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## Firms' Collaborative Behaviour and Enterprise Resilience among Banks in Nigeria

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### **Abstract:**

*The paper adopted objectivism as its research philosophical paradigm to evaluate the impact of firms' collaborative behaviour on enterprise resilience of banks in Nigeria. The research data were collected from a cross-sectional survey involving 17 banks that adopted collaborative behaviour (merger or acquisition). The formulated research hypotheses were tested using Pearson's Product Moment Correlation Coefficient statistics. From the test results, it was found that collaborative behaviour, particularly acquisition, galvanizes the resilient capacity of banks, while mergers, although trends in that direction, but has inherent inhibitions. Based on this, the study concludes that integrative behaviour found in mergers and acquisition is a substantial resilient reinforcer of banks in terms of their resilient capacity against environmental threats. The paper recommends that banks faced with threats of irresilient should adopt integrative behavior mostly acquisition and to a lesser extent mergers to survive the perturbations in their highly dynamic and wild environment.*

**Keywords:** Enterprise resilience, environmental resilience, social resilience and economic resilience, collaborative behavior, mergers, acquisition, joint ventures, adaptive capacity.

### **1. Introduction**

The dynamics in firms' operating environment present serious threats and sometimes opportunities to the enterprise. The environmental threats often result to difficult moments which manifest in some forms of business maladjustments, decline or failure. Hamel and Valikangas (2009) argued that, technological discontinuities, regulatory upheavals, geopolitical stocks, industry de-verticalizations and disintermediation, abrupt shifts in consumer taste and hordes of non-traditional competitors are just a few of the factors undermining the advantages of incumbency.

Considering this obvious dynamic phenomenon, Yossi (2005) argued that, it is not the decline of the enterprise that matters, what matters most is its adaptive ability to rise again to sustain its continuity. In this context, Darwin in Pfeffer (1982) also argued that, it is not the strongest of the species that survive, not the most intelligent, but the one that is most adaptive to change. The continuous adaptive tendency of the surviving businesses found expression in the 'enterprise resilience' construct. Hamel and Valikanjas (2010) argued that the world is becoming turbulent faster than organizations are becoming resilient, thus, it means that in a turbulent environment, companies need to become more resilient.

However, considering the turbulent phenomenon in the Nigerian Banking sector and collaborative behaviour by banks in the post-consolidation era, it behooves on us to evaluate how such corporate behaviour influences the needed enterprise resilience in the sector (Eketu and Oshi, 2010). Besides the fact that collaborative behaviour is an event that has occurred or is occurring in the banking sector in Nigeria, we have reasoned that its expected synergic implication is worthy of an empirical evaluation, at least within the province of expected enterprise resilience. Therefore, the focus of this paper is to explain enterprise resilience using 'firms' collaborative behaviour among banks in Nigeria.

### **2. Literature Review**

#### *2.1. The Concept of Firm's Collaborative Behaviour*

As economic ventures, operating within a population economy, firms are competitive systems. They compete for resources including customers. This is true particularly among those operating within the same industry or ecology. In most cases, the competitive advantages are not evenly distributed, and as such, they seek to merge forces to have a better synergic impact either to take advantages of an opportunity or to surmount a threat. This found expression in collaborative behaviour. Collaborative behaviour has become a

strategic option for most firms faced with competition crises, stringent operating regulations or the need to take optimum advantage of an opportunity.

Bradley (1999) argued that competition induce alliance, as a collaborative behaviour, allows firms to jointly produce assets, competencies or capabilities that are not readily available in competitive factor markets. A common form of firms' collaborative behaviour is strategic alliance. This represents an agreement between two or more firms to cooperate in other to achieve one or more common strategic objectives. Such alliance may involve the need to gain superior access to complex technological, and product development capabilities, or stronger capital base required (Mokwenye, 2012, and Kaplan, Norton and Rugelsjoen, 2010).

Nevertheless, Gravens and Piery (2003) contented that gainful ways to examine firms' collaborative behaviour is to consider whether the tie between firms is a vertical or horizontal collaborative relationship. This involves having a relationship with a business operating along the same channel of a production or service flow (this represent vertical integration behaviour), or with a business involved in a different production or service line (horizontal integration behaviour) (Gravens and Piery, 2003; and Anderson and Naru, 1991). This may be consummated in forms defined in mergers, acquisition and joint venture collaborative relationships (Kazmi, 2008; Fubara, 2006; and Hill and Jones, 2004).

