impact of corporate entrepreneurship on the organization's performance and sustainability (Karacaoglu, et al., 2013). The theme of this study has encircled two major theories associated with corporate entrepreneurship, RBV theory and contingency theory. RBV emphasizes that internal capacities in terms of organizational capabilities and resources are the major source behind the competitive advantage (Barney, 2001). Thus, differentiated resources are the main reason behind the competitive edge and also forms the base of RBV Theory. Thus, the theory is fruitful to underline those factors which are critical in influencing the performance of the firm (Ab Rahman & Ramli, 2014). Umrani, et al (2018) also used the reference of Resource-Based Theory for discussing corporate entrepreneurship with reference to Pakistan.

According to Makadok (2011), RBV is still a major theory which explains the role of resources in creating sustainable competitive advantage. This looks valid as an organization that uses its human resources, as well as information and processes, to generate quality and innovative products (Amit & Schoemaker, 1993). Therefore, Umrani et al. (2018) indicated that CE is a process which is associated with human resources which are mainly responsible for the enhancement in the company's performance. Similarly, their study also used contingency theory to emphasize that the relationship between variables cannot be gauged properly without the inclusion of the moderating variable.

Problem Statement

It is a common belief that entrepreneurship produces a favorable impact on company's performance (Covin & Slevin, 1991), but Kolaković, Sisek, and Milovanović (2008) indicated that some studies failed to relate corporate entrepreneurship with firm's performance. Similarly, one of the initial studies on the topic highlighted that poor firm performance might be a result of poor entrepreneurial strategy (Hart, 1992).

Although there is a lack of evidence for the relationship between entrepreneurship and company's performance (Zahra, Jennings & Kuratko, 1999), and most of the studies on CE are based on the western scenario. In fact, recent research work is still rising concerns towards quantitative work in the domain of corporate entrepreneurship (Shin & Cho, 2020), similarly there is also a demand of research work on CE from the western side e.g., Entebang (2010); Entebang Harrison and Run (2010a) requirement became more vivid for large corporations as some of the studies indicated corporate culture might become major hindrance for CE in large corporations (Shin & Cho, 2020). Hence, it is valid to conduct studies on the effect of corporate entrepreneurship on firms concerning the eastern part of the world (Kuratko, Hronby & Covin, 2014). This point became more important when very few studies including Umrani et al (2015); and Umrani et al (2018) were found to be the only contributors on the subject in the context of Pakistan. Moreover, Kuratko, et al., (2014) suggested the use of moderating variables to provide a massive inventory of variables which might foster corporate entrepre-

neurship research. Thus, as there are insufficient studies on CE in public sector organizations the major purpose of this study is to gauge the impact of CE on the performance of public sector firms. It has been evidenced that public organizations all over the globe lack implementation of entrepreneurial orientation (Banda & Kazonga, 2018)., although they play a major role in contributing to the national economic and social structure (Entebang et al., 2010b).

Theoretical Framework

Corporate Entrepreneurship is the hybrid of innovation, risk-taking and proactiveness (Miller, 1983). Although a recent study indicated that corporate entrepreneurship includes new product development, new business venturing, competitive aggressiveness, self-renewal, and strategic renewal (Banda & Kazonga, 2018). Diefenbach (2011), stressed that variables of CE in the public and private sector coincide with each other. This statement is found to be valid as the studies e.g., Astrini et al (2020) Banda and Kazonga (2018) and Diefenbach (2011), used innovation, risk-taking and proactiveness to gauge corporate entrepreneurship in their studies. Additionally, Umrani et al. (2018) marked organizational culture as one of the major moderating variables between corporate entrepreneurship and business performance. This consideration became more crucial when other studies emphasized on negative role of large bureaucratic structure in the process of CE in large scale firms (Shin & Cho, 2020). Therefore, organizational culture has been used as a moderating variable in this study as without moderating variables the research investigation may not gauge the real relationship (Umrani et al. 2018). Prior studies utilizing the primary data deliberated to determine the factors observed by managers in an organization (Abou-Moghli & Al-Abdallah, 2018; Umrani et al., 2018), focused on determining operational performance (Abou-Moghli & Al-Abdallah, 2018), and customer satisfaction & profitability in comparison to rival (Umrani et al., 2015).

