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**THE MODERATING EFFECTS OF BOARD EQUITY
OWNERSHIP ON THE RELATIONSHIP BETWEEN
ENTERPRISE RISK MANAGEMENT (ERM) PRACTICES
AND THE PERFORMANCE OF FINANCIAL INSTITUTIONS
IN NIGERIA**

AHMED, IDRIS



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OWNERSHIP ON THE RELATIONSHIP BETWEEN
ENTERPRISE RISK MANAGEMENT (ERM) PRACTICES
AND THE PERFORMANCE OF FINANCIAL INSTITUTIONS
IN NIGERIA**

By



**Thesis submitted to
School of Economics, Finance and Banking, College of Business,
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the Degree of Doctor of Philosophy**



Kolej Perniagaan
(College of Business)
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Pemeriksa Dalam (Internal Examiner)	:	Dr. Arpah Abu Bakar	Tandatangan (Signature)

Tarikh: 6 September 2016
(Date)

Nama Pelajar
(Name of Student)

: Ahmed Idris

Tajuk Tesis / Disertasi
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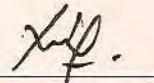
: Doctor of Philosophy

Nama Penyelia/Penyelia-penyalia
(Name of Supervisor/Supervisors)

: Assoc. Prof. Dr. Norlida Abdul Manab



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ABSTRACT

Corporate failure around the world has triggered scholars and professionals to re-examine the link between risk management practices and performance of organizations. The prime objective of this study is to examine the impact of enterprise risk management (ERM) framework implementation and ERM success factors include compliance (COP), risk management culture (RMC), risk management information (RMI), risk knowledge sharing (RKS), staff competence (SC), organisational innovativeness (OIN) and leadership factor (LF) on the performance of financial institutions in Nigeria. The study also aims to determine the moderating effect of board equity ownership (BEO) on the relationship between risk management framework (RMF) implementation, ERM success factors, and performance of financial institutions. Survey data on 163 randomly selected firms from five subsectors of financial institutions were collected. Partial Least Squares Structural Equation Modelling (PLS-SEM) was used to test hypotheses. The findings of the study reveal that RMF, COP, RMC, RMI, RKS, SC, and LF have positive and significant effects on the performance of financial institutions. Contrary to expectation, OIN negatively influences the firm performance. Furthermore, BEO moderates positively the relationship between RMF, COP, RMI, RKS, and firm performance. However, BEO does not have significant moderating effects on RC, SC, OIN, and LF. The results of this study offer valuable insight to financial institutions, regulators, and researchers to further understand the effects of ERM practices on firm performance. The study recommends that firms and regulatory agencies should promote sound risk culture with a view to increase risk awareness, establish a robust information management system for comprehensive risk analysis and reporting, devise internal risk knowledge sharing strategies to boost staff capabilities and entrench effective leadership role to handle complex firms' operational activities.

Keywords: enterprise risk management, success factors, board equity ownership, Nigerian financial sector, firm performance

ABSTRAK

Kegagalan pihak korporat di seluruh dunia telah mencetuskan minat ahli akademik dan golongan profesional untuk mengkaji semula hubungan antara amalan pengurusan risiko dengan prestasi organisasi. Objektif utama kajian ini adalah untuk meneliti impak pelaksanaan rangka kerja pengurusan risiko enterprise (ERM) dan faktor kejayaan ERM, termasuklah pematuhan (COP), budaya pengurusan risiko (RMC), maklumat pengurusan risiko (RMI), perkongsian pengetahuan risiko (RKS), kecekapan kakitangan (SC), inovasi organisasi (OIN) dan faktor kepimpinan (LF) terhadap prestasi institusi kewangan di Nigeria. Kajian ini juga bermatlamat untuk menentukan kesan penyederhana pemilikan ekuiti lembaga pengarah (BEO) terhadap hubungan antara pelaksanaan rangka kerja pengurusan risiko (RMF), faktor kejayaan ERM, dengan prestasi institusi kewangan. Data kajian dikutip daripada 163 syarikat yang dipilih secara rawak di lima subsektor institusi kewangan. Pendekatan kuasa dua terkecil separa untuk permodelan persamaan berstruktur (PLS-SEM) telah digunakan untuk menguji hipotesis. Dapatkan kajian memperlihatkan bahawa RMF, COP, RMC, RMI, RKS, SC, dan LF mempunyai kesan yang positif dan signifikan terhadap prestasi institusi kewangan. Sebaliknya, OIN mempengaruhi prestasi firma secara negatif. Selain itu, BEO menyederhana hubungan secara positif antara RMF, COP, RMI, dan RKS dengan prestasi firma. Walau bagaimanapun, BEO tidak mempunyai kesan penyederhana yang signifikan terhadap RC, SC, OIG, dan LF. Dapatkan kajian memberikan maklumat yang bernilai kepada institusi kewangan, para pengawal selia, dan penyelidik untuk terus memahami kesan amalan ERM terhadap prestasi firma. Kajian ini mencadangkan agar firma dan agensi kawal selia menggalakkan budaya risiko yang teguh untuk meningkatkan kesedaran tentang risiko, mewujudkan satu sistem pengurusan maklumat yang mantap untuk menghasilkan analisis dan laporan risiko yang menyeluruh, merangka strategi perkongsian pengetahuan risiko dalam bagi meningkatkan keupayaan kakitangan, dan mengukuhkan peranan kepimpinan yang berkesan untuk mengendalikan operasi firma yang kompleks.

Kata kunci: pengurusan risiko enterprise, faktor kejayaan, pemilikan ekuiti lembaga pengarah, sektor kewangan Nigeria, prestasi firma

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LIST OF ABBREVIATIONS

AT	Agency Theory
AVE	Average Variance Extracted
BSC	Balance Score Card
CAS	Casualty Actuarial society
CBN	Central Bank of Nigeria
CFO	Chief Financial Officer
CG	Corporate Governance
CMV	Common Method Variance
COSO	Committee of Sponsoring Organisation of Treadway Commission
CRO	Chief Risk Officer
ERM	Enterprise Risk Management
F^2	Effect Size
FFP	Financial Firm Performance
FSB	Financial Stability Board
IMF	International Monetary Fund
ISO	International Standard Organisation
KPMG	One of the Big Four Auditing Firm
LR	Leadership Role
MPT	Modern Portfolio Theory
NAICOM	National Insurance Commission
NBS	National Bureau of Statistics
NDIC	Nigerian Deposit Insurance Corporation
NFP	Non-financial Firm Performance
Pc	Composite Reliability
PENCOM	Pension Commission
PLS	Partial Least Squares
Q^2	Predictive Relevance
R^2	R-squared values
RBV	Resource Based View
RMC	Risk Management Culture
RMF	Risk Management Framework

RMI	Risk Management Information
RO	Risk Officer
SEC	Security and Exchange Commission
SEM	Structural Equation Modelling
SPSS	Statistical Package for the Social Sciences
TLM	Top Level Manager
TRM	Traditional Risk Management
VIF	Variance Inflation Factor



CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Corporate failure has triggered scholars and professionals to re-examine the link between risk management initiatives and the performance of business organizations.

The collapse of Enron, WorldCom, and Lehman Brothers among others were among the worst corporate scandals of the 21st century(Alsop, 2004; Young & Perez, 2002).

Given the complexities surrounding corporate organisations, the strength to manage risk exposures has become essential to the survival of firms (Boniface & Ibe, 2012).

In fact, business firms continued to face sharp instability from the effect of globalization, deregulations, and other challenges (Shecterle, 2010). Thus, the inability of firms to be proactive in risk assessment, mitigation and control had resulted in poor firm performance. In essence, a change in the customer expectations, engagement imperatives, performance assessments, risk management skills and competencies required to effectively improve business performance have become necessary. These challenges have brought the issue of risk management to the limelight (Awoyemi, 2010; Rostami, Sommerville, Wong, & Lee, 2015).

