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UNVEILING THE DIRECT EFFECT OF CORPORATE ENTREPRENEURSHIP'S DIMENSIONS ON THE BUSINESS PERFORMANCE: A CASE OF BIG FIVE BANKS IN PAKISTAN

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Abstract:

The ground aim of this study was to investigate the relationship between individual factors of corporate entrepreneurship and business performance. This investigation was expected to bring in un-revealed results as the past literature does not provide any sufficient evidence for the proposed model. The study used survey method to collect data from the big five banks in Pakistan. For this reason a total of 256 responses were collected from the bank branch managers on the topic, using stratified random sampling technique. Through using PLS structural Equation Modeling, the study employed the use of SmartPLS 3.0 for executing tests pertaining to reliability and validity, this was ensured by evaluating measurement model. Next, the study assessed structure model, under which the research has revealed that out of the 5 mentioned dimensions of corporate entrepreneurship only three have resulted in a significant relationship with business performance; this was followed by assessment of r-squared values and predictive relevance of the model keeping in view the recommendations from the popular literature. Implications for further research and management professionals are mentioned in detail.

Key words: *Corporate Entrepreneurship, Entrepreneurship, Business Performance, Banks, Pakistan.*

1. Introduction

Banks serve as the most critical financial component for every thriving economy. In the views of Anderson and Trap (2003) a cultured and systematically

operating banking system is essential for the responsive economic development of a country. This is why Fase and Abma (2003) have mentioned that effective banking system is an important feature for the receptive operating for local businesses which help to boost the overall economy. Likewise, the role and contribution of banking sector can also be seen vital for the economic nurturing of Pakistan. The financial sector of Pakistan comprises of government owned, private, Islamic, Specialized Industrial, Micro-finance and other developmental institutions (Pakistan & Gulf Economist, 2013). Notably, out of this, there are 5 banks that occupy more than 57% of the market share out of the entire banking sector of the country and enjoy more than 80% of the market capitalization (The Express Tribune, 2011). Importantly, the report also mentions that these five banks have substantially parked their funds in government securities which are less risky, thus applying the risk-averse approach.

Dalrymple and Parsons, (1995) have argued that organizations are required to be more business process oriented in order to strategically survive. The authors further state that developing economies have started implementing strategies for robust economic reforms. According to Wonglimpiyarat (2005) tougher business environment and growing competition is pushing businesses to re-think on their existing strategies and introduce policies and practices that that could help them stay competitive. Roche (2015) has also suggested that due to the growing complexity and survival of businesses in the today`s era, the banking sector is also becoming complex. Viewing this statement in the context of banking sector in a developing country like Pakistan would be encouraging towards initiate procedures and practices that could potentially help banks to follow development and business process strategies of conventional businesses. The idea of corporate entrepreneurship has been receiving increasing prominence over the past years (Kuratko et al., 2015) as it encourages organizations to understand the importance of developing entrepreneurial mindset of employees and motivate them to engage in entrepreneurial practices within the organization. This in the similar vein can also be seen significant for the banking sector of Pakistan.

The present study has attempted to explore the direct impact of these five dimensions of corporate entrepreneurship on business performance in the banking sector of Pakistan. Precisely, the study has strived to answer questions concerning to the extent these five components of corporate entrepreneurship can influence the business performance of the banks in Pakistan.

Drawing upon the explanations of Lumpkin and Dess (1996) concerning to the individual imparity and contribution of each of the CE dimensions, this study contributes towards the existing body of knowledge on corporate entrepreneurship and business performance through empirically testing each of the CE components. Accordingly, the study has also strived to resolve questions pertaining to the inconsistent results on the said relationship. Finally, the study also empirically explains as to how corporate entrepreneurship's components are individually perceived by the middle managers and their influence on the banks` performance in Pakistan.

2. Literature Review

Corporate entrepreneurship is defined as the entrepreneurial behavior amongst the employees in an organization, large or small (Morris et al., 2011). Corporate entrepreneurship refers to the nurturing of new ideas and exploitation of opportunities within a business, directed to improve the organizational profitability and strengthening of competitive position in the market (Kuratko et al., 2015).

Corporate entrepreneurship is generally termed with five dimensions known as e management support, organizational boundaries, reward reinforcement, time availability and work discretion (Hornsby et al., (2002).

Notable empirical studies have underlined the significance of corporate entrepreneurship with regards to improvement in overall performance, acquisition of strategic benefits, and financial strengthening (Heavey & Simsek, 2013; Bierwerth et al., 2015; Phan et al., 2009). Importantly, the work of (Zahra et al., 2000; Zahra & Covin, 1995; Simsek & Heavey, 2011) has empirically indicated the significance of corporate entrepreneurship in boosting both, financial and non-financial performance. Moreover, recent work (Frese, Rousseau, & Wiklund, 2014; Heavey & Simsek, 2013; Zahra, 2012; Kuratko et al., 2011; Zahra, 2010), on corporate entrepreneurship have also reported the same.