### 2.1.1. Joint Venture

The joint venture collaborative behaviour according to Bradley (1999) involves the commitment of financial, management, and technological resources for a considerable time to produce more efficient and effective results. In all strategic alliances, there is a reciprocity arrangement in the exchange and harmonization of productive factors or skills. Bradley (1999) also argued that the various collaborative behaviours defined in strategic alliance represent a continuum of increasing commitment to partnership.

Another issue raised on firms' collaborative behaviour is alliance, which Graven et al (2003) argued that it is necessary, for firms to know that the skills and resources requirements of technologies in many industries very often surpass the capabilities of a single firm. Thus, even companies that can develop the capabilities may do so faster via partnering. The sharing of complementary technologies and risk is an important driver for strategic partnership defined in collaborative behaviour of vulnerable firms (Anderson and Narus, 1991; Graven, 2003). Also, the increasing complexity of technology as a necessary factor for firms' collaborative behaviour recognizes technological constraints affecting industry giants and small firms.

Based on this thought paradigm, Graven and Piery (2003) argued that the small firms with specialized competitive strengths are able to achieve impressive bargaining power with larger firms because of their high levels of competence in specialized technology areas, and their ability to substantially compress development time. However, what appears to be explanatory paradigm of collaborative firms' behaviour among banks in Nigeria is presented in the argument by Kazmi (2008) that the financial needs for competing in globalized markets or meeting statutory capital requirements are often beyond the capacity of single firms. This suggest why many firms (banks) seek collaborative relationship in order to obtain the resources essential for competing or meeting up statutory capital requirement, or to spread the risk of financial losses with other firms. This scenario presents the potential for collaborative behaviour among firms.

### 2.1.2. Acquisition

Acquisition is a cooperative or collaborative behaviour exhibited when one firm uses its capital resources to purchase another (Kazmi, 2008; and Hill and Jones, 2004). The capital resources involved maybe the need for acquisition to limit the risk inherent in entering new ventures because acquisition is perceived to involve less uncertainty. Also, acquisition is found to be a much quicker process of making significant impact and generate profit in a market.

### 2.1.3. Mergers

As the case with acquisition, the assumption that competition is a natural state of existence for firms (Kazmi, 2008) is negated in firms' takeover behaviours. This assumption merely rests on the population ecological view of the firm (Pfeffer, 1982). This view was propagated by Porter (1998) that firms compete for limited resource and benefit at the cost of others to strive for the limited share of the market, as a win-lose mindset (Kazmi, 2008). However, mergers represent a co-operation behaviour demonstrated in an "agreement between equals to pool their operations and create a new entity" (Kazmi, 2008 and Maluste, 1989). Mergers and acquisition is one horizontal cooperation behavioural patterns of firms involving the process of acquiring or merging within industry rivals in an attempt to secure the competitive advantages that are associated with economies of scale and scope (Kazmi, 2008).

## *2.2. Enterprise Resilience*

It is a natural phenomenon for both organic and social systems to manifest entropy. This is the tendency to grow old, encounter survival threatening challenges, or even die. However, such systems also have the capacity to resist the entropic tendencies by what is refers to as negative entropy. Specifically, businesses as social systems are faced with population ecological challenges that increase their entropic threats (Eketu, 2012).

This means that survival of the enterprises depends on their resilient capacity. Clucas (2009) argue that a resilient firm is the one which realizes its own potentials through nurturing the abilities of those working within it to bounce back from adversity, thrive on challenge, explore and reach its own full potential and even have a positive impact on others. Valikangas (2009) contends that, rather survival of the fittest, a truly healthy approach to economic adaptation and wealth creation is four companies to become more resilient. Promoting enterprise resilience is very important because of the huge economic and social cost of business decline and failure. To escape this, Valikangas (2009) suggested the following steps: rethinking the underlining principles on which management is founded;

generating portfolio of strategic options; and careful assessment of resource allocation. The principal ingredients of the corporate resilience cake are: commitment, trust, engagement, psychological flow, strong psychological contract, skills, knowledge and experience, effective people management, positive working environment, personal resilience. These ingredients are those that promote wellbeing at work, and those that are key to the development of a corporate culture based on positive principles of commitment and trust between leaders and everyone else (www.orghealth.co.uk, (2012).