Similarly, the Asian financial crisis of 1997 and the recent global financial crisis of 2008 have further emphasized the importance of risk management strategies for firms' survival. The global economic meltdown is an indicator that regulatory agencies need to increase their monitoring and surveillance capabilities to ensure a sound global financial systems (Nicolas, 2012). Financial institutions are among the most significant economic drivers that improve the welfare of individuals by supporting the ability of households and business entities to hold and transfer

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REFERENCES

- Abd Razak, N., Ab Rahman, Z., & Borhan, H. (2016). Modeling firm resources – enterprise risk management relationships: An empirical finding using PLS-SEM. *World Journal of Entrepreneurship, Management and Sustainable Development*, 12(1), 35–49.
- Abdullah, M. A. N., Zakuan, N., Khayon, M., Ariff, M. S. M., Bazin, N. E. N., & Saman, M. Z. M. (2012). Adoption of enterprise risk management practices in organization: A Review. *International Journal of Business and Information Technology*, 2(1), 1–9.
- Abiola, J. O., & Ojo, S. O. (2012). Compliance with regulatory financial reporting and corporate governance practices in selected primary mortgage institutions in Nigeria. *International Journal of Business and Social Science*, 3(15), 246–254.
- Acharyya, M. (2008). In measuring the benefits of enterprise risk management in insurance: An integration of economic value added and balanced score card approaches. *Society of Actuaries*, 1–25.
- ACI Worldwide. (2014). *Taking risk management from the silo across the enterprise (Report No. ATL5537 10-14)*. ACI worldwide Universal Payments Company. Retrieved from www.aciworldwide.com
- Acuna, E., & Rodriguez, C. (2004). The treatment of missing values and its effect on classifier accuracy. In B. David, R. Frederick, & W. Gaul (Eds.), *Studies in Classification, Data Analysis, and Knowledge Organisation* (pp. 639–648). Berlin Heidelberg: Springer-Verlag.
- Adeusi, S. O., Akeke, N. A., Obawale, S., Oladunjoye, O., Oluwafemi, D. S., Israel, N. A., ... Olawale, O. (2013). Risk management and financial performance of banks in Nigeria. *Journal of Business and Management*, 14(6), 52–56.
- Adomi, E. E., Ayo, B. T., & Nakpodia, E. D. (2007). A better response rate for questionnaires: Attitudes of librarians in Nigerian University Libraries. *Library Philosophy and Practice*, 9(2), 50.
- Aduloju, S. A., Awoponle, A. L., & Oke, S. A. (2008). Recapitalization, mergers, and acquisitions of the Nigerian insurance industry. *The Journal of Risk Finance*, 9(5), 449–466.
- Agarwal, S., Erramilli, M. K., & Dev, C. S. (2003). Market orientation and performance in service firms: Role of innovation. *Journal of Services*

- Marketing*, 17(1), 68–82.
- Agu, C. C. (2011). *Understanding the ABC of the financial system*. Retrieved from www.unn.edu.ng/wp-content/uploads/2015/09/42nd-Lecture.pdf
- AIG. (2014). *Financial institution risk management issues (White paper)*. Retrieved from www.aig.com/.../financial-institution-risk-management-issues-2014-01-13-brochure.pdf
- Akinkoye, E. Y., & Olasanmi, O. O. (2014). Corporate governance practice and level of compliance among firms in Nigeria: Industry analysis. *Journal of Business and Retail Management Research*, 9(1), 13–26.
- Aksoy, M., Apak, S., Eren, E., & Korkmaz, M. (2014). Analysis of the effect of organisational learning based on organisational culture on performance, job satisfaction and efficiency: A field study of banking sector. *International Journal of Academic Research*, 6(1), 301–313.
- Al-gharaibeh, S. M. A., & Malkawi, N. M. (2013). The impact of management information systems on the performance of governmental organizations- Study at Jordanian ministry of planning. *International Journal of Business and Social Science*, 4(17), 101–109.
- Al-Swidi, A. K. (2012). *The moderating effect of organisational culture on the relationship between total quality management, entrepreneurial orientation and the performance of banks in Yemen*. Universiti Utara Malaysia.
- Albring, S., Robinson, D., & Robinson, S. M. (2013). Audit committee financial expertise, corporate governance, and the voluntary switch from auditor-provided to non-auditor provided tax services. *Advances in Accounting*, 1–14.
- Allan, N., & Beer, L. (2006). *Strategic risk: It's all in your head* (No. 2006.01). School of Management (Vol. 276).
- Alreck, P. L., & Settle, R. B. (1995). *The survey research handbook: Guidelines and strategies for conducting a survey* (2nd ed.). New York, NY: McGraw Hill.
- Alsop, R. (2004). Corporate scandals hit home; reputations of big companies tumble in consumer survey; ‘money can rob the goodness. *Wall Street Journal*, P. B1.
- Altaany, F. H. (2013). Impact of management information systems to improve performance in municipalities in north of Jordan. *Interdisciplinary Journal of Contemporary Research in Business*, 5(6), 429–446.
- Altuntas, M., Berry-Stolzle, T. R., & Hoyt, R. E. (2011). Dynamic determinants of

- enterprise risk management adoption in the property-liability insurance industry: evidence from Germany. *Journal of Risk Management*, 123(17), 1234–1244.
- Alves, C., & Mendes, V. (2001). *Corporate governance policy and company performance: The case of Portugal. Working Papers*.
- Alviniussen, A., & Jankensgard, H. (2009). Enterprise risk budgeting: Bringing risk management into the financial planning process. *Journal of Applied Finance*, 19(1/2), 178–192.
- Amedu, S. (2010). Global financial market meltdown and the Nigerian Stock market crash of 2008: Any lessons for market players and regulators? *Nigerian Journal of Securities and Finance*, 15(1), 99–125.
- Amenta, E., & Ramsey, K. M. (2010). Institutional theory. *Handbook of Politics*, 15–39.
- Ammann, M., Oesch, D., & Schmid, M. M. (2011). Corporate governance and firm value: International evidence. *Journal of Empirical Finance*, 18(1), 36–55.
- Anthropopoulou, A. (2005). Knowledge sharing: A critical success factor for risk management. In *In Proceedings of 6th European Conference on Knowledge Management* (pp. 26–33). UK: Academic Conferences Limited.
- Antonopoulos, N., & Gillam, L. (2010). *Cloud computing: Principles, systems and applications*. Springer Science & Business Media. Retrieved from <http://arxiv.org/abs/0912.1905>
- Antony, J. P., & Bhattacharyya, S. (2010). Measuring organizational performance and organizational excellence of SMEs Part 2: an empirical study on SMEs in India. *Measuring Business Excellence*, 14(3), 42–52.
- Archer, D. (2002). Creating a risk management framework. *CMA Management*, 76(1), 16–19.
- Arena, M., Arnaboldi, M., & Azzone, G. (2010). The organizational dynamics of Enterprise Risk Management. *Accounting, Organizations and Society*, 35(7), 659–675.
- Armstrong, J. S., & Overton, T. S. (1977). Estimating non-response bias in mail surveys. *Journal of Marketing Research*, 14(3), 396–402.
- Arnold, V., Benford, T., Canada, J., & Sutton, S. G. (2011). *Enhancing strategic flexibility and performance through enterprise risk management: The enabling*