Yet, despite of all this, literature also highlights empirical studies indicating mixed results with regards to the influence of corporate entrepreneurship and business performance (Davis, 2007; George & Marino, 2011). Therefore, studies have suggested further investigation on the relationship (Macaes et al., 2007). More importantly, past studies have also indicated and recommended for further investigation on this relationship in the banking sector (Al Swidi & Al Hosam, 2012; Mahmood & Wahid, 2012).

2.1 Measuring Corporate Entrepreneurship

Literature on corporate entrepreneurship outlines arguments over its measurement (Collin and Smith, 2003; Rauch et al., 2009). According to (Welter & Smallbone, 2011; Goodale et al., 2011) organizational context is important to consider to ensure appropriate selection of mechanism for corporate entrepreneurship. This may be the reason why Barrett et al., (2012) are asked for strategically assessing internal organizational factors to view their corporate entrepreneurship performance. Accordingly, Goodale et al., (2011) have underlined for researchers in this area that empirical results pertaining to corporate entrepreneurship are often varied for different organizations based on their individual environment, factors and processes. Based on this it can be said that appropriate design of corporate entrepreneurship should ideally be based on individual organizational setting. Notably, the five factors by Hornsby et al., (2002) which includes management support, organizational boundaries, rewards reinforcement, time availability and work discretion have been empirically concluded

as, the most promising in this regard (Kuratko et al.,, 2014; Hornsby et al., 1999; Tajeddini & Mueller, 2012).

Kuratko et al., (2014) have provided following definitions to each of the five factors of corporate entrepreneurship: ***Management Support*** the top management's support denotes to facilitation, and promotion of entrepreneurial activates and behaviors. The support refers the provision of resources-needed and psychological support-encouragement. It has direct positive relationship with the innovative outcomes of an organization and is key component to facilitate corporate entrepreneurship (Kuratko et al., 2014). ***Organizational boundaries*** refer to the employee perception that the organization is flexible enough and its boundaries are inducing, directing, and encouraging coordinated innovative behavior. These set boundaries ensure the effective use of resources that enable innovation (Kuratko et al., 2014). ***Rewards and reinforcement*** talks about the degree of perception that organization rewards entrepreneurial activity and success; by encouraging risk taking; For middle and first line mangers the 'reward and resource availability' are principal determinants (Kuratko et al., 2014). ***Time Availability*** perception that organization provides enough extra time for pursuing innovative ideas and outcomes (Kuratko et al., 2014). The organizations require to structure jobs in a way that individuals could have enough time to pursue innovation. The leaders should evaluate job load to ensure time availability so that employees could look for innovation (Kuratko et al., 2005). ***Work Discretion*** employee perception regarding work organization that it would tolerate failure, provide freedom to make decisions and delegate authority and responsibility to managers and workers at lower levels (Kuratko et al., 2014).

2.2 Hypothesis

History of entrepreneurship counterparts with the history of capitalism whereby entrepreneurs acted as the driving force for the economic build up and this continues till date. Organizational scientists believe that due to increasing market competitiveness, it is becoming crucial for organizations to act with an entrepreneurial mindset (Zhang, 2008; Zahra et al., 1999; Dess et al., 1999). Studies have also outlined that entrepreneurial activities in an organization can significantly enhance organizational well-being in terms of growth and learning (Shaw et al., 2005; Zampetakis & Moustakis, 2010).

Additionally, researchers have also underlined the need for encouraging entrepreneurial behaviors within organizations (Hurley & Hult, 1998; Hult & Ferrell, 1997). According to Stevenson and Grousbeck (1992) that through entrepreneurial orientation, organizations can identify competitively progressing opportunities, capitalize upon available resources, and devise strategies for responsive exploitation. Based on this, it can be implied that enterprises embracing entrepreneurial orientation can bring a sizeable improvement in their performance which, (Lumpkin & Dess, 1996; Covin & Slevin, 1991) have also pointed out towards. Studies have empirically argued that organizations.

Rutherford and Holt (2007) have stated that corporate entrepreneurship facilitates organization`s capacity of cultivating and utilizing innovative skills and abilities. Importantly, nurturing of individual employee attitudes and behaviors is also important along with management and formal structuring of the organization to promote corporate entrepreneurship (Heinonen & Tivonen, 2008).

Study exploring antecedents and consequences of corporate entrepreneurship (Wood et al., 2008) concluded that management support, work discretion, rewards and reinforcement, time availability, and organizations boundaries are critical components of corporate entrepreneurship. The results outline that fostering corporate entrepreneurial culture can be notably done through developing and promoting these five components. Moving ahead, the literature provides noteworthy evidence about the importance of corporate entrepreneurship to boost overall performance in an organization thus, resulting in competitive advantage (Wood et al., 2008; Covin & Slevin, 1991; Zahra, 1993). According to Kuratko et al., (2001) corporate entrepreneurship can make a momentous contribution towards achieving all types of performance targets.