However, due to a lack of studies on corporate entrepreneurship from public sector institutions of Pakistan, this study only concentrates on one dependent variable, perceived operational performance (POP).

Significance & Scope

The study fills the gap in the literature as there are inadequate studies conducted on Corporate Entrepreneurship in Pakistan. Only a few studies including Ahmed, Sabir, Sohail, Mumtaz (2011), and Umrani et al. (2018) have researched the subject. This deficiency is more dominant in the context of the public sector where there is a need to formulate more workable research models. In contrast, the city government is treated as one of the pillars of managing democracy in the country. Hence research based on those organizations which are working under city government might provide more useful outcomes for the society and economy (Entebang et al., 2010b). Thus, this study marks a pervasive issue and emphasizes not only towards the betterment of municipal organizations of Karachi but also for the intrapreneurs working in state-owned companies all over the country. This study, therefore, perhaps be treated as the basis for the generation of future research models and foundations to highlight the corporate entrepreneurship within public sector organizations.

LITERATURE REVIEW

The need for corporate entrepreneurship is essential in the public sector as it is in private sector organizations (Banda & Kazonga, 2018). The managers in public sector organizations need to acquire a set of skills to deal with complex problems and unique issues pertaining to public

sector organizations and help these organizations grow in a competitive environment (Banda & Kazonga, 2018). The literature below highlights the three basic components of corporate entrepreneurship as accentuated by prior researchers.

Innovation

There is a significant relationship between innovation and corporate entrepreneurship (Arunga, 2017). The term innovation is associated with the search for new, exceptional, and better solutions for complex problems (Diefenbach, 2011). Although one of the initial studies indicated innovation as a combination of launching new products, finding new markets, the use of new methods of production, the use of new means for raw material and devising monopoly. It has also been revealed by Thornhill (2006), that firms which are more focused towards innovation acquire better performance outcomes in comparison to the others in the competition. Therefore, an organization may implement innovation by applying new organizational structures, designing new services, and optimizing organizational work process (Currie, Humphreys, Ucbasaran & McManus, 2008). Thus, innovation is the characteristic which may lead to competitive edge (Ahmed et al., 2011), & concern towards this might be measured through investment in R&D and introducing new products (Astrini et al., 2020). However, in public sector, innovation is majorly concerned with designing and implementation of new processes, rather than other components (Diefenbach, 2011). Hence, the hypotheses derived from the above literature on relationship between innovation and CE and innovation and POP is as follows:

H1A: There is a relationship between innovation and corporate entrepreneurship in municipal organizations in Karachi.

H2A: There is a relationship between innovation and perceived operational performance of municipal organizations in Karachi.

Proactiveness

The literature on corporate entrepreneurship firmly substantiates the relationship of proactivity with the firm's performance. Lumpkin and Dess (1996), defined proactiveness as the ability of the firm to take first-mover advantage over its competitors, through analyzing the future requirements and demands of the marketplace. Lately, Venkatraman (1989), stressed that proactiveness includes the launching of new offerings proactively and eliminating those processes which are facing a decline in the organization's life cycle. Proactiveness is part of an organizational plan where a firm seeks new opportunities which are not part of traditional organizational plan. Thus, the actual purpose of inducing proactiveness in operations is to be a market leader (Wiklund & Shepherd, 2005). Moreover, proactiveness also aids firm through competitive advantage and foster pressure on others to respond to the first mover initiative created by the firm (Astrini et al., 2020). Thus, the hypothesis relationship proactiveness and CE and POP, are derived as follows:

H3A: There is a relationship between proactiveness and corporate entrepreneurship in municipal organizations in Karachi.

H4A: There is a relationship between proactiveness and perceived operational performance of municipal organizations in Karachi.