- role of information technology.* Retrieved from www.raw.rutgers.edu/docs
- Arnold, V., Benford, T. S., Hampton, C., & Sutton, S. G. (2014). Enterprise risk management: Re-Conceptualizing the role of risk and trust on information sharing in transnational alliances. *Journal of Information Systems*, 28(2), 257–285.
- Arthur, M. G. (1994). *Integrated compliance and total risk management: Creating a bankwide compliance program that works.* Chicago: Probus Publishing Company.
- Asat, S. H., Maruhun, E. N. S., Haron, H., & Jaafar, M. (2015). Enterprise risk management (ERM) and organisational performance: The case of housing developers in Malaysia. In *MARIM International Conference, Langkawi*.
- Asher, A., & Wilcox, T. (2015). Virtue and risk culture in finance. In *The Actuaries Institute 2015 ASTIN, AFIR/ERM and IACA Colloquia* (Vol. 61).
- Augustine, I. E., Ajayi, J. R., Ade, B. A., & Adakole, A. (2013). Assessment of risk management practices in Nigerian construction industry:Toward establishing risk management index. *International Journal of Pure and Applied Sciences and Technology*, 16(2), 20–31.
- Aven, T. (2011). On the new ISO guide on risk management terminology. *Reliability Engineering and System Safety*, 96(7), 719–726.
- Awoyemi, O. (2010). Repositioning corporate Nigeria:lessons in corporate reputation management. In *Nigerian Institute of International Affairs*.
- Aziz, R. A., Abdullah, M. H., Anas, T., & Mahmood, R. (2013). The effects of leadership styles on the business performance of SMEs in Malaysia. *International Journal of Economics, Business and Management Studies*, 2(2), 45–52.
- Ballantyne, R. (2013). *An empirical investigation into the association between enterprise risk management and firm financial performance.* Lawrence Technological University.
- Baney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Baney, J., Wright, M., David, J., & Ketchen, J. (2001). The resource-based view of the firm: Ten years after 1991. *Journal of Management*, 27(6), 625–641.
- Bank for International Settlement. (2011). *Principles for the sound management of*

- operational risk (Basel Committee on banking supervision).* Retrieved from www.bis.org
- Baregheh, A., Rowley, J., & Sambrook, S. (2009). Towards a multidisciplinary definition of innovation. *Management Decision*, 47(8), 1323–1339.
- Barlet, C. E., Duguet, D. E., & Pradel, J. (2000). The Commercial Success of Innovations: An Econometric Analysis at the Firm Level in French Manufacturing. In D. Encaoua (Ed.), *The Economics and Econometrics of Innovation* (pp. 435–456). Boston: Kluwer Academic Publishers.
- Barnabei, M. (2008). *Risk management psychology and practice. Master of Science in Organizational Dynamics*. University Pennsylvania.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182.
- Bartesaghi, M., Grey, S. H., & Gibson, S. (2012). Defining (the Concept of) Risk. *Poroi*, 8(1), 6.
- Bartlett, J. E., Kotrlik, J. W. K. J. W., & Higgins, C. (2001). Organizational research: Determining appropriate sample size in survey research appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal*, 19(1), 43.
- Baxter, P., & Susan, J. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report Volume*, 13(4), 544–559.
- Baxter, R., Bedard, J. C., Hoitash, R., & Yezegel, A. (2013). Enterprise risk management program quality: determinants, value relevance, and the financial crisis. *Contemporary Accounting Research*, 30(4), 1264–1295.
- BaxterBruce Ltd. (2013). *Enterprise risk management: The challenges and benefits of implementing ERM (industry report)* (Vol. 44). Retrieved from www.baxterbruce.com
- Bayer, F., & Maier, R. (2007). Governing knowledge risks design and results of an empirical study. *Organization Science*, (September), 200–208.
- Beasley, B. M. S., Branson, B. C., & Hancock, B. V. (2010a). Are you identifying your most significant risks? *Strategic Finance*, (November), 29–35.

- Beasley, M., Branson, B., & Pagach, D. (2015). An Analysis of the maturity and strategic impact of investments in ERM. *Journal of Accounting and Public Policy*. Retrieved from <http://dx.doi.org/10.1016/j.jaccpubpol.2015.01.001>
- Beasley, M., Pagach, D., & Warr, R. (2008). Information conveyed in hiring announcements of senior executives overseeing enterprise-wide risk management processes. *Journal of Accounting, Auditing & Finance*, 23(3), 311–332.
- Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *The Accounting Review*, 71(4), 443–465.
- Beasley, M. S., Branson, B. C., & Hancock, B. V. (2010b). How key risk indicators can sharpen focus on emerging risks. In L. F. Mark & J. A. Richard (Eds.), *Practical Approaches for Getting Started*.
- Beasley, M. S., Clune, R., & Hermanson, D. R. (2005). Enterprise risk management: An empirical analysis of factors associated with the extent of implementation. *Journal of Accounting and Public Policy*, 24(6), 521–531.
- Beck, U. (1992). *Risk Society: Towards a new modernity*. London.
- Bekefi, T., Epstein, M. J., & Yuthas, K. (2008). *Managing opportunities and risks* (Report No. -55302-212-2). Retrieved from <http://www.cimaglobal.com>
- Beltratti, A., & Stulz, R. (2009). *Why do bank perform better during the credit crisis?A cross country study of the impact of governance and regulation*.
- Beneda, N. (2005). Managing an asset management firm's risk portfolio. *Journal of Asset Management*, 5, 327–337.
- Berenbeim, R. (2004). The value based enterprise: A new corporate citizenship paradigm. In *The Asia Foundation's Hong Kong Symposium on Corporate Citizenship and the Taipei Corporate Citizenship Forum October* (pp. 27–29). Hong Kong,
- Bertinetti, G. S., Cavezzali, E., & Gardenal, G. (2013). *The effect of the enterprise risk management implementation on the firm value of European companies* (No. 10/2013).
- Bhabra, G. S., Ferris, S. P., Sen, N., & Yen, P. P. (2003). Corporate governance in Singapore: The impact of directors' equity ownership. *Advances in Financial Economics*, 8, 29–46.

- Bhabra, G. S., Ferris, S. P., Sen, N., & Yen, P. P. (2015). Corporate governance in Singapore: The impact of directors' equity ownership. *Advances in Financial Economics*, 8(1), 29–46.
- Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of Corporate Finance*, 14(3), 257–273.
- Bharathy, G. K., & Mcshane, M. K. (2014). Applying a systems model to enterprise risk management. *Engineering Management Journal*, 26(4), 38–46.
- Bhatti, M. A., & Sundram, V. P. K. (2015). *Business research: Quantitative and qualitative methods*. Kuala Lumpur, Malaysia: Pearson Malaysia.
- Bhimani, A. (2009). Risk management, corporate governance and management accounting: Emerging interdependencies. *Management Accounting Research*, 20(1), 2–5.
- Blaauw, A. (2009, November 8). From enterprise risk management to governance risk and compliance. *Vanguard*. Retrieved from <http://www.vanguardngr.com/2009/11>
- Blach, J. (2010). Financial risk identification based on the balance sheet information. *Managing and Modelling of Financial Risks*, 8(9), 1–10.
- Black Sea Trade & Development Bank. (n.d.). *Operational risk management policy (Report No. 4457)*. Retrieved from <https://www.nib.int/filebank>
- Blaskovich, J., & Taylor, E. Z. (2011). By the numbers: Individual bias and enterprise risk management. *Institute of Behavioral and Applied Management*, 13(c), 5–24.
- Boniface, U., & Ibe, I. G. (2012). Enterprise risk management and performance of Nigeria's brewery industry. *Developing Country Studies*, 2(10), 60–67.
- Booth, J. R., Cornett, M. M., & Tehranian, H. (2002). Boards of directors, ownership, and regulation. *Journal of Banking & Finance*, 26(10), 1973–1996.
- Bostancı, O. (2013). *Presentation of a risk culture framework and assessment of risk culture at Garanti Bank, Turkey*.
- Bouwens, J., & Verriest, A. (2014). *Putting skin in the game : managerial ownership and bank risk-taking* (No. 14–070). *Harvard Business Review*.
- Boyatzis, R. E. (2008). Competencies in the 21st century. *Journal of Management Development*, 27(1), 5–12.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology Using

- thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 37–41.
- Bris, A. (2010). *The lehman brothers case: A corporate governance failure, not a failure of financial markets (IMD Report)*. Retrieved from www.imd.ch
- Brown, R. B. (2006). *Doing your dissertation in business and management: The reality of researching and writing*. London: Sage Publications Limited.
- Bruno, L. F. C., & De-Sousa, J. O. P. (2009). *Organisational cultutre: How to measure it- a case study*. E-Leader Tallinn.
- Bryman, A. (2004). Quantity and quality in social research. In M. Bulmer (Ed.), *Social Research Today and Contemporary Social Research* (Vol. 18, pp. 1–208). New York: Taylor & Francis e-Library.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Caldwell, J. E. (2012). *A framework for board oversight of enterprise risk*. Canada: Canada Institute of Chartered Accountants.
- Cameron, K. ., & Quinn, R. . (2011). *Diagnosing and changing organisational culture based on the competing Values framework, 3rd edition*. San Francisco, CA: John Wiley and Sons.
- Campbell, K. a. (2015). Can effective risk management signal virtue-based leadership? *Journal of Business Ethics*, 129, 115–130.
- Carey, A. (2001). Effective risk management in financial institutions: the Turnbull approach. *Balance Sheet*, 9(3), 24–27.
- Carol Liu, M. H., Tiras, S. L., & Zhuang, Z. (2014). Audit committee accounting expertise, expectations management, and non-negative earning surprises. *Journal of Accountancy and Public Policy*, 33(2), 145–166.
- Carroll, R., Hoppes, M., Hagg-Rickert, S., Youngberg, B. J., McCarthy, B. A., Shope, D., ... Driver, J. (2014). *Enterprise risk management: A framework for success*.
- Casimir, G., Lee, K., & Loon, M. (2012). Knowledge sharing: Influences of trust, commitment and cost. *Journal of Knowledge Management*, 16(5), 740–753.
- Casualty Acturial Society. (2003). *Overview of enterprise risk management*. Ontario Canada.
- CBN. (2006). *Code of corporate governance*. Abuja Nigeria. Retrieved from www.cbn.gov.ng/OUT/PUBLICATIONS/BSD/2003/CORPGOV.PDF

- CBN. (2008a). *Banking supervision annual report*. CBN. Abuja, Nigeria.
- CBN. (2008b). *Supervisory framework for banks and other financial institutions*. Retrieved from http://www.cbn.gov.ng/out/2010/circular/BSD/CBN_RBS_Framework-KIM_final_12_2010.PDF
- CBN. (2010). *Financial stability report*. Abuja Nigeria. Retrieved from <https://www.cbn.gov.ng>
- CBN. (2012). *Competency framework for the Nigerian banking industry*. Abuja Nigeria. Retrieved from https://www.cbn.gov.ng/out/2012/ccd/competency_framework.pdf
- CBN. (2014a). *Code of corporate governance for banks and discount houses in Nigeria*. CBN. Retrieved from <https://www.cbn.gov.ng>
- CBN. (2014b). *Revised guidelines for finance companies*. Retrieved from <https://www.cbn.gov.ng>
- CBN. (2014c). *The list of financial institutions*. Abuja Nigeria. Retrieved from www.cenbank.org/supervision
- Chaffey, D., & Wood, S. (2005). *Business information management: Improving performance using information systems*. Pearson Education Limited, Essex.
- Chan, L. L. M., Shaffer, M. A., & Snape, E. (2004). In search of sustained competitive advantage: the impact of organizational culture, competitive strategy and human resource management practices on firm performance. *International Journal of Human Resource Management*, 15(1), 17–35.
- Che-Ha, N., Mavondo, F. T., & Mohd-Said, S. (2014). Performance or learning goal orientation: Implications for business performance. *Journal of Business Research*, 67, 2811–2820.
- Chee, C. I. (2011). *Risk management*. Kuala Lumpur, Malaysia: Pearson Education Limited.
- Chich-Jen, S., & Wang, I.-M. (2010). A study of the relationships between corporate core competence, management innovation and corporate culture. *International Journal of Organizational Innovation*, 2(3), 395–411.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern Methods for Business Research* (pp. 295–336). Mahwah, New Jersey: Laurence Erlbaum Associates.
- Chin, W. W., Marcolin, B. L., & Newsted, P. R. (2003). A partial least squares latent

- variable modeling approach for measuring interaction effects: Results from a Monte Carlo simulation study and an electronic-mail emotion/adoption study. *Information Systems Research*, 14(2), 189–217.
- Choi, Y., Ye, X., Zhao, L., & Luo, A. C. (2015). Optimizing enterprise risk management: a literature review and critical analysis of the work of Wu and Olson. *Annals of Operations Research*, 1–7.
- Choo, B. S., & Goh, J. C. (2014). Adapting the ISO31000 : 2009 enterprise risk management framework using the six sigma approach. In *Proceedings of the 2014 IEEE* (pp. 39–43).
- Chow, C. W., & Van Der Stede, W. a. (2006). The use and usefulness of nonfinancial performance measures. *Management Accounting Quarterly*, 7(3), 1–9.
- Ciocoiu, C. N., & Dobrea, R. C. (2010). *The role of standardization in improving the effectiveness of integrated risk management*. (Giancarlo Nota, Ed.). Intech Open Access Publishers.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). London: Lawrence Erlbaum Associates Publisher.
- Cohen, J. R., Holder-Webb, L. L., Nath, L., & Wood, D. (2012). Corporate reporting of nonfinancial leading indicators of economic performance and sustainability. *Accounting Horizons*, 26(1), 65–90.
- Collier, P. M., Berry, A. J., & Burke, G. T. (2006). Best practice guidelines for enterprise-wide internal control procedures. *Risk and Management Accounting*, 2(11), 1–8.
- Cooper, T., Speh, C., & Downey, A. (2012). *Creating a Culture of Risk Management*. ARC Logics.
- Coram, P. J., Mock, T. J., & Monroe, G. S. (2011). Financial analysts' evaluation of enhanced disclosure of non-financial performance indicators. *British Accounting Review*, 43(2), 87–101.
- COSO. (2004). *Enterprise risk management: Integrated framework executive summary* (Vol. 3).
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. London: Sage Publications Inc.
- Creswell, J. W. (2014). *Research Design*. New Delhi: Sage Publications Inc.

- Creswell, J. W., & Clark, V. L. P. (2007). *Designing and conducting mixed methods research*. California: Sage Publications.
- Crook, T. R., Kretchen, J. D., Combs, J. G., & Todd, S. Y. (2008). Strategic resources and performance: A meta analysis. *Strategic Management Journal*, 29, 1141–1154.
- Cumming, C. M., & Hirtle, B. J. (2001). The challenges of risk management in diversified financial companies. *FRBNY Economic Policy Review*, (November), 1–17.
- D'Arcy, S. P. (2001). Enterprise risk management. *Journal of Risk Management of Korea*, 12(1), 207–228.
- Dabari, I. J., & Saidin, S. (2015). Current state of enterprise risk management practices in the Nigerian banking industry. *IOSR Journal of Business and Management*, 17(6), 27–33.
- Dafikpaku, E. (2011). The strategic implications of enterprise risk management : A framework. In *Enterprise Risk Management Symposium* (pp. 1–49). Society of Actuaries. Retrieved from www.ermssymposium.org/2011/pdf/Dafikpaku.pdf
- Daft, R. L. (2010). *Organization theory and design: Tenth edition*. Mason, Ohio: South-Western Cengage Learning.
- Daily Independent Nigeria. (2014, October 29). Insurers urged to implement enterprise risk management. *Daily Independent Nigeria*. Abuja Nigeria. Retrieved from <http://dailyindependenlg.com/2014/10/insurers-urged-implement-enterprise-risk-management/>
- Dagleis, F., & Cooper, B. J. (2005). Risk management: Developing a framework for a water authority, management of environmental quality. *An International Journal*, 16(3), 235–249.
- Dali, A., & Lajtha, C. (2012). ISO 31000 risk management: The gold standard. *Edpacs*, 45(5), 1–8.
- Damanpour, F., & Evan, W. M. (1990). The adoption of innovations over time: structural characteristics and performance of organizations. In *National Decision Science Institute Conference, San Diego, 1990*. San Diego.
- Damapour, F. (1996). Organizational complexity and innovation: Developing and testing multiple contingency models. *Management Science*, 42(5), 693–715.
- DataStar. (2013). *How to interpret standard deviation and standard error in survey*