However, as discussed earlier, studies have reported mixed results on corporate entrepreneurship and performance links (Wiklund & Shepherd, 2005; Antoncic & Hisrich, 2001; Morris & Sexton, 1996), leading towards gap for further empirical attention. According to Lumpkin and Dess (1996) each component of corporate entrepreneurial can generate varied results and the review highlights that most of the studies have failed to underline the role and credible influence of each of the five CE components on business performance, individually. Based on these evidences and arguments, this study proposed the following hypothesis:

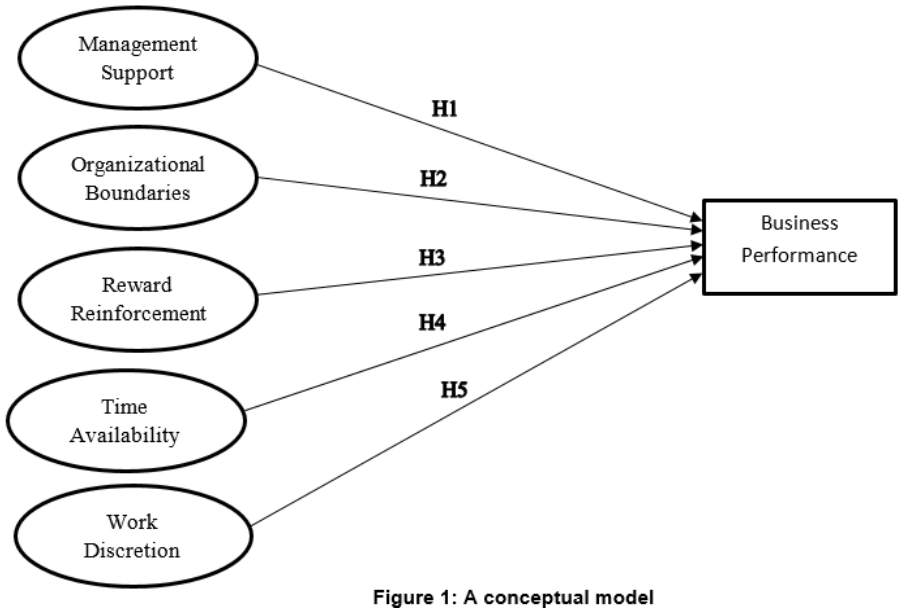

Figure 1: A conceptual model

3. Research method

3.1 Procedure and participants

The mail survey method was employed to collect data from branch managers of big five banks in Pakistan. The survey method is considered as the most appropriate way for describing a large population (Davis, 1996). Considering the total population of 1385 of big five banks in the four capital cities of the country, a total number of 300 questionnaires (Krejcie & Morgans, 1970) were required, however to improve the response rate a total number of 500 questionnaires were mailed to the bank branch managers as per (Pakistan Banks Association, 2014) list drawing upon stratified random sampling method. Followed up with reminders a total number 265 questionnaires were received. The characteristics of the respondent managers are provided in the Appendix.

3.2 Measurement

Independent Variables

The five factors of corporate entrepreneurship namely Management support, work discretion, rewards reinforcement, time availability and organizational boundaries are treated as independent variables in the present study; therefore, we measured these independent variables using Corporate Entrepreneurship Assessment Instrument (Hornsby, et al., 2002).

Dependent variable

We measured business performance with judgmental questions by adopting 4-items from the work of Deshpandé et al., (1993) and 03-items from (Jaworski & Kohli, 1993). The opinion of managers was sought on previous year's overall performance of their business etc. We employed this approach due to first, obtaining accurate financial information becomes very difficult (Naman & Slevin, 1993). Second, the financial measures lack strategic focus to predict future information regarding business performance (Kaplan and Norton, 1996).

4. Results & Discussion

4.1 PLS path modeling

We have chosen PLS path modelling for the data analysis. It is a structural equation modeling technique which is based on variance-based; it suits to structural measurement models, it has the beauty to deal with small-sample size, and is effectively useful in the exploratory research which aims to test and validate models (Hair et al., 2012; Hair et al., 2011; Henseler et al., 2009). According to (Wold, 1975) when the research model and settings are exploratory in nature they require soft-

modelling approach. Drawing upon these literature recommendation we judge that the PLS path modelling will be appropriate. Following a two-step analytical approach; first the assessment of measurement model is made; followed by structural model assessment (Hair et al., 2012). The SmartPLS 3.0 is used to analyze the data (Ringle, Wende, & Becker, 2015).