Risk-Taking

Risk-Taking is the allocation of resources to those projects, which are associated with a higher risk of failure (Miller & Friesen, 1978). This can also be defined as the transfer of resources to projects of high uncertainty (Karacaoglu et al, 2013). Kolaković, et al., (2008) also highlighted that risk taking has a significant association with corporate entrepreneurship which might be observed repeatedly while examining the literature on corporate entrepreneurship (Ketchen & Short, 2012).In actuality this makes the firm to be involved in bold actions rather than cautious actions (Ketchen & Short, 2012), and became an integral part of corporate entrepreneurship as the business environment is dynamic and unstable and companies have to take risk in order to sustain and to retain their market share (Astrini, 2020). Although the study of Morris and Kuratko (2002) indicated that corporate entrepreneurship in the public sector significantly lacks risk taking in comparison to innovation and proactiveness. Currie et al. (2008), explain this more explicitly that the managers in the public sector are reluctant in focusing on risk-taking as there is lack of rewards, lack of tolerance and lack of identification of risk-aversion culture. Thus, the firm must be risk-oriented to take a competitive edge over its rival needs to be risk oriented (Ahmed et al., 2011). Thus the hypotheses developed on the relationship between risk-taking and corporate entrepreneurship and POP are provided below:

H5A: There is a relationship between risk-taking and corporate entrepreneurship in municipal organizations in Karachi.

H6A: There is a relationship between risk-taking and perceived operational performance of municipal organizations in Karachi.

Organizational Culture

There is a livable relationship between Organizational Culture and Organization effectiveness. The Resource-Based Theory (RBV) of the organization asserts that organizational culture is a unique resource of a company and is incredibly useful in devising conducive environment which promotes corporate entrepreneurship (Abou-Moghli & Al-Abdallah, 2018). Similarly, organizational culture can influence characteristics of entrepreneurship as well as organizational performance (Karinda & Maski, 2016). Especially for the large sized firms the organizational culture might be a more potential area of concern as prior studies indicated negative role of organizational culture in the process of CE for large sized firms (Shin & Cho, 2020). Hence the hypothesis on the moderating role of organizational culture in the relationship between corporate entrepreneurship and POP.

H7A: Organizational Culture moderates the relationship between corporate entrepreneurship and perceived operational performance of municipal organizations in Karachi.

RESEARCH METHODOLOGY
Research Design

Most of the studies on CE follow western perspective whereas there is a need for studies on the eastern perspective. As this study is conducted to enhance knowledge, hence its philosophy is epistemology (Crotty, 1998), and philosophical stance is post-positivism. This study has used the survey approach, based on primary data from managers, and follows the study by Umrani et al. (2018); and Abou-Moghli & Al-Abdallah (2018). Similarly, the research strategy used to carry the research survey, and the choice for data analysis is the mono method followed by a cross-sectional time horizon.

Sampling Design

The study was coupled with non-probability sampling following Umrani et al. (2018) and Ahmed et al (2020). The study responses are collected from employees working in the capacity of deputy-director or above level in the municipal corporation of Karachi and followed the quota sampling technique as suggested by Abou-Moghli and Al-Abdallah (2018). The use of middle level managers was legitimized through Ahmed et al (2020) and sample size of the study was limited to 100 respondents as a collection of data from employees of the municipal organization was difficult and the employees were also reluctant to provide their opinion. However, 150 questionnaires were circulated initially out of which 100 were found to be filled accurately.

Research Instrument

This study uses a closed-ended questionnaire to support the cause of quantitative study on corporate entrepreneurship. Although the elements used in the study are not a single source in order to device better instrument for data collection. This is coherent with Rauch, Wiklund, Frese, and Lumpkin (2005), that difference in methodology and data collection technique might result in a change in results, and when there is a need of conducting a study on eastern perspectives than making questionnaire through the mixing of research instruments is a must. The variables on innovation, proactiveness and risk-taking were taken from Astrini et al (2020) and Covin and Slevin (1986) while moderating variable (OC) was incorporated from Umrani et al (2018). However to make study more emphatic criterion from Egungwu and Egunwu (2018); Moige Mukulu and Orwa (2016); Karacaoglu et al (2013); Umrani et al (2015); and Minafam (2017) were also incorporated.

Statistical Testing

Structural equation modeling (SEM) is one of the thorough methods to analyze the causal relationship between observed and latent variables. SEM is a hybrid of multiple regression analysis & confirmatory factor analysis, which is helpful in an exhaustive analysis of newly generated research models (Karacaoglu et al., 2013), especially when the model is used to check multiple relationships concurrently (Hair, Black, Babin & Anderson, 2006). Moreover, descriptive statistics including Cronbach's Alpha (α) and Factor loadings were conducted to validate the variables and check their reliability. For this study formative model has been used to check the relationship between variables of interest. Therefore, explanation regarding relationship must start with two forms of models i.e. measurement model and structural model. The measurement model evaluates constructs and items relationship, whereas the structural model relates variables with the latent variables.