These characteristics have become necessary business success factors considering the unavoidable tribulations in the business development and environment, as argued in Nonaka (1995), Eketu (2009), Derek (2011) and Valikangas (2004). Mowday, Porter & Steers (1982) specifically argued that corporate resilience is the capacity to mobilize characteristics that enable the business to have an attitude to tolerate, overcome and be strengthened by adverse events and experience. It is all about sustainable survival and growth during and after all odds.

The contentions on corporate resilience centre on the ability to achieve organisation's aspirations regardless of adverse circumstances, with the aim of creating long-term sustaining assets, based on the diverse skills sets defined by people concerned and the competence in the process. The sustained ability of an organization to rebound and learn from adversity is the central theme in corporate resilience. Seville, Porter & Askew (2008) contended that, corporate resilience is the character attributes that reduces the chance to receive critical blows, the damages taken from these blows, and to be able to bounce back without been negatively affected.

The contentions on corporate resilience anchor on the silent meaning of sustainability of the resilient process and the survival and development outcomes. For instance, McManus et al (2008) espoused that corporate resilience is the ongoing ability to anticipate and adapt to critical strategic shifts, not only to respond, but also to rebounding from setbacks. Also, Hamel and Valikangas (2003) argued that corporate resilience is the continuous anticipation and adjustment to keep circular trends that can permanently inspire the earning power of a core business.

This suggests that the capacity to change before the case for change becomes painfully clear is a sustainable resilience factor. It further implies that the organizational ability to rapidly adapt and respond to internal and external dynamics, opportunities, demands, disruptions with little or limited impact, is a crucial sustainable development factor in corporate resilience. The need for sustainable corporate resilience rests on the continued profitable survival of the firm. Resilience enables businesses to retain and improve the internal skills, explore, acquire core competence in the long-run, or divest where necessary (Kpona, 2011). This is achieved through the adaptation and development of new opportunities and promotion of stability of long-run values as well as competitiveness at personal and organizational levels. For this to be sustainably realized, it is argued that the resilient firm must anticipate emerging threats and understand their impact on the firms objectives and goals; understand operational system dependency and support its strategic direction; foster and supports a partnership with critical supply chains, sectional and community stakeholders; processes and ability to respond to and recover from disruptions quickly and holistically; adapt and react flexibly to restore and strengthen the routine functions of the firm; nurture and support loyal staff; enthrone effective leadership; and provide a strong sense of purpose in response to and recover from disruption (Kpona, 2011; and Coyle-Shapiro and Conway, 2008).

These fits are attainable through holistic awareness, problem solving skills, the consciousness that setbacks is part of life, optimism, ability to ask for help, and effective risk management.

### 2.3. Collaborative Behaviour and Firms' Resilience

The justification for collaborative behaviour of the firm rests on the attainment of a stronger capability to survive within the firms' population ecology (Pfeffer, 1982). This presupposes that collaborative behaviours are triggered by obvious threats and opportunities within the environment and a conscious attempt to overcome threats or optimize gains of an opportunity. Thus, the capacity of the firm to surmount threats or even bounce back after incurring the impact of the threat is the focus of collaborative behaviour. This implied that enterprise resilience is the target of firms' collaborative behaviour. For instance, Brunson & Dalziell (2005) argued that, "In a turbulent environment companies need to become more resilient". It is about continuously anticipating and adjusting to deep, secular trends that can permanently impair the earning power of a core business". The characteristics of the resilient firm according to Dalziell (2005) and Seville (2008) are decision skills, risk management, competency, optimism, flexibility, and adaptability. However, the ultimate evidence of resilience is continuous survival. Drawing from this logical sequence, we formulate the following hypotheses.  
H<sub>01</sub>: there is no significant relationship between acquisition collaborative behaviour and enterprise resilience,  
H<sub>02</sub>: there is no significant relationship between mergers collaborative behaviour and enterprise resilience.

### 3. Methodology

This study adopted a cross-sectional survey design and positivism as its research paradigm (Katrina, 2007). This objectivist was predicated on the assumption that the phenomenon under investigation has ontological reality, epistemological position, human nature, determinism, all these necessitating a nomothetic inquiry. The study targeted and covered all 17 banks in Nigeria. Since a census was conducted on the entire population of the study, the need for sample size determination and sampling technique was negated (Ntouamanis. 2001 and Eketu, 2009).