4.2 Reliability and validity of measures

The construct validity was ascertained following (Anderson and Gerbing, 1988) 2-stage Structural Equation Modeling (SEM) approach. According to which the internal reliability and convergent validity for the constructs are assessed first, and is followed by the constructs' discriminant validity which are presented below in Table 1 and Table 2 respectively.

Table 1: Discriminant validity of the constructs

	BP	MS	OB	RR	TA	WD
BP	**0.705**					
MS	0.385	**0.710**				
OB	0.389	0.117	**0.731**			
RR	0.402	0.437	0.475	**0.712**		
TA	-0.187	-0.119	-0.309	-0.209	**0.800**	
WD	0.232	0.364	0.126	0.36	-0.319	**0.711**

The square root of the average variance extracted and correlations are presented in the table above.

The acceptable level of recommended values for composite reliability is 0.7 whereas for average variance extracted it is recommended that the value should be 0.5 or above (Bagozzi et al., 1991; Chin, 1998; Fornell and Larcker, 1981, Gefen et at., 2000). Further to this, for ascertaining discriminant validity of the constructs the average variance shared between each construct and its measures should exceed the variance shared between the construct and other constructs (Fomell and Larcker, 1981). In connection with this, Table 1 suggests that the internal reliability and convergent validity of the measurement model in this study is up to the satisfactory level.

In order to ensure discriminant validity, it is suggested in the literature that the correlation of each construct should be less that the square root of the average variance extracted (Fomell and Larcker, 1981; Hair et al., 2010). Hence, the value provided in Table 2 indicate that this model has acquired adequate discriminant validity.

4.3 The predictive power of the model

The R^2 was analyzed to determine the predictive power of the model. Using PLS *Algorithm* function in the SmartPLS 3.0, the R^2 was computed for the business

performance which is the dependent variable in the model. We determine 0.283 R^2 for business performance; considering the international and industrial research perspective, the R^2 of 0.283 is greater than acceptable threshold of 0.1 (Falk and Miller, 1992).

The computation of effect size is based on the following formula: f^2 = (R^2 included - R^2 excluded) / (1- R^2included). The f^2 analysis complements R^2 in the total sizes of the impact of specific latent variables on the dependent latent variable(s) can be examined (Chin, 2010). According to Cohen, (1988) the f^2 values of 0.02 is considered small; 0.15 is considered as medium and 0.35 is considered as large effect size. The results of the present study found that management support has small effect size (f^2=0.082) over business performance.

Table 2. Effect sizes of the latent variables

	R^2	f^2	Effect size rating
Business Performance	0.283		
Management Support	-	0.082	Small
Organizational Boundaries	-	0.080	Small
Reward Reinforcement	-	0.013	Very small effect
Time Availability	-	0.001	Very small effect
Work Discretion	-	0.002	Very small effect

The effect size of organizational boundaries was also determined small (f^2=0.080), however, the determined effect size for reward reinforcement (f^2=0.013), time availability (f^2=0.001), and work discretion (f^2=0.002) was very small. Table 2 presents the summary of the effect sizes of each of the latent variables. Next, the assessment of predictive relevance of the dependent latent variable was performed. Using the blindfolding approach the cross-validated redundancy Q^2 was computed (Fornell & Cha, 1994). Table 3 presents the blindfolding results; according to which the Q^2 value for latent construct is greater than zero, this suggests that the model has predictive relevance (Chin, 1998).

Table 3: Blindfolding results

	SSO	SSE	Q¬? (=1-SSE/SSO)
BP	1,855.000	1,615.210	0.129

4.4 Hypothesis testing

Table 4 and Figure 2 present the results of PLS structural model (Ringle, Wende, & Becker, 2015).

Table 4: Path coefficients and hypothesis testing

Hypothesis	Relationship	Beta	SE	T-Statistics	Decision
H1	Management Support -> BP	0.283	0.062	4.501	Supported
H2	Organizational Boundaries -> BP	0.284	0.065	4.373	Supported
H3	Reward Reinforcement -> BP	0.124	0.068	1.816	Supported
H4	Time Availability -> BP	-0.027	0.078	0.345	Not Supported
H5	Work Discretion -> BP	0.041	0.075	0.552	Not Supported