The descriptive statistics are highlighted through Predictive Accuracy & Quality Criteria, Table 1 & 2, Composite Reliability, Table 3, Fornell & Larcker Citation, Table 4 & 5, while inferential statics are highlighted by (Figure 1 & 2 and Table 6).

Table 1.
Predictive Accuracy (Quality Criteria)

	R Square	R Square Adjusted
Corporate Entrepreneurship	1.000	1.000
Firms Operational Performance	0.527	0.498

Table 1 indicates that predictive accuracy (Quality Criteria), and the method of interpretation of R^2 is similar as of multiple regression and used to highlight variance caused by impendent variable (Andreev et al., 2009). Although in the case of second order constructs it is preferred to use a two-stage approach (Lowry & Gaskin, 2014). However, to examine the size of the impact created by independent variables, it is also suggested by Hair et al (2006); Hair, Ringle, and Sarstedt (2011); and Hair et al. (2012) to check values of f2, correspondingly highlighted by Cohen (1988). Moreover, it is also recommended that for second order (formative models) R^2 must be calculated twice, i.e. first with endogenous variable and second without endogenous variable. (Götz, Liehr-Gobbers & Krafft, 2010). Hence, the value of 1.000 for corporate entrepreneurship must be neglected as this will again be tested and the value of firm's operational performance (i.e. 0.527) is treated as a moderate relationship of independent variables (Chin, 1988).

Table 2.

Impact of Exogenous Variables on Endogenous through f2

	CE	FOP
CE		0.467
FOP		
Innovation (Inn)	2,460.459	
OC* FOP		0.054
Org Culture (OC)		0.004
PA	1,885.483	
RT	2,225.491	

Table 2 indicates the impact of independent variables over the dependent variable through f2. These effects follow the same rules highlighted by Cohen (1988) for multiple regression that 0.02 is treated as small, 0.15 treated as medium and 0.35 or above treated as large impact (Henseler, Hubona & Ray, 2016). Therefore, it is legitimate to believe that all the effects on the latent variable (CE) are large and the effects of the dependent variable (FOP) are weak (for OC), moderate (for Moderation of OC with FOP) and strong for CE, although the purpose is not to gauge the impact of moderating variable (OC), hence the impact must not be treated as the point of concern.

Table 3.

Construct Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Corporate Entrepreneurship	0.897	0.901	0.914	0.542
Firms Operational Performance	0.802	0.800	0.863	0.558
Innovation	0.876	0.879	0.915	0.730
OC* FOP	1.000	1.000	1.000	1.000
Organizational Culture	0.813	0.835	0.877	0.641
Proactiveness	0.810	0.811	0.876	0.638
Risk Taking	0.832	0.857	0.891	0.677

Table 3 shows the convergent validity which shows the correlation of different indicators associated with the same construct. This hybrid includes factor loadings, composite reliability and average variance explained (AVE) (Ab Hamid, Sami & Sidek, 2017). Moreover, table 3

also highlights the values for Cronbach's Alpha (α) and Dillon-Goldstein's rho, as the predictors of reliability. These values are incorporated as (α) is a lower level predictor of reliability (Sijtsma, 2009) and as per Ravand and Baghaei (2016), rho is a better predictor of reliability and acceptable values for both the indicators are 0.70 or above. Similarly, AVE is also a better tool for analysis of reliability in comparison to rho and its acceptable value is 0.5 or above (Ab Hamid et al., 2017)

Table 4 indicates the discriminant validity and proves that the elements of one variable are not linked with any other variable (Fornell & Larcker, 1981). Hair Jr. et al., (2011), also supported that the cutoff values below 0.85 are appropriate enough for two different variables. This is verified by the table as there is no variable which is showing the value of 0.85 or above for any variable except constituents of CE. Thus, the table is sufficiently fulfilling the condition of Discriminant Validity; as the cutoff value of 0.85 does not apply to constituents of corporate entrepreneurship i.e. due to formative nature of the construct (Becker, Klein & Wetzels, 2012).