The instrument for data collection was developed to match the context of the industry in Nigeria. Firms' collaborative behaviour was sub-divided into three alliance behaviour typologies: mergers, acquisition and joint ventures alliances. However, from a preliminary survey, it was revealed that the dominant collaborative behaviours in the banks are mergers and acquisition. Each of these dimensions was operationalised with core 8-items that measure their existing state in the banks. Enterprise resilience was measured using a combination of instruments developed by Valikangas (2010) and Mokwenye, (2012), modified to consist of environmental resilience, social resilience and economic resilience, which ultimately manifest in firms adaptive and survival capacity.

All items were measured with a five-point Likert-type scale that yielded an instrument to evaluate the extent firms' collaborative behaviour impact on enterprise resilience in Nigerian banks. The instrument was validated through Cronbach Alpha Tests to achieve internal consistency (Golafshani, 2003; and Nunnally, 1978). The reliability Cronbach alpha results computed using SPSS version 17.0 were quite above 0.7 benchmark as recommended by Golafshani (2003) please see table 2. Also, the instrument validity was considered in terms of convergence. The coefficients of the 3 items passed Golafshani (2003) test (see table 1). The potential effects of response pattern biases was reduced by introducing negatively worded or reversed-coded items on the questionnaire, as recommended by Hinken, (1995); and Drasgow & Idazak, (1987). This was found necessary because reversed-coded items are like cognitive "speed bumps" calling for the respondents' carefulness and more control, as opposed to automatically cognitive processing (Hinken, 1995; and Kamukama, Ahiauzu and Ntayi, 2012).

### 3.1. Data Management, Analysis and Findings

The data management involved checking; cleaning, recorded and negatively worded scale items were reversed coded, before analysis (Zikmund, 2004). The instrument validity was achieved through content validity index test, where results above 0.70 were recorded. Also, convergent validity was tested evaluate the extent to which various constructs were overlapping or strongly interrelated (Nunnally, 1978 and Golafshani, 2003), all to establish the extent of accuracy of the measures. The reliability of the instrument was examined using the Cronbach alpha test in SPSS version 17.0. The results shown in Table 2 passed Nunnaly (1978) benchmark of 0.70. The validity and reliability tests results corroborate earlier results in Asawo (2009).

Pearson's Correlation Coefficient was used for the bi-variate analysis to test the formulated hypotheses. The results indicated that acquisition collaborative behaviour has moderate correlation, implying substantial relationship with enterprise resilience ( $p < 0.01$ ;  $r = .538$ ). On the relationship between mergers and enterprise resilience, the results show a low correlation, implying definite but small relationship ( $p < 0.01$ ;  $r = .273$ ) see table 3. Therefore, going by Guilford's (1956) scale given in Irving (2005) and adopted in Ahiauzu & Asawo (2008), we rejected the two null hypotheses. This means that mergers and acquisition significantly impact positively on enterprise resilience of banks in Nigeria. However, mergers have lesser significance arising from the social-psychological problems associated with identity shift, personality and role clashes and internal struggles for dominion between employees of merging banks. This breeds dual authority and dual loyalty that affect ultimate productivity (Robins & Sanghi, 2006 and Kazmi, 2008).

## 4. Discussion, Conclusion and Implications

The paper investigated the impact of firms' collaborative behaviour on bankers' resilience in Nigeria. The purpose of testing such impact is to develop and produce empirical facts on how the measuring post-consolidation collaborative behaviours of enterprise resilience of such banks. This rests on the contention by Hamel & Valinkagas (2003) that "Resilience management or Business continuity management is the competence that certain companies decide to develop in scenarios of systematic crises to overcome the unforeseen efforts, negative repercussions and odd consequences that disruptive business changes could pose over the company, which operational continuity, financial performance and long term survival could be seriously me.....".