***p<0.01, **p<0.05

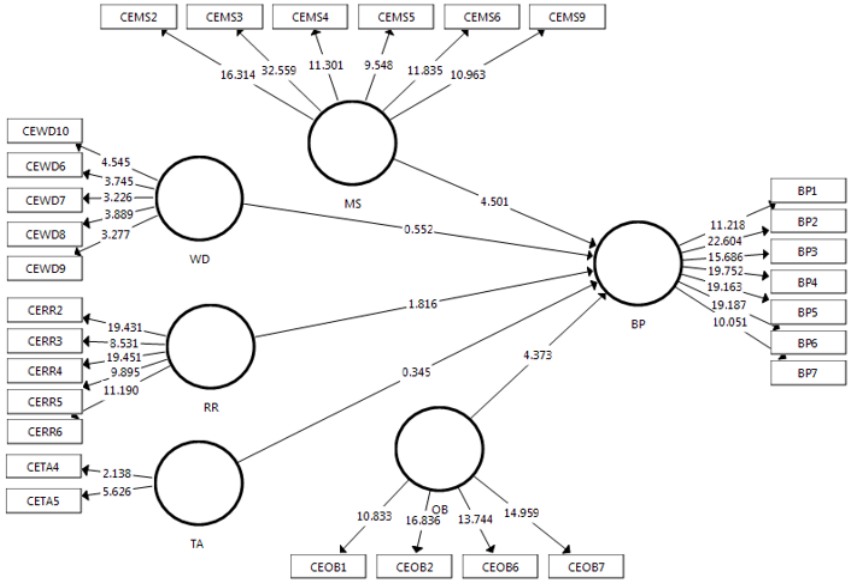

Figure 2: Results of structural model

Table 4 reports the positive relationship between management support (beta=0.283, t-value=4.501, p=0.01) and business performance. This positive relationship is also supported between organizational boundaries (beta=0.284, t-value=4.373, p=0.01), and rewards and reinforcement (beta=0.124, t-value=1.816, p=0.05) with business performance. On the contrary, the results reveal insignificant relationship between time availability (beta=-0.027, t-value=0.345, p=0.730), work discretion (beta=0.041, t-value=0.552, p=0.581) and business performance. Meanwhile, the R^2 for business performance is 0.28 which suggests that the variables explained 28% of the variance of the business performance.

Drawing upon resource based view of the firm (RBV) theory (Wernerfelt, 1984), according to which the organization's success is primarily determined by its internal resources. Based on this it was argued that the management support, organizational boundaries, reward reinforcement, time availability and work discretion individually contribute to the business performance because they are typically the core components of internal organizational structure. The following section presents the conclusion, limitations and future recommendations.

5. Conclusion

The objective of present study was to examine the direct influence of corporate entrepreneurship dimensions over business performance of big five banks in Pakistan. The results suggest that three out of five components have direct significant relationship with the business performance. This implies that when organizations formulate and implement strategies for enhancing corporate entrepreneurial behaviors they tend to focus more on management support, organizational boundaries and reward reinforcement. In doing so, the managers at top should extend their support towards employees, the organizational boundaries should be relaxed and rewards and reinforcements may be enforced within an organization for enhancing performance driven behavior.

There are implications for future research on the basis of findings and discussion of this study. Although, the past research on corporate entrepreneurship and business performance relationship reports mix results (Wiklund & Shepherd, 2005; Antoncic & Hisrich, 2001; Morris & Sexton, 1996). However, findings of this study report that each organizational boundaries and reward reinforcement hold positive relationship with organizational performance. Hence, it is explained that the middle managers tend to perceive these factors more important in relations to management support, time availability and work discretion. Therefore, it is necessary that the management of banks in Pakistan should consider organizational boundaries and reward reinforcement into their future policy while encouraging entrepreneurial behaviors for better organizational performance.

The study presents several limitations deserving discussion at length. First, the present study is cross-sectional in nature not permitting casual inferences to be made. Therefore, longitudinal design research is required in future for measuring theoretical construct at different points in time for confirming the findings of the present study. Second, the R^2 value of 0.28 for business performance, implying that the modeled variables explain 28% of the variance in the business performance. Hence, the future research is required to incorporate other factors such as organizational culture, organizational learning, human resource practices, market orientation, flexibility and absorptive capacity, among others to further explain the phenomena. Third, the self-reported measures were employed in present study. These self-reported measures are typically associated with social desirability and/or common method bias therefore, the future research may be conducted considering multiple sources of data collection. Fourth, the data was collected from big five banks in Pakistan hence to further validate the construct in Pakistan the researchers may test the model into commercial and private banks or in other industries in Pakistan.

6. References

Al Swidi, A. K., & Al Hosam, A. (2012). The effect of entrepreneurial orientation on the organizational performance: A study on the Islamic banks in Yemen using the partial least squares approach. *Arabian Journal of Business and Management Review (OMAN Chapter)*, *2*(1), 73-84.

Allen, R. S., & Kilmann, R. H. (2001). The role of the reward system for a total quality management based strategy. *Journal of Organizational Change Management*, *14*(2), 110-131.

Andersen, T. B., & Tarp, F. (2003). Financial liberalization, financial development and economic growth in LDCs. Journal of International Development, 15(2), 189-209.

Anderson, JC. and D.W, Gerbing, 1988, Structural equation modeling in practice: A review and recommended two-step approach. PsychoL Bull., 103: 411-423.