Table 4.
Discriminant Validity (Heterotrait-Monotrait (HTMT) Ratio)

	CE	FOP	Innovation	OC* FOP	OC	Proactiveness	Risk Taking
Corporate Entrepreneurship (CE)							
Firms Operational Performance (FOP)	0.712						
Innovation	0.945	0.560					
OC* FOP	0.106	0.236	0.060				
Organizational Culture (OC)	0.456	0.307	0.336	0.179			
Proactiveness	0.955	0.615	0.600	0.176	0.237		
Risk Taking	0.976	0.664	0.663	0.043	0.602	0.659	

Table 5.
Discriminant Validity (Fornell and Larcker Criterion)

	CE	FOP	Inn	OC* FOP	OC	PA	RT
CE	0.687						
FOP	0.612	0.747					
Inn	0.842	0.478	0.854				
OC* FOP	0.065	0.211	0.056	1.000			
OC	0.393	0.254	0.285	-0.161	0.801		
PA	0.803	0.500	0.507	0.158	0.190	0.799	
RT	0.850	0.548	0.566	-0.039	0.493	0.543	0.823

Table 5 indicates the Fornell and Larcker (1981) criterion which is the square root of each construct, and to proof discriminant validity between variables AVE value for each variable must be higher than diagonal values i.e. other variables (Hair Jr. et al., 2016). Though there are again some issues with the construct of CE, and this inappropriateness in values must be ignored in the case of discriminant validity as the second-order structural model is the main model for consideration (Becker et al., 2012; Sarstedt, 2016).

Table 6.
Path-Coefficients (Regression Weights and p-values)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
CE-> FOP	0.578	0.578	0.052	11.160	0.000
Innovation -> CE	0.423	0.423	0.019	22.454	0.000
OC* FOP	0.192	0.191	0.047	4.133	0.000
Organizational Culture -> FOP	0.056	0.061	0.052	1.071	0.284
Proactiveness -> CE	0.364	0.363	0.017	20.981	0.000
Risk Taking -> CE	0.413	0.414	0.019	22.171	0.000

Table 6 indicates the Path Coefficients for the first-order structural model to deduce the effect of different constructs associated with CE. The table also highlights the p-values in addition to t-statistics to improve the understanding regarding the impact of the variable on another. Higher values of t-statistics indicate a strong relationship between two constructs (Duarte & Amaro, 2018) while the minimum value of t-statistics for the rejection of null hypotheses is 1.97 (Hair et al., 2011). Moreover, for the data drawn from the sample, the p-value must be less than 0.05 to reject the null hypotheses (Kock & Hadaya, 2018). In the light of results and figure 1 and figure 2, it is appropriate enough to believe that all the variables associated with the construct of corporate entrepreneurship (CE) are significant for the municipal organizations of Karachi. Although the moderating variable of organizational culture is not producing a direct impact on CE, and when it is supplemented as a moderator with CE, then it is portraying an appropriate impact on the operational performance of the firm.
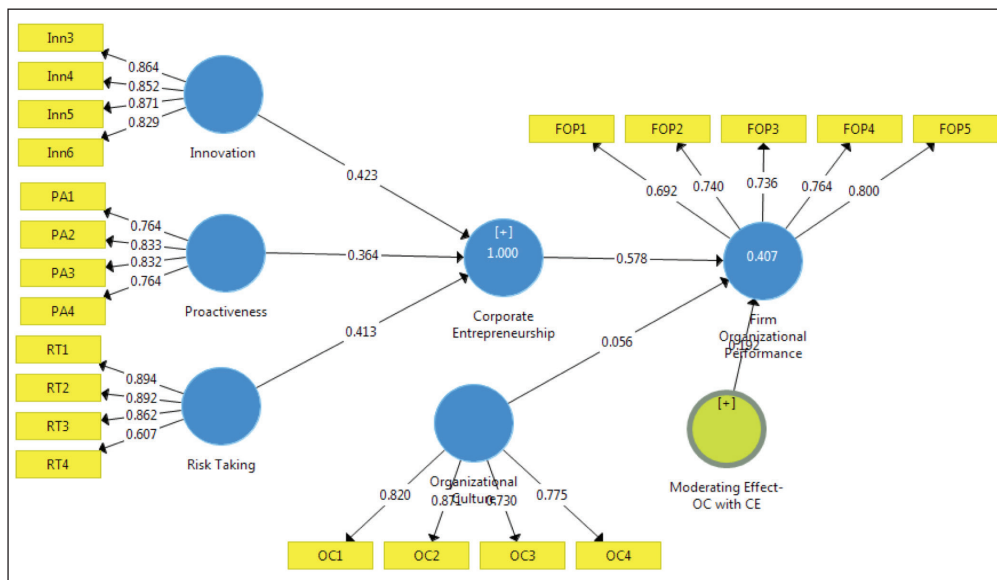