The study established that bank mergers and acquisition collaborative behaviour has substantially impacted on the resilient value of the affected banks, as evinced in their economic, social and environmental resilient values. This is supported by the contention that mergers, downsizing and nontraditional work arrangements are an unpredictable, but common way of life, "as mastering, resilience skills creates a competency in accepting and dealing with unpredictability and complex challenges in the business environment (Valikangas, 2004; Barney, 2007 and Barney, 1991). Therefore, the improved competitive and resilient value of acquired/merged banks draws strength from the synergic outcomes provided in collaborative behaviour. Such outcomes according to Fubara (2006) are the ultimate reinforcement of the resilient capacity of firms. The insulation of the enterprise from the adverse environment (real or perceived) is the basic idea in enterprise mergers/acquisition. This implies that effective bank merger and acquisition harmonizes the resilient capacity to withstanding odds and sustaining continuous survival.

However, the positive but moderate mergers effect on resilient capacity of merged banks tends to provoke serious behavioral content analysis. For instance, banks with 'acquisition' collaborative structure were found to be higher in their resilient capacity than banks with mergers collaborative structure. This finding corresponds with the latent consequences of mergers as contended in Fubara (2006). For instance, Fubara (2006) argued that while mergers and acquisition are akin to marriage, there are implied dual authorities in mergers resulting to dual loyalty. This dual authorities and split-loyalty arise for the integrative structures that are implied in mergers (Kazmi, 2008). This behaviour negates the possibility of effective teamwork because it impinges on trust (Robins & Sanghi, 2006). This inhibits the overall team spirit and resilient readiness of the banks.

In conclusion, the dominantly substantial impact of collaborative behaviour found in mergers and acquisition of banks on their resilient capacity, is suggesting that alliances provide banks with strength to survive the odds. It is also indicative that acquisition than mergers is less problematic to manage when faced with resilient challenges.

The implications of this study suggest the issues that should be taken seriously by managers and scholars in reinforcing the resilient capacity of banks in Nigeria. For instance, the study has provided that the resilient effectiveness in banks' collaborative behaviour is higher with acquisition than in mergers. Therefore, the basic challenges and threats facing the banks need to be understood within the context of their strength and opportunities before consummating any integration. Also, managers of banks contemplating mergers should formulate a programme of behaviour reorientation to neutralize inhibitors to mutual trusts, teamwork and single authority based loyalty. The researchers and scholars should recognize this pathway to enterprise resilience with the understanding that two good heads are better than one, and theories in the direction to boast the knowledge on enterprise collaborative behaviour patterns in

sustaining their reliance value. Drawing from the foregoing, the paper strongly recommends mergers and acquisition for banks or enterprises faced with external and internal challenges that are threatening the resilient capabilities.