Antoncic, B. & Hisrich, R.D. (2001). Intrapreneurship: construct refinement and cross cultural validation. Journal of Business Venturing, 16, 495-527.

Bagozzi, R., & Yi, Y. (1988). On the evaluation of structural equation models. Journal of the Academy of Marketing Science, 16, 74-94. doi:10.1007/bf02723327

Bagozzu R.P., Y. Yi and L.W. Phillips, 1991. Assessing construct validity in organizational research. Admin. Sci. Q., 36: 421-478,

Barrett, H., Balloun, J. L., & Weinstein, A. (2012). Creative climate: a critical success factor for 21st century organisations. *International Journal of Business Innovation and Research*, *6*(2), 202-219.

Bierwerth, M., Schwens, C., Isidor, R., & Kabst, R. (2015). Corporate entrepreneurship and performance: A meta-analysis. Small Business Economics, 1-24.

Chin, W. W. (2010). How to write up and report PLS analyses. In V. Esposito Vinzi, W. W. Chin,
J. Henseler, & H. Wang (Eds.), Handbook of partial least squares (pp. 655-690). Berlin, Germany: Springer.

Chin, W.W., 1998. The Partial Least Squares Approach to Structural Equation Modelling. In: Modem Methods for Business Research, Markoulides, G A (Ed). Lawrence Erlbaum, Mahwah, NJ.? USA.,p: 95-336.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences. Hillsdale, NJ: Lawrence Erlbaum.

Collin, S. O., & Smith, E. (2003). Corporate governance and corporate entrepreneurship in public associations: The case of the riding school.

Covin, J.G. & Slevin, D.P. (1991). A conceptual model of entrepreneurship as firm behavior. Entrepreneurship Theory and Practice, 16(1), 7-25.

Dalrymple, D. J. and L. J. Parsons. (1995). "Marketing Management," New York: John Wiley and Sons.

Davis, D. (1996). Business research for decision making (4th ed). Belmont, CA: Duxbury Press.

Davis, J. L. (2007). *Firm-Level Entrepreneurship and Performance: An Examination and Extension of Relationships and Measurements of the Entrepreneurial Orientation Construct.* University of Texas at Arlington, Arlington.

Deshpandé, R., Farley, J. U., & Webster Jr, F. E. (1993). Corporate Culture Customer Orientation, and Innovativeness in Japanese Firms: A Quadrad Analysis. Journal of marketing, 57(1).

Dess, G., Lumpkin, G.T. & McGee, J.E. (1999). Linking corporate entrepreneurship to strategy, structure and process: suggested research directions. Entrepreneurship Theory and Practice, 23(3), 85-102.

Falk, R. F., & Miller, N. B. (1992). A primer for soft modeling. Akron, OH: The University of Akron Press.

Fase, M. M., & Abma, R. C. N. (2003). Financial environment and economic growth in selected Asian countries. Journal of Asian Economics, 14(1), 11-21.

Fomell, C. and D.F. Larcker, 1981. Evaluating structural equation models with unobservable variables and measurement error. J. Mar. Res., 18: 39-50.

Fornell, C., & Cha, J. (1994). Partial least squares. *Advanced methods of marketing research*, *407*, 52-78.

Fornell, C., & Cha, J. (1994). Partial least squares. Advanced methods of marketing research, 407, 52-78.

Frese, M., Rousseau, D. M., & Wiklund, J. (2014). The emergence of evidence-based entrepreneurship. Entrepreneurship Theory and Practice, 38(2), 209–216.

Gefen, D., D. Straub and M. Boudreau, 2000. Structural equation modeling and regression- Guidelines for research practice. Commun. Assoc. Inform. Syst, 7: 1-78.

George, B. A., & Marino, L. (2011). The epistemology of entrepreneurial orientation: Conceptual formation, modeling, and operationalization.*Entrepreneurship Theory and Practice*, *35*(5), 989-1024.

George, BA, Marino L (2011). The Epistemology of Entrepreneurial Orientation: Conceptual Formation, Modeling, and Operationalization. *Entrepreneurship: Theory & Practice, 35*(5): 989-1024.

Goodale, J. C., Kuratko, D. F., Hornsby, J. S., & Covin, J. G. (2011). Operations management and corporate entrepreneurship: The moderating effect of operations control on the antecedents of corporate entrepreneurial activity in relation to innovation performance. Journal of Operations Management, 29(1), 116-127.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. Journal of Marketing Theory and Practice, 19(2), 139-152.

Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. Journal of the Academy of Marketing Science, 40(3), 414-433.

Hair; IF., W C. Black, B. J. Babin and R,E. Anderson, 2010. Multivariate Data Analysis. 7th Edn., Prentice-Hall, Upper Saddle River, New Jersey.