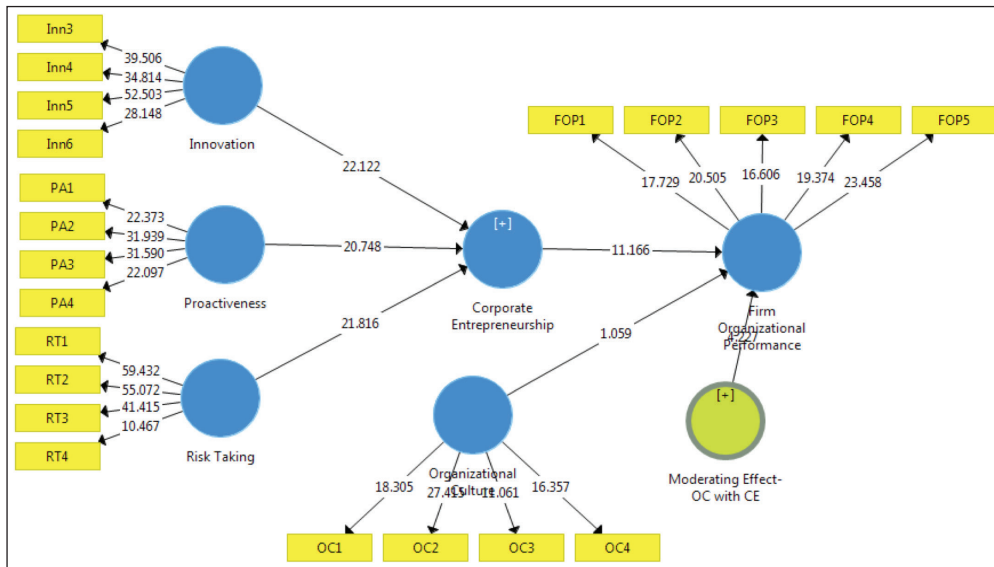**Figure 1.** *Path coefficient thorough regression weight*

Figure 2. *Impact of first-order model thorough t-statistics*

Moreover, Andreev et al (2009), highlighted that for an appropriate analysis of formative models one must test multi-collinearity (VIF) and indicator validity (i.e. path coefficient). However, one can also use test-retest as the additional tool for the analysis of formative models. Although this study is focused on the initial tow criterion mentioned by Andreev et al. (2009) besides the diagrams for path-coefficient and t-values.

Table 7.
Predictive Accuracy (Quality Criterion) for the formative model

	R Square	R Square Adjusted
FOP	0.587	0.561

Table 7 indicates that the value of R2 is indicating the moderate relationship of the independent variable (CE) with the (FOP), dependent variable (Chin, 1988).

Table 8.
Impact of Independent Variable through f2

F Square		
CE	FOP	Moderating Effect-OC
CE	0.603	
FOP		
Moderating Effect-OC	0.050	

Table 8 indicates the impact of the moderating effect of OC while the large impact of CE (previously endogenous variable) on the dependent variable FOP (Henseler et al., 2016). Therefore, neglecting the issue of organizational culture in the first stage of the structural model is found to be significant.

Table 9.
Discriminant Validity (HTMT)

	CE	FOP	Moderating Effect-OC
CE			
Firm Operational Performance	0.612		
Moderating Effect-Organizational Culture	0.065	0.211	

Table 9 proves that the entire range of constructs used in this study are distinguished from each other and there is no overlapping among the variables of interest. This is valid as there are no variables which yield 0.85 or above value when compared with the others. Therefore, it is sufficient to assume that elements (items) of one variable (construct) are not related to the other. Similar has been supported by as the cutoff value for any junction of variables is 0.85 (Hair Jr. et al., 2017)

Table 10.
Discriminant Validity - Fornell and Larcker (1981)

	CE	FOP	Moderating Effect-OC
CE	1.000		
F O P	0.612	1.000	
Moderating Effect-OC	0.065	0.211	1.000

Table 10 indicates the Fornell and Larcker (1981) for the second level structural model. It can be observed that AVE for each variable is producing higher value than the other values in the diagonal (Hair Jr et al., 2016).