## 5. References

- i. Ahiauzu, A., & Asawo, S. P. (2010). Altruistic Love Culture and Workers' Commitment in the Nigerian Manufacturing Industry: A Study in Workplace Spirituality. *Journal of Management Policy and Practice*, 11(5), 97-105.
- ii. Anderson, C. and Naru, J.A. (1991). "Partnering as a focused market strategy." *California Management Review*.
- iii. Asawo, S.P. (2009). Spirituality Leadership and Worker's Commitment in Manufacturing Firms in Nigeria. PhD Thesis, Rivers State University of Science and Technology, Port Harcourt.
- iv. Barney, K. (2007). A note on forest land concessions, social conflicts and poverty in the Mekong region. *International Conference on Poverty Reduction and Forests: Tenure, Market and Policy Reforms*, 3-7 September, Bangkok.
- v. Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*. Vol. 17. No.1 99-120
- vi. Bradley, F. (1999). *International Marketing Strategy*. England: Pearson Educational Ltd
- vii. Brunson, D. & Dalziell, E. (2005). Making organisations resilient: Understanding the reality of the challenge. Rotorua, New Zealand: Centre for Advanced Engineering (CAE) Resilient Infrastructure 2005, 8-9 Aug 2005.  
<http://www.caenz.com/info/ConfPres.html>. Access via UC Research Repository. (Conference Contributions - Full conference papers).
- viii. Chen, M.J. (1996). "Competitor analysis and interfirm rivalry: Toward a theoretical integration." *Academy of Management Review*. 2(1) 100-134
- ix. Clucas, L. (2009). "Corporate Resilience Development Counseling" <http://www.laurenclucas.com>
- x. Coyle-Shapiro, J.A.M and Conway, N. (2008). "Perceived Organisational support and employee resilience, commitment and innovations". *Journal of Applied Psychology*, Vol. 90. 14-781
- xi. Cronbach, L.J. (1951). Coefficient Alpha and Internal Structure of Test. *Psychometrika*, Vol. 15, No.3 pp.297-33
- xii. Dalziell, E.P. (2005). Understanding the vulnerability of organisations. Te Papa, Wellington, New Zealand: The 1855 Wairarapa Earthquake Symposium, 8-10 Sep 2005. In *The 1855 Wairarapa Earthquake Symposium - Proceedings Volume* 130-135. [http://www.gw.govt.nz/pdfs/The\\_1855\\_Wairarapa\\_Earthquake\\_Symposium\\_Proceedings\\_Volume\\_Web\\_Version.pdf](http://www.gw.govt.nz/pdfs/The_1855_Wairarapa_Earthquake_Symposium_Proceedings_Volume_Web_Version.pdf). Access via UC Research Repository. (Conference Contributions - Papers in published proceedings).
- xiii. Deeds, D.L.; De Carolis, D. and Colimbus, J. (2000). "Dynamic capabilities and new product development in high technology.....an empirical analysis of biotechnology firms." *Journal of Business venturing*. 15(13): 211-229
- xiv. Derek, M. (2011). Resilience and strengthening resilience in individuals. Management Advisory Service. Retrieved from: [http://www.mas.org.uk/uploads/articles/Resilience\\_and\\_strengthening\\_resilience\\_in\\_individuals.pdf](http://www.mas.org.uk/uploads/articles/Resilience_and_strengthening_resilience_in_individuals.pdf)
- xv. Eketu, C.A. and Needorn, R.S. (2013). "Sustainable Development in the Nigerian Tourism Industry: A Review of a Besetting Business Environment." *The University Advanced Research Journal*. Issue 9, January-March, 2013
- xvi. Eketu, C.A. (2012) "Antecedents of Enterprise Resilience in the Nigeria Hospitality Sector: A Phenomenological Approach". *Journal of Business and Value Creation*. (JBVC) Vol.1, No.1. pp.107-144
- xvii. Eketu, C.A. and Oshi, J.E.O. (2010). "Banking sector recapitalization programme and labour turnover behaviour of Nigerian Banks." *Universal Journal on Sustainable Development Research*, Vol. 7, No.3, 141-146.
- xviii. Eurofound, A. (2009). "Business Resilience: Anticipation as the key to sustainable Business success": <http://www.thefreelibrary.com>
- xix. Fubara, B.A. (2006). *Corporate Strategy and the Developing Economies*, Spectrum Book Ltd: Ibadan
- xx. Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report*, 8(4), 597-606. Retrieved [Insert date], from <http://www.nova.edu/ssss/QR/QR8-4/golafshani.pdf>
- xxi. Gravens, D.W. and Piery, W.F. (2003). *Strategic Marketing*. New York: McGraw-Hill Irwin.
- xxii. Guilford, J. P. (1956). *Fundamental statistics in psychology and education*. (3rd ed.). New York: McGraw-Hill.
- xxiii. Idaszak, J. R., & Drasgow, E (1987). A revision of the job diagnostic survey: Elimination of a measurement artifact. *Journal of Applied Psychology*, 72, 69-74.
- xxiv. Irving, J. A. (2005). *Servant leadership and the effectiveness of teams*. Unpublished doctoral thesis, School of Leadership Studies, Regent University.
- xxv. Guilford, J. P. (1956). *Fundamental statistics in psychology and education*. New York: McGraw-Hill.
- xxvi. Hill, C.W. and Jones, G.R. (2004). *Strategic Management: An integrative Approach*. Boston: Houghton Mifflin Company
- xxvii. Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. *Journal of Management*, 21, 967-988.
- xxviii. Kamukama, N., Ahiauzu, A., & Ntayi, J.M, A (2010). Intellectual capital and performance: Testing interaction effects. *Journal of Intellectual Capital*, Vol. 11 No. 4, 2010 pp. 554-574, Emerald Group Publishing Limited. 1469-1930, <http://dx.doi.org/10.1108/14691931011085687>
- xxix. Kaplan, R.S., Norton, D.P. and Rugelsjoen, B. (2010). "Managing Alliances with the Balanced Scorecard." *Harvard Business Review*, January-February.
- xxx. Kazmi, A. (2008). *Strategic Management and Business Policy*. New Delhi: McGraw-Hill