Heavey, C., & Simsek, Z. (2013). Top management compositional effects on corporate entrepreneurship: The moderating role of perceived technological uncertainty. Journal of Product Innovation Management, 30(5), 837–855.

Heinonen, J. & Toivonen, J. (2008). Corporate entrepreneurship or silent followers? Leadership and Organization Development Journal, 29(7), 583-599.

Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The Use of Partial Least Squares Path Modeling in International Marketing. In R. R. Sinkovics & P. N. Ghauri (Eds.), Advances in International Marketing (Vol. 20, pp. 277-320). Bingley: Emerald

Hornsby, J. S., Kuratko, D. F., & Zahra, S. A. (2002). Middle managers' perception of the internal environment for corporate entrepreneurship: assessing a measurement scale. Journal of business Venturing, 17(3), 253-273.

Hornsby, J. S., Kuratko, D. F., & Montagno, R. V. (1999). Perception of internal factors for corporate entrepreneurship: A comparison of Canadian and US managers. *Entrepreneurship Theory and Practice*, *24*(2), 9-24.

Hult, G.T. & Ferrell, O.C. (1997). A global learning organization structure and market information processing. Journal of Business Research, 40, 155-165.

Hurley, R.F. & Hult, T.M. (1998). Innovation, market orientation and organizational learning: an integration and empirical examination. Journal of Marketing, 62(3), 42-54.

Ireland, R.D., Covin, J.G. & Kuratko, D.F. (2009). Conceptualizing corporate strategy. Entrepreneurship Theory and Practice, 33(1), 19-46.

Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: antecedents and consequences. The Journal of marketing, 53-70.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educational and psychological measurement, 30(3), 607-610.

Kuratko, D. F., Morris, M. H., & Covin, J. G. (2011). Corporate innovation and entrepreneurship. SOUTH-WESTERN CENGAGE Learning Australia, United States.

Kuratko, D. F., Hornsby, J. S., & Covin, J. G. (2014). Diagnosing a firm's internal environment for corporate entrepreneurship. *Business Horizons*, *57*(1), 37-47.

Kuratko, D. F., Hornsby, J. S., & Hayton, J. (2015). Corporate entrepreneurship: the innovative challenge for a new global economic reality.*Small Business Economics*, 1-9.

Kuratko, D., Ireland, R.D. & Hornsby, J. (2001). Improving firm performance through entrepreneurial actions: Accordia's corporate entrepreneurship strategy. Academy of Management Executive, 15(4), 60-71.

Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. Academy of management Review,21(1), 135-172.

Lumpkin, G.T. & Dess, G.G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. Academy of Management Review, 21(1), 135-172.

Maçães, M. A. R., Farhangmehr, M., & Pinho, J. C. (2007). Market orientation and the synergistic effect of mediating and moderating factors on performance: The case of the fashion cluster. *Portuguese Journal of Management Studies*,*12*(1), 27-43.

Mahmood, R., & Wahid, R. A. (2012). Applying corporate entrepreneurship to bank performance in Malaysia. Journal of Global Entrepreneurship, 3(1), 68-82.

Morris, M.H., Kuratko, D.F., Covin, J.G. (2011). Corporate Entrepreneurship & Innovation, Entrepreneurial Development within Organisations. Mason:Thomson South-Western.

Morris, M.H. & Sexton, D.L. (1996). The concept of entrepreneurial intensity: implications for company performance. Journal of Business Research, 2, 247-259.

Pakistan & Gulf Economist. (2013, September).

Pakistan Bank's Association Website - *http://www.pakistanbanks.org/ – retrieved on 28 April, 2014*

Phan, P. H., Wright, M., Ucbasaran, D., & Tan, W. L. (2009). Corporate entrepreneurship: Current research and future directions. Journal of Business Venturing, 24(3), 197-205.

Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. Entrepreneurship Theory and Practice, 33(3), 761-787.

Ringle, C. M., Wende, S., and Becker, J.-M. 2015. "SmartPLS 3." Boenningstedt: SmartPLS GmbH, http://www.smartpls.com.

Roche (2015): Retrieved from: http://www.pragcap.com/banking-is-complex-because-the-world-has-become-more-complex/

Rutherford, M. W., & Holt, D. T. (2007). Corporate entrepreneurship: An empirical look at the innovativeness dimension and its antecedents. Journal of Organizational Change Management, 20(3), 429-446.

Shaw, E., O'Loughlin, A. & McFadzean, E. (2005). Corporate entrepreneurship and innovation: a role and process based approach. European Journal of innovation Management, 8(4), 393-408.

Simsek, Z., & Heavey, C. (2011). The mediating role of knowledge-based capital for corporate entrepreneurship effects on performance: A study of small to medium-sized ¿rms. Strategic Entrepreneurial Journal, 5(1), 81–100.