This was not the case when this criterion was determined previously although the point motioned in the first-order structural model has been proved here that the issue was created due to overlapping of constructs associated with the endogenous variable.

Table 11.
VIF values

Inner VIF Values		
CE	**FOP**	**Moderating Effect-OC**
CE	1.004	
FOP		
Moderating Effect-OC	1.004	

Table 11 indicates the VIF values and these values are in the acceptable range as all the values are lesser than 2. Hence, in the light of the range provided by Hair, Hult, Ringle, and Sarstedt (2014), the values are effective enough to diminish the chances of multi-collinearity among the constructs.

Table 12.
Path-coefficients (Mean, STDEV, T-Values, P-Values)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
CE-> FO P	0.601	0.600	0.044	13.670	0.000
Moderating Effect-OC -> FO P	0.172	0.172	0.047	3.649	0.000

Table 12 indicates the Path Coefficient for the higher-order structural model in order and deduces the effect of the independent variable (CE) and moderating variable (OC) on the firm's operational performance. Through this table, it is validated that there is a significant impact of independent as well as the moderating variable. This has not only proved through p-values which are 0.000 but also from t-statistics as this is the criterion which is used to show the strength of relationship and relation always get strengthened with the increased value of t (Duarte & Amaro, 2018). Although this is a criterion for least acceptable values of t-statistics and probability value (p-value), and these are 1.97 or above for t-statistics (Hair Jr et al., 2016) and $p \leq 0.05$ (Kock & Hadaya, 2018). These relationships became clearer through figure 3 and figure 4.
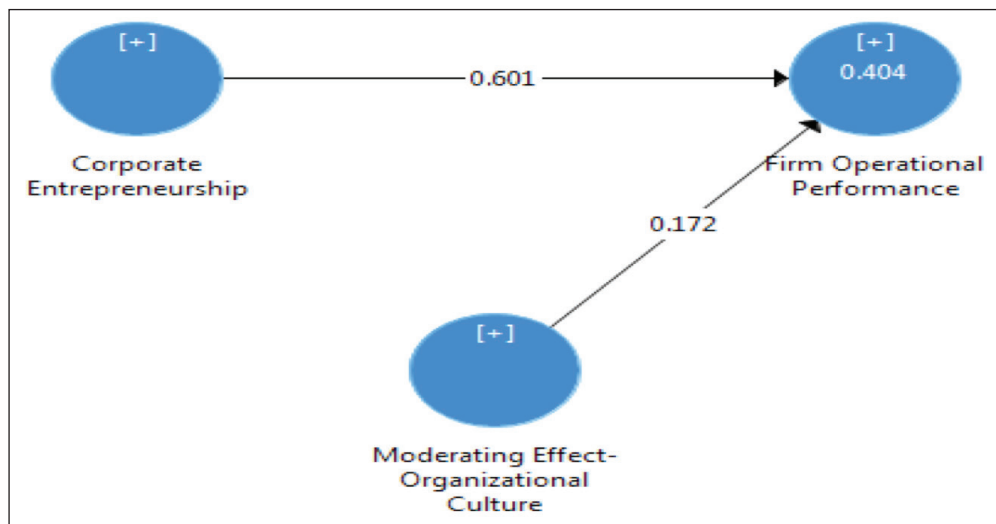