- xxxi. Ketchain, J., Snow, C.C. and Street, V. (2004). "Improving firm performance by matching strategic decision-making process to competitive dynamics." *Academy of Management Executive*, Vol. 18, No.4
- xxxii. Kporna, P.N. (2011). *Corporate Resilience and Organizational Survival: A survey of Banks in Rivers State*. MBA Thesis, University of Port Harcourt.
- xxxiii. Maluste, N. (1989). *Takeovers- A game capitalists play*. Business India. Mar-6-19,1989
- xxxiv. McManus, S., Seville, E., Vargo, J. & Brunson, D. (2008). Facilitated process for improving organizational resilience. *Natural Hazards Review* 9(2): 81-90. [http://dx.doi.org/10.1061/\(ASCE\)1527-6988\(2008\)9:2\(81\)](http://dx.doi.org/10.1061/(ASCE)1527-6988(2008)9:2(81)).
- xxxv. Mowday, R.T., Porter, L. & Steers, R.M. (1982). *Effective Behaviour in Organisation*. New Jersey, Prentice-Hall
- xxxvi. Mokwenye, O.A. (2012). *The effect of knowledge management on Organisational Resilience: A study of selected manufacturing companies in Rivers State*. MBA Thesis. University of Port Harcourt, Nigeria.
- xxxvii. Nonaka, I. (1995). *The knowledge creating company: How Japanese companies create the dynamics of innovations*. Oxford: Oxford University Press.
- xxxviii. Nunnally, J. C. (1978). *Psychometric Theory* (2nd ed.). New York: McGraw-Hill.
- xxxix. Pfeffer, J. (1982). *Organisations and Organisational Theory*, London: McGraw-Hill. p.109
- xl. Porter, M.E. (1998). *On competition*, New York: Free Press
- xli. Robins, S.P. and Sanghi, S. (2006). *Organisational Behaviour*, New Delhi: Prentice-Hall.
- xlii. Seville, E. (2008). *Resilience: Great Concept but What Does it Mean?* Wilmington, USA: Council on Competitiveness - Risk Intelligence and Resilience Workshop, Nov 2008. Access via UC Research Repository. (Conference Contributions - Full conference papers).
- xliii. Seville, E., Porter, J. and Askew, G. (2008). *Enterprise resiliency: A sustainable growth imperative*. Seoul, South Korea: AVESC (Aviation Security) World 2008, 11-13 Nov 2008. Access via UC Research Repository. (Conference Contributions - Full conference papers).
- xliv. Staber, U. (1998). *Inter-firm co-operating and competition in industrial districts*. *Organisation studies*. 19(4)
- xlv. Valikangas, L. (2009). *Four steps to corporate Resilience*. Woodside, California
- xlvi. Valikangas, L. (2009). *The Resilient Organisation: How Adaptive Culture Thrives Even when strategy fails*. Mc-Graw Hill Inc. USA
- xlvii. Yossi, S. (2005). *The resilient enterprise: Overcoming vulnerability for competitive advantage*. Cambridge, MA, The MIT Press.
- xlviii. Zikmund, W.G. (2003). *Business research methods*, (7th edn), Thompson South-Western: Ohio
- xlix. [www.orghealth.co.uk](http://www.orghealth.co.uk) (2012). *Corporate Resilience*

### Appendices

	<b>Acquisition</b>	<b>Mergers</b>	<b>Ent. Resilient</b>
Acquisition	1		
Mergers	.416**	1	
Ent. Resilient	.261**	.381**	1

*Table 1: Convergent validity results*

	<b>Alpha from Pre-test</b>	<b>Alpha from the final test</b>	<b>Number of items in the final test</b>	<b>Items deleted</b>
Acquisition	0.808	0.8572	11	01
Mergers	0.798	0.902	10	02
Ent. Resilient	0.813	0.878	09	01

*Table 2: Reliability coefficient for each variable*

		<b>Acquisition</b>	<b>Mergers</b>	<b>Ent. Resilience</b>
Pearson's	Acquisition correlation	1.000	.057	.538**
	Sig. (2-tailed)		.460	.000
	N	17	17	17
	Mergers correlation	.057	1.000	.211**
	Sig. (2-tailed)	.460		.006
	N	17	17	17
	Ent. resilience correlation	.538**	.211**	1.000
	Sig. (2-tailed)	.000	.006	
	N	17	17	17

*Table 3: Correlation between elements of collaborative behaviour and enterprise resilience*