- research*. Retrieved from www.surveystar.com/startips/jan2013.pdf
- Daud, N. W., Yazid, A. S., & Hussin, M. H. R. (2010). The effect of chief risk officer (CRO) on enterprise risk management (ERM) practices: Evidence from Malaysia. *International Business & Economics*, 9(11), 55–64.
- Daud, W. N., Haron, H., & Ibrahim, N. D. (2011). The role of quality board of directors in enterprise risk management (ERM) practices: Evidence from binary logistic regression. *International Journal of Business and Management*, 6(12), 205–211.
- Davidson, G. M. (2003). *The relationship between organisational culture and financial performance in a South African Investment Bank*. University of South Africa.
- Dawes, J. (2008). Do data characteristics change according to the number of scale points used? An experiment using 5 point, 7 point and 10 point scales. *International Journal of Market Research*, 50(1), 61–18.
- Dawson, C. (2007). *Practical research methods: A user-friendly guide to mastering research techniques and projects* (3rd ed.). Oxford: How To Books Ltd.
- De Caluwé, C., & Dooren, W. Van. (2013). Do organisations matter? A multilevel analysis explaining perceptions of organizational performance. *Paper Presented at the 11th Public Management Research Conference*. Madison, Wisconsin.
- de Villiers, C., Naiker, V., van Staden, C. J., De-Villiers, C., Naiker, V., & Staden, C. J. J. (2011). The effect of board characteristics on firm environmental performance. *Journal of Management*, 37(6), 1636–1663.
- DeLoach, J., & Thomson, J. (2014). *Improving organisational performance and governance: How the COSO frameworks can help?* COSO.
- Deloitte. (2012). *Cultivating a risk intelligent culture: Understand , measure , strengthen , and report*. Retrieved from www.deloitte.com/us/about
- Deloitte. (2013). *Exploring strategic risk*. Retrieved from <https://www2.deloitte.com/content>
- Deloitte. (2014). *Deloitte insurance risk management survey: State of the industry* (Vol. 2). Retrieved from <https://www.thelibrarybook.net/pdf>
- Demaki, G. O. (2011). Proliferation of codes of corporate governance in Nigeria and economic development. *Business and Management Review*, 1(6), 1 – 7.
- Demsetz, H., & Lehn, K. (1985). The Structure of corporate ownership: Causes and

- consequences. *Journal of Political Economy*, 93(6), 1155–1177.
- Desender, K. A. (2011). On the determinants of enterprise risk management implementation. In S. S. Nan & S. Gilbert (Eds.), *Enterprise IT governance, business value and performance measurement* (pp. 1–25). IGI Global. Retrieved from papers.ssrn.com/sol3/papers.cfm?abstract_id=1025982
- Desender, K., Aguilera, R. V., Crespi, R., Spain, C. C. V. K., & Lamy, M. L. P. (2011). *Foreign ownership and corporate governance patterns: The board-auditor relationship in Japan*. Retrieved from <https://aquila.iseg.utl.pt/aquila/getFile>
- Deutsch, Y., Keil, T., & Laamanen, T. (2010). A dual agency view of board compensation: The joint effects of outside director and CEO stock options on firm risk. *Strategic Management Journal*, 32(2), 212–227.
- Dickinson, G. (2001). Enterprise risk management: Its origins and conceptual foundation. *The Geneva Papers on Risk and Insurance*, 26(3), 360–366.
- Dillman, D. A. (2007). *Mail and internet surveys: The tailored design method, second ed.* (2nd ed.). New York: John Wiley & Sons, Inc.
- Dionne, G. (2013). Risk management: history, definition, and critique. *Risk Management & Insurance Review*, 16(2), 147–166.
- Doherty, N. A. (2000). *Integrated risk management: Techniques and strategies for managing corporate risk*. New York San Francisco Washington, DC: McGRAW HILL, INC.
- Dooley, R. S., & Fryxell, G. E. (1999). Attaining decision quality and commitment from dissent: The moderating effects of loyalty and competence in strategic decision-making teams. *Academy of Management Journal*, 42(4), 389–402.
- Doran, J., & Ryan, G. (2012). Regulation and firm perception, eco-innovation and firm performance. *European Journal of Innovation Management*, 15(4), 421–441.
- Drew, M. (2007). Information risk management and compliance: Expect the unexpected. *BT Technology Journal*, 25(1), 19–29.
- Drucker, P. (1999). *Innovation and Entrepreneurship: Practice and Principles*. B & H Oxford.
- Duarte, P., & Raposo, M. (2010). A PLS model to study brand preference: An application to the mobile phone market. In V. Esposito Vinzi, W. W. Chin, J.

- Henseler, & H. Wang (Eds.), *Handbook of Partial Least Squares* (pp. 449–485). Springer Berlin Heidelberg.
- Ehtesham, U. M., Muhammad, T. M., & Muhammad, S. A. (2011). Relationship between organizational culture and performance management practices : A case of university in Pakistan. *Journal of Competitiveness*, 1(4), 78–86.
- Eichhorn, B. R. (2014). *Common Method Variance Techniques*. Midwest SAS Users Group. Retrieved from <http://mwsug.org/2014-proceedings.html>
- Eicker, S., Kochbeck, J., & Schuler, P. M. (2008). *Employee competencies for business process management*. Berlin Heidelberg.
- Ekrot, B., Kock, A., & Gemünden, H. G. (2016). Retaining project management competence - Antecedents and consequences. *International Journal of Project Management*, 34(2), 145–157.
- Elton, E. J., & Gruber, M. J. (1997). Modern portfolio theory, 1950 to date. *Journal of Banking and Finance*, 21, 1743–1759.
- Ernst & Young. (2015). *Board oversight of corporate culture*.
- Ernst and Young. (2014). *Shifting focus: Risk culture at the fore front of banking*.
- Esposito Vinzi, V., Trinchera, L., & Amato, S. (2010). PLS path modeling: From foundations to recent developments and open issues for model assessment and improvement. In V. Esposito Vinzi, W. W. Chin, J. Henseler, & H. Wang (Eds.), *Handbook of partial least squares: Concepts, methods and applications* (pp. 47–82). Berlin Heidelberg: Springer.
- Esteve-Pérez, S., & Mañez-Castillejo, J. A. (2008). The resource-based theory of the firm and firm survival. *Small Business Economics*, 30(3), 231–249.
- EY Global Limited. (2014). *Developing effective and sustainable risk cultures in banks*. New York. Retrieved from www.ey.com/Publication/vwLUAssets/EY
- Fadun, O. S. (2013a). Promoting enterprise risk management's adoption in business enterprises: Implications and challenges. *International Journal of Business and Management Invention*, 2(1), 69–78.
- Fadun, O. S. (2013b). Risk management and risk management failure: Lessons for business enterprises. *International Journal of Academic Research in Business & Social Sciences*, 3(2), 225–239.
- Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*, 88(2), 288–307.

- Fama, E. F., & Jensen, M. C. (1983). Agency problems and residual claims. *The Journal of Law and Economics*, 26(2), 327.
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175–91.
- Feinberg, B.-J., Ostroff, C., & Burke, W. W. (2005). The role of within-group agreement in understanding transformational leadership. *Journal of Occupational and Organizational Psychology*, 78(3), 471–488.
- Feridun, M. (2006). Risk management in banks and other financial institutions: Lessons from the crash of long-term capital management (LTCM). *Bank and Bank Systems*, 1(3), 132–141.
- Ferreira, A., & Otley, D. (2009). The design and use of performance management systems: An extended framework for analysis. *Management Accounting Research*, 20(4), 263–282.
- Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). London: Sage Publications Inc.
- Financial Stability Board. (2011). *Financial stability issues in emerging market and developing economies (Report to the G-20 finance ministers and central bank governors)*. Retrieved from www.fsb.org/wp-content/uploads/r_111019.pdf
- Financial Stability Board. (2014). *Guidance on supervisory interaction with financial institutions on risk culture: A framework for assessing risk culture*.
- Fink, A. (2003). *The survey handbook* (Vol. 1). Thousand Oaks, CA: Sage.
- Fisher, C. (2010). *Researching and writing a dissertation: A guidebook for business students* (3rd ed.). England: Pearson Education Limited.
- Fornell, C., & Larcker, D. F. . (1981). Evaluating dysfunctional employee behaviors: A test of structural equation models with unobservable traditional and contingency theory postulates: The variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Francoise, D. L., & Winterton, J. (2005). What is competence? *Human Resource Development International*, 8(1), 27–46.
- Fraser, J. R. S., Schoening-Thiessen, K., & Simkins, B. J. (2008). Who reads what most often? A survey of enterprise risk management literature read by risk executives. *Journal of Applied Finance*, 18(1), 73–91.

- Freund, Y. . (1988). Planner's guide critical success factors. *Planning Review*, 16(4), 20–23.
- Frigo, M. L., & Anderson, R. J. (2011a). *Embracing enterprise risk management: Practical approaches for getting started*. Retrieved from www.coso.org
- Frigo, M. L., & Anderson, R. J. (2011b). What is strategic risk management? *Strategic Finance*, 92(10), 21.
- Gaines, C., Hoover, D., Foxx, W., Matuszek, T., & Morrison, R. (2007). Information systems as a strategic partner in organizational performance. *Journal of Management and Marketing Research*, 1–17.
- Galloway, D., & Funston, R. (2000). The challenges of enterprise risk management. *Balance Sheet*, 8(6), 22–25.
- Gamal, D., Salah, T., & Elrayyes, N. (2011). *How to measure organisational innovativeness? An overview of innovation measurement frameworks and innovation audits/management tools* . Technology Innovation and Entrepreneurship Center, Egypt.
- Garba, T., & Abubakar, B. A. (2014). Corporate board diversity and financial performance of insurance companies in Nigeria. *Asian Economic and Financial Review*, 4(2), 257–277.
- Garciaa-Morales, V., Jimenez-Barrionuevo, M., & Gutierrez-Gutierrez, L. (2012). Transformational leadership influence on organizational performance through organizational learning and innovation. *Journal of Business Research*, 65(7), 1040–1050.
- Gaskin, J. (2012). Data screening. Retrieved from <http://statwiki.kolobkreations.com>
- Gates, S., Nicolas, J., & Walker, P. L. (2012). Enterprise risk management: A process for enhanced management and improved performance. *Management Accounting Quarterly*, 13(3), 28–38.
- Gatzert, N., & Martin, M. (2013). *Determinants and value of enterprise risk management: Empirical evidence from the literature* (No. November 23, 2013). *Department for Insurance Economics and Risk Management*. Friedrich-Alexander-University (FAU) of Erlangen-Nürnberg.
- Gavrea, C., Ilieş, L., & Stegorean, R. (2011). Determinants of organizational performance: The case of Romania. *Management & Marketing Challenges for the Knowledge Society*, 6(2), 285–300.

- Gedajlovic, E. R., & Shapiro, D. M. (1998). Management and ownership effects: Evidence from five countries. *Strategic Management Journal*, 19(6), 533–553.
- Geisser, S. (1974). A predictive approach to the random effect model. *Biometrika*, 61, 101–107.
- Ghazali, Z., & Manab, N. A. (2013). Enterprise risk management and value creation: Initial findings amongst non-financial public listed companies in Malaysian Bourse. *Asian Economic and Financial Review*, 3(7), 913–922.
- Gibson, M. (1997). *Information systems for risk management board of governors of the federal reserve system*. (No. 585).
- Gibson, M. S. (1998). The implications of risk management information systems for the organization of financial firms. *International Finance Discussion Paper*, (632).
- Gjerdum, D., & Peter, M. (2011). The new international standard on the practice of risk management—A comparison of ISO 31000: 2009 and the COSO ERM framework. *Risk Management*, (31), 8–13.
- Global Audit Information Network [GAIN]. (2009). *2008 ERM benchmarking survey: Executive summary*. The institute of internal auditors, research foundation. Retrieved from www.theiia.org/gain
- Golshan, N. M., Rasid, A. S. Z., & Zaleha, S. (2012). What leads firms to enterprise risk management adoption? A literature review. In *International Conference on Economics, Business and Marketing Management* (Vol. 29, pp. 1–5). Singapore: IACSIT Press.
- Gompers, P., Joy, I., & Andrew, M. (2003). Corporate governance and equity prices. *Quarterly Journal of Economics*, 118, 107–155.
- Gordon, L. a., Loeb, M. P., & Tseng, C.-Y. (2009). Enterprise risk management and firm performance: A contingency perspective. *Journal of Accounting and Public Policy*, 28(4), 301–327.
- Gozman, D., & Currie, W. (2015). Managing governance, risk, and compliance for post-crisis regulatory change: A model of IS capabilities for financial organizations. *Proceedings of the Annual Hawaii International Conference on System Sciences, 2015–March*, 4661–4670.
- Grabowski, M., & Roberts, K. (1999). Risk mitigation in virtual organisations. *Organisational Science*, 10(6), 704–722.

- Greener, S. (2008). *Business research methods*. BookBoon.
- Grossi, D., Royakkers, L., & Dignum, F. (2007). Organizational structure and responsibility : An analysis in a dynamic logic of organized collective agency. *Artificial Intelligence and Law, 15*, 223–249.
- Gupta, P. . (2004). *Insurance and risk management*. New Delhi: Himalaya Publishing House.
- Haenlein, M., & Kaplan, A. M. (2004). A beginner's guide to partial least squares analysis. *Understanding Statistics, 3*(4), 283–297.
- Hafizuddin-Syah, B. A. M., Abdul-Hamid, M., Janor, H., & Yatim, P. (2014). The implementation of enterprise risk management (ERM) and firm performance : Evidence from Malaysian technology firms. In *The 16th Malaysian Finance Association Conference (MFA2014): Financial Systems Re-Generation: MAPS, GAPS and TRAPS*.
- Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. London: SAGE Publications, Incorporated.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *The 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 Jr, J. F., Black, J. W., Babin, B. J., & Anderson, E. R. (2010). *Multivariate aata analysis: A global perspectives* (Seventh Ed.). New Jersey: Pearson Education Limited.
- Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review, 26*(2), 106–121.
- Hakkak, M., & Ghodsi, M. (2015). Development of a sustainable competitave advantage model based on balanced scorecard. *International Journal of Asian Social Science, 5*(5), 298–308.
- Hampton, J. (2006). Risk pro knows value of networking. *Business Insurance, 40*(45).
- Harrington, S., & Niehaus, G. R. (2003). *Risk Management and Insurance*. USA.:

Irwin/McGraw-Hill.

- Hartono, R., & Sheng, M. L. (2015). Knowledge sharing and firm performance: the role of social networking site and innovation capability. *Technology Analysis & Strategic Management*, 7325(December), 1–13.
- Hase, S. (2000). Measuring organisational capability: Beyond competence. *Future Research, Research Futures*, 1–6.
- Hashim, M., Yousaf, A., Jehangir, M., Khan, S., & Hadi, N. (2012). The impact of management information system on the overall performance and efficiency of the workforce of the accountant general (Peshawar): A research base study. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 2(2), 167–182.
- Hayduk, L. A., & Littvay, L. (2012). Should researchers use single indicators, best indicators, or multiple indicators in structural equation models? *BMC Medical Research Methodology*, 12(159), 1–17.
- Heene, A., & Sanchez, R. (1996). *Competence-based strategic management*. New York: John Wiley.
- Helm, S., Eggert, A., & Garnefeld, I. (2010). Modeling the impact of corporate reputation on customer satisfaction and loyalty using partial least squares. In V. V. Esposito, W. W. Chin, J. Henseler, & H. Wang (Eds.), *Handbook of Partial Least Squares* (pp. 515–534). Berlin Heidelberg: Springer Berlin Heidelberg.
- Henseler, J., & Chin, W. W. (2010). A comparison of approaches for the analysis of interaction effects between latent variables using partial least squares path modeling: Structural equation modeling. *A Multidisciplinary Journal*, 17(1), 82–109.
- Henseler, J., & Fassott, G. (2010). Testing moderating effects in PLS path models: An illustration of available procedures. In V. Esposito, W. W. Vinzi, J. Chin, J. Henseler, & H. Wang (Eds.), *Handbook of Partial Least Squares: Concepts, Methods and Applications* (pp. 713–735). Berlin Heidelberg: Springer.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *New Challenges to International Marketing Advances in International Marketing*, 20, 277–319.
- Henseler, J., & Sarstedt, M. (2013). Goodness-of-fit indices for partial least squares path modeling. *Computational Statistics*, 28(2), 565–580.

- Hill, R. A. (2010). *Portfolio theory and investment analysis*. Ventus Publishing APS.
- Hillman, A. J. A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3), 383–396.
- Hillson, B. D. (2005). Innovative risk management. *Risk Doctor Briefing*, (September), 1–1. Retrieved from <http://www.risk-doctor.com/pdf-briefings/risk-doctor17e.pdf>
- HM Treasury. (2004). *The orange book: Management of risk principles and concepts*. London: HM Treasury. London. Retrieved from www.hm-treasury.gov.uk
- Hoddinott, D. (2007). *Developing and maintaining staff competence* (2nd ed.). London: Health and Safety Executive.
- Hoffman, M. (2009). Interest in enterprise risk management is growing. *Business Insurance*, 43(18), 14–16.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2nd ed.). Oaks CA: Sage.
- Holton, G. A. (2004). Defining risk. *Financial Analysts Journal*, 60(6), 1–7.
- Hopkins, A. (2011). Risk-management and rule-compliance: Decision-making in hazardous industries. *Safety Science*, 49(2), 110–120.
- Hora, M., & Klassen, R. D. (2013). Learning from others' misfortune: Factors influencing knowledge acquisition to reduce operational risk. *Journal of Operations Management*, 31(1–2), 52–61.
- Horton-Bentley, A. (2006). The new best practice: Unifying banking across lines of business. In *KMworld Best practices in Financial Services*, September.
- Hoskisson, R. E., Castleton, M. W., & Withers, M. C. (2009). Complementarity in monitoring and bonding: More compensation. *Academy of Management Perspectives*, (May), 57–74.
- Hotvedt, J. E., & Tedder, P. L. (1978). Systematic and unsystematic risk of rates of return associated with selected forest products companies. *Southern Journal of Agricultural Economics*, 135–138.
- Hoyt, R. E., & Liebenberg, A. P. (2011). The value of enterprise risk management. *Journal of Risk & Insurance*, 78(4), 795–822.
- Hoyt, R. E., Moore, D. L., & Liebenberg, A. P. (2008). *The value of enterprise risk*

- management: Evidence from the US insurance industry.*
- Hsu, I. C. (2008). Knowledge sharing practices as a facilitating factor for improving organizational performance through human capital: A preliminary test. *Expert Systems with Applications*, 35(3), 1316–1326.
- Hurley, R. . F., & Hult, G. T. . (1998). Innovation, market orientation, and organizational learning: an integration and empirical examination. *Journal of Marketing*, 62(3), 42–54.
- Hussin, M. R., Yazid, A. R., & Razali, A. . (2012). Enterprise-wide risk management (EWRM) as a value added tool in enhancing the economic value of business enterprises. *International Business Research*, 5(1), 83–98.
- Hutchison, M. R., & Ngoc, T. B. (2013). Corporate governance and risk management: The role of risk management and compensation committees. *Journal of Contemporary Accounting & Economics*, 9(1), 83–99.
- Hyrsky, K., & Tuunanan, M. (1999). Innovativeness and risk-taking propensity: A cross-cultural study of Finnish and US entrepreneurs and Small business owners. *Business*, 48, 238–256.
- Ibuakah, I. (2012). Key issues & challenges in corporate governance reform in Nigeria. In *International conference HHL Leipzig Graduate School of Management*. Leipzig.
- Idornigie, P. O. (2010). Enhancing corporate value through the Harmonization of corporate value through the Harmonization of corporate codes. In *34th Annual conference of ICSAN*. Abuja Sheraton.
- Iganiga, B. O. (2010). Evaluation of the Nigerian financial sector reforms using behavioral models. *Journal of Economics*, 1(July 2004), 65–75.
- Imamoglu, S. Z., Ince, H., Keskin, H., Karakose, M. A., & Gozokara, E. (2015). The role of leadership styles and organizational learning capability on firm performance. *Journal of Global Strategic Management*, 9(1), 113–124.
- IMF. (2013). *Nigeria : Financial sector stability assessment*.
- Institute of International Finance (IIF). (2008). *Final report of the IIF committee on market best practices: Principles of conduct and best practice recommendations*.
- Institute of International Finance (IIF). (2009). *Risk culture, reform in the financial industry: Strengthening practices for a more stable system*.

- Institute of Risk Management [IRM]. (2012). *Risk culture: Under the microscope guidance for boards* (Vol. 44). Palgrave Macmillan.
- International Finance Corporation. (2012). *Risk taking: A corporate governance perspective*. Washington DC.
- International Standard Organisation [ISO]. (2009). ISO31000:2009 Risk management- Principles and guidelines. Retrieved from http://www.iso.org/iso/catalogue_detail?csnumber=43170
- Ismail, R., & Abidin, S. Z. (2010). Impact of workers' competence on their performance in the Malaysian private service sector. *Business and Economic Horizons*, 2, 25–30.
- Jain, K. K., Sandhu, M. S., & Sidhu, G. K. (2007). Knowledge sharing among academic staff: A case study of business schools in Klang. *JASA*, 2(January), 23–29.
- Jayashree, S. (2006). Some Views on Corporate Governance. *Indira Management Review*.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Johannessen, J., Olaisen, J., & Olsen, B. (1999). Strategic use of information technology for increased innovation and performance. *Information Management & Computer Security*, 7(1), 5–22.
- John, A. O., & Ackah, O. (2015). Employee's competency and organizational performance in the pharmaceutical industry: An empirical study of pharmaceutical firms in Ghana. *International Journal of Economics, Commerce and Management*, III(3), 1–9.
- Jonker, J., & Pennink, B. (2010). *The essence of research methodology: A concise guide for master and PhD students in management sciences*. Germany: Springer.
- Judge, W. Q., Naoumova, I., & Koutzevoi, N. (2003). Corporate Governance and Firm Performance in Russia: An empirical study. *Journal of World Business*, 38(4), 385–396.
- Kalita, M. (2004). Enterprise-Wide Risk Management: Myth or Reality? *Business Credit*, 106(3), 22–23.

- Kama, T. (2006). Event studies in economics and finance. *Journal of Economic Literature*, 35(3), 75–86.
- Kamaruddeen, A. M., Yusof, N. A., & Said, I. (2010). Innovation and innovativeness : Difference and antecedent relationship. In *The Management in Construction Researchers Association (MICRA, 2009 Conference) Universiti Sains Malaysia* (Vol. II, pp. 66–78).
- Kanhai, C., Ganesh, L., & Muhwandavaka, R. (2014). An investigation of the extent of adoption of enterprise risk management (ERM) by banks in Zimbabwe. *International Journal of Business and Commerce*, 3(7), 19–33.
- Kaplan, R. S., & Norton, D. P. (1996). *The balanced scorecard*. Boston: Havard Business School Press.
- Kaplan, R. S., & Norton, D. P. (2005). The balanced scorecard: Measures that drive performance. *Harvard Business Review*, 83.
- Keegan, P., Eiler, G. R., & Jones, C. R. (1989). Are your performance measures obsolete? *Management Accounting Quarterly*, 45–50.
- Kehinde, A. O., & Soyebo, A. Y. (2012). Management information system as a catalyst to organisational performance in the 21 st century: A study of selected banks in Nigeria. *American Journal of Business and Management*, 1(1), 12–17.
- Kelley, K., & Preacher, K. J. (2012). On effect size. *Psychological Methods*, 17(2), 137–152.
- Kelman, H. C. (1958). Compliance, identification, and internalization three processes of attitude change. *Journal of Conflict Resolution*, 2(1), 51–60.
- Kerstin, D., Simone, O., & Nicole, Z. (2014). Challenges in implementing enterprise risk management. *ACRN Journal of Finance and Risk Perspectives*, 3(3), 1–14.
- Kimbrough, R. L., & Componation, P. J. (2009). The relationship between organizational culture and enterprise risk management. *Engineering Management Journal*, 21(2), 18–26.
- Kirsch, P., Hine, A., & Maybury, T. (2015). A model for the implementation of industry-wide knowledge sharing to improve risk management practice. *Safety Science*, 80, 66–76.
- Kleffner, A. E., Lee, R. B., & McGannon, B. (2003a). The effect of corporate governance overnance on the use of enterprise risk management: Evidence from

- Canada. *Risk Management*, 6, 53–73.
- Kleffner, A. E., Lee, R. B., & McGannon, B. (2003b). The effect of corporate governance on the use of enterprise risk management: Evidence from Canada. *Risk Management and Insurance Review*, 6(1), 53–73.
- Kline, R. B. (2011). *Principles and practice of structural equation modeling*. *Journal of Chemical Information and Modeling* (3rd ed., Vol. 53). New York: The Guilford Press.
- Kloman, F. (1992). Rethinking risk management. *The Geneva Papers on Risk and Insurance-Issues and Practice*, 299–313.
- Koenig, D. R. (2008). The human reaction to risk and opportunity. In D. L. Olson & D. Wu (Eds.), *New frontiers in enterprise risk management* (pp. 7–21). Heidelberg Germany: Springer.
- Kornkaew, A. (2012). *Management information system implementation challenges , success key issues , effects and consequences : A Case Study of Fenix System*. Jonkoping International Business School.
- Kothari, C. R. (2004). *Research methodology, methods and techniques (Second Revised Edition)*.
- KPMG. (2011). *Risk management: A driver of enterprise value in emerging environment*. Retrieved from <https://erm.ncsu.edu/library/article/improve-challenges-survey>
- KPMG. (2013). *Expectations of risk Management outpacing capabilities: It's time for action*. Retrieved from <https://www.kpmg.com>
- Kraus, V., & Lehner, O. M. (2012). The nexus of enterprise risk management and value creation: A systematic literature. *ACRN Journal of Finance and Risk Perspectives*, 1(1), 91–163.
- Kreiner, R., & Kinicki, A. (2008). *Organizational behavior*. (8th, Ed.). New York: McGraw-Hill Irwin.
- Krejcie, R. V, & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 38, 607–610.
- Krosnick, J. A., & Fabrigar, L. R. (1997). Designing rating scales for effective measurement in surveys. In L. E. Lyberg, P. Biemer, M. Collins, E. D. De Leeuw, C. Dippo, N. Schwarz, & D. Trewin (Eds.), *Survey Measurement and Process Quality* (pp. 141–164). John Wiley & Sons.

- Kumar, R. (2011). *Research methodology: A step by step guide for beginners* (3rd ed.). New Delhi: Sage Publications Inc.
- Kuye, O. L., Ogundele, O. J. K., & Otike-Obaro, A. (2013). Government bailout of financially distressed banks in Nigeria: A justifiable strategy? *International Journal of Business and Social Sciences*, 4(8), 174–180.
- Kwaku, J., & Mawutor, M. (2014). The failure of lehman brothers : Causes , preventive measures and recommendations. *Reseach Journal of Finance and Accounting*, 5(4), 85–91.
- Kwanbo, M. L., & Abdul-qadir, A. B. (2013). Dispersed equity holding and financial performance of banks in Nigeria. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 3(1), 238–247.
- Laguna, M., Wiechetek, M., & Talik, W. (2012). the Competencies of Managers and Their Business Success. *Central European Business Review*, 1(3), 7–13.
- Lai, F. (2012). A review of enterprise risk management practices among Malaysian public listed companies. *International Journal of Social, Business, Psychological , Human Science and Engineering*, 6(8), 300–306.
- Lai, F.-W. (2014). Examining the dimensions of enterprise risk management implementation framework, its challenges and benefits: A study on Malaysian public listed companies. *Journal of Economics, Business and Management*, 2(2), 81–86.
- Lai, F., & Azizan, N. A. (2012). Critical review of literature on enterprise risk management and the cost of capital: The value creation perspective. *African Journal of Business Management*, 6(9), 3126–3133.
- Lai, F. W., & Samad, F. A. (2011). Enterprise risk management framework and the empirical determinants of Its implementation. *International Conference on Business and Economics Research*, 1, 340–344.
- Laisasikorn, K., & Rompho, N. (2014). A study of the relationship between a successful enterprise risk management system , a performance measurement system and the financial performance of Thai listed companies. *Journal of Applied Business and Economics*, 16(2), 81–92.
- Lalonde, C., & Boiral, O. (2012). Managing risks through ISO 31000: A critical analysis. *Risk Management*, 14(4), 272–300.
- Lam, J. (2000). Enterprise-wide risk management and the role of the chief risk

- officer. *White Paper, ERisk. Com.*
- Lam, J. (2007). *Enterprise risk management at Asian banks: From challenges to strategies.*
- Lamser, I., & Helland, E. (2000). How the chief risk officer is taking centre stage. *Balance Sheet*, 8(6), 26–28.
- Laudon, K. C., & Laudon, J. P. (2012). *Management information system: Managing the digital firm*. Boston, USA: Prentice Hall.
- Leitch, M. (2010). ISO 31000 : 2009 — The new international standard on risk management. *Risk Analysis*, 30(6), 887–892.
- Levine, R. (2004). Risk management systems: Understanding the need. *Information Systems Management*, 21(2), 31–37.
- Levine, R. (2010). An autopsy of the US financial system: accident, suicide, or negligent homicide. *Journal of Financial Economic Policy*, 2(3), 196–213.
- Levy, C., Lamarre, E., & Twining, J. (2010). *Taking control of organizational risk culture (Report from McKinsey & Company)*. Retrieved from <https://www.mckinsey.com>
- Li, Q., Wu, Y., Ojiako, U., Marshall, A., & Chipulu, M. (2014). Enterprise risk management and firm value within China's insurance industry. *Acta Commercii*, 14(1), 1–10.
- Liao, K., Ma, Z., Lee, J.-Y. J., & Ke, K. (2011). Achieving mass customization through trust-driven information sharing: a supplier's perspective. *Management Research Review*, 34(5), 541–552.
- Liebenberg, A. P., & Hoyt, R. E. (2003). The determinants of enterprise risk management: Evidence from the appointment of chief risk officers. *Risk Management and Insurance Review*, 6(1), 37–52.
- Lim, E. N. K., & Mccann, B. T. (2013). The influence of relative values of outside directors options on firm strategic risk from a multi-agent perspectives. *Strategic Management Journal*, 34, 1568–1590.
- Lin, C.-H., Peng, C.-H., & Kao, D. T. (2008). The innovativeness effect of market orientation and learning orientation on business performance. *International Journal of Manpower*, 29, 752–772.
- Lin, Y. C., & Chen, Y. M. (2007). Does innovation lead to performance? An empirical study of SMEs in Taiwan. *Management Research News*, 30(2), 115–

- Lin, Y., Wen, M. M., & Yu, J. (2012). Enterprise risk management: Strategic antecedents, risk integration, and performance. *North American Actuarial Journal*, 16(1), 1–28.
- Lindell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology*, 86(1), 114–121.
- Lindner, J. R., & Wingenbach, G. J. (2002). Communicating the handling of nonresponse error in Journal of Extension Research in Brief articles. *Journal of Extension*, 40, 1–5.
- Ling, Y., Simsek, Z., Lubatkin, M. H., & Veiga, J. F. (2008). The impact of transformational CEOs on the performance of small- to medium-sized firms: Does organizational context matter? *Journal of Applied Psychology*, 93(4), 923–934.
- Liu, X., Ruan, D., & Xu, Y. (2005). A study of enterprise human resource competence appraisement. *Journal of Enterprise Information Management*, 18(3), 289–315.
- Long, C. S., & Ismail, W. K. W. (