Figure 3. *Path coefficient of higher-order structural model thorough regression weight*
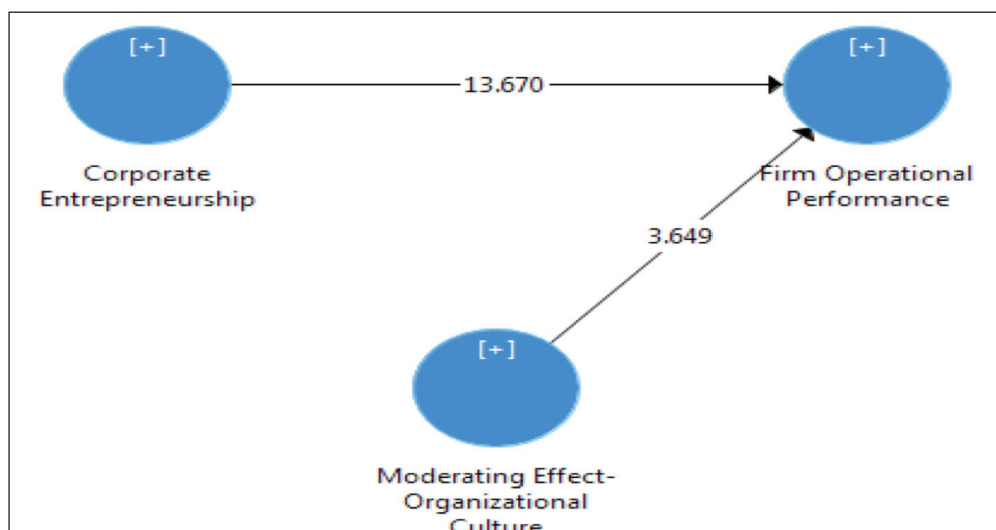

Figure 4. *Impact of the variable for higher-order structural model thorough regression weight*

CONCLUSION

Through the detailed statistical analysis, it has been determined that corporate entrepreneurship is perceived as a potent factor for improving the operational performance of municipal corporations. Moreover, all the compelling determinants for corporate entrepreneurship which were valid for public limited companies as suggested by previous studies by Banda & Kazonga (2018); Diefenbach (2011); Miller (1983), are also perceived as a strong contributor of corporate entrepreneurship in municipal corporations of Karachi. On the other hand, the organizational culture which is selected as a moderating variable is not affecting the organizational operational performance when checking through the first-order model. Although variable is found to be significant when tested as a moderator in the higher-order structural model. Though the direct impact of corporate entrepreneurship is more than the impact which has been created through the moderation of organizational culture & this might be the resultant of lacking of willingness to work in teams or due to support of top management.

One of the initial observations indicated that CE as the hybrid of innovation, risk-taking and proactiveness (Miller, 1983). Moreover, corporate entrepreneurship also includes variables such as new product development, new business venturing, competitive aggressiveness, self-renewal, and strategic renewal (Banda & Kazonga, 2018). On the other hand, Diefenbach (2011) mentioned that variables of corporate entrepreneurship in the public sector and private sector coincide with each other. This statement was found to be valid as studies like Diefenbach (2011); Banda and Kazonga (2018) incorporated innovation, risk taking and proactiveness to gauge corporate entrepreneurship.

RESEARCH IMPLICATIONS AND DISCUSSION

This study has been conducted to check the impact of corporate entrepreneurship in eastern countries. The study is specific to corporate entrepreneurship in municipal corporations of Karachi. This has been done to ensure the impact of CE on companies in eastern countries which are associated with the vital part of the economy related to the city government. Moreover, municipal corporations are also treated as those organizations which might reflect the benefits at a societal level (Mbecke, 2015).

As the city government is considered as one of the pillars of democracy in the country and corporate entrepreneurship in these organizations might foster their performance and thus bring benefits to the masses (Mbecke, 2015). Although OC as a moderating variable, was found to result in decreasing the impact created by corporate entrepreneurship (CE) on the operational performance of the firm. Moreover, this study confirms the findings of prior studies conducted on innovation, proactiveness and risk-taking as contributors to corporate entrepreneurship. Similarly, the study also validated the relationship endorsed by Fajra Dhany, and Trinanda (2018) in other Asian countries. Lastly, our study has also confirmed the findings by Ahmed et al. (2011); and Zhang (2012) and validated the relationship between risk orientation and corporate entrepreneurship.

AREA FOR FURTHER RESEARCH

On the basis of this study further research might be conducted by taking top management support as the moderating variable. Moreover, corporate entrepreneurship might also be assessed through an increase in variable inventory for CE in public sector companies. This

might effectively be done by adding diversification, institutional processes, international success, competitive aggressiveness, self-renewal, and strategic renewal. Similar studies can also be conducted on semi-government, private companies and on SMEs to increase the literature and level of understanding associated with the acceptance, availability, and impact of corporate entrepreneurship in Pakistan.

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