Stevenson, H. & Grousbeck, H. (1992). The heart of entrepreneurial venture. In R.Sahlmand and H. Stevenson (eds). The entrepreneurial venture. Boston, MA: Harvard Business School.

Tajeddini, K., & Mueller, S. L. (2012). Corporate entrepreneurship in Switzerland: evidence from a case study of Swiss watch manufacturers.*International Entrepreneurship and Management Journal*, *8*(3), 355-372.

The Express Tribune. Retrieved from http://tribune.com.pk/story/286458/history-of-banking-in-pakistan--of-humble-origins-and-vast-potential/

Welter, F., & Smallbone, D. (2011). Institutional perspectives on entrepreneurial behavior in challenging environments. Journal of Small Business Management,49(1), 107-125.

Wernerfelt, B. (1984). A resource based view of the firm. Strategic management journal, 5(2), 171-180.

Wiklund, J. & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: a configurational approach. Journal of Business Venturing, 20, 71-91.

Wold, H. (1975). Path models with latent variables: The NIPALS approach (pp. 307-357). Acad. Press.

Wonglimpiyarat, J. (2005). *Strategies of competition in the bank card business: Innovation management in a complex economic environment*. Sussex Academic Press.

Wood, C., Holt, D., Reed, T. & Hudgens, B. (2008). Perceptions of corporate entrepreneurship in air force organizations: antecedents and outcomes. Journal of small Business and Entrepreneurship, 21(3),117-132.

Zahra, S. A., & Garvis, D. M. (2000). International corporate entrepreneurship and firm performance: The moderating effect of international environmental hostility. Journal of Business Venturing, 15(5), 469-492.

Zahra, S. A. (2010). Harvesting family firms' organizational social capital: A relational perspective. Journal of Management Studies, 47(2), 345–366.

Zahra, S. A. (2012). Organizational learning and entrepreneurship in family firms: Exploring the moderating effect of ownership and cohesion. Small Business Economics, 38(1), 51–65.

Zahra, S. A., & Covin, J. G. (1995). Contextual influences on the corporate entrepreneurship-performance relationship: A longitudinal analysis. Journal of business venturing, 10(1), 43-58.

Zahra, S.A. (1993). Environment, corporate entrepreneurship and financial performance: a taxonomic approach. Journal of Business Venturing, 20, 71-91.

Zahra, S.A., Jennings, D. & Kuratko, D. (1999). The antecedents and consequences of firm-level entrepreneurship: the state of the field. Entrepreneurship Theory and Practice, 24(3), 45-65.

Zampetakis, L.A. & Moustakis, V.S. (2010). An exploratory research on the factors stimulating corporate entrepreneurship in the Greek public sector. International Journal of Manpower, 31(8), 871-887.

Zhang, D. (2008). Integration of market and entrepreneurial orientation. Unpublished PhD thesis, University of Manitoba, Winnipeg, Canada.

Appendix

Table A1: Results of measurement model

Latent Variable	Item	Loadings	AVE	CR
Business Performance	BP1	0.632	0.497	0.873
	BP2	0.769		
	BP3	0.701		
	BP4	0.714		
	BP5	0.756		
	BP6	0.737		
	BP7	0.611		
Management Support	CEMS2	0.727	0.504	0.858
	CEMS3	0.827		
	CEMS4	0.722		
	CEMS5	0.658		
	CEMS6	0.675		
	CEMS9	0.634		
Organizational Boundaries	CEOB1	0.704	0.535	0.821
	CEOB2	0.745		
	CEOB6	0.734		
	CEOB7	0.742		
Reward Reinforcement	CERR2	0.794	0.508	0.837
	CERR3	0.636		
	CERR4	0.77		
	CERR5	0.663		
	CERR6	0.686		
Time Availability	CETA4	0.586	0.639	0.77
	CETA5	0.967		
Work Discretion	CEWD10	0.865	0.506	0.835
	CEWD6	0.667		
	CEWD7	0.658		
	CEWD8	0.694		
	CEWD9	0.649		

Appendix B: Table 2: Demographic profile of respondents

Characteristics	Frequency	Percentage
Gender		
Male	227	85.7
Female	38	14.3
Age		
1 below 30 years	92	34.7
2 30-40	116	43.8
3 41-50	45	17.0
4 51-60	12	4.5
Qualification		
High School	3	1.1
Diploma or Associate Degree in Banking	10	3.8
Undergraduate Degree	74	27.9
Postgraduate Degree	178	67.2
Job Title		
1 General Manager	6	2.3
2 Branch Manager	93	35.1
3 Operations Manager	165	62.3
Experience		
1 Less than 3 years	123	46.4
2 03-06	81	30.6
3 07-10	39	14.7
4 11-13	10	3.8
5 more than 13 years	12	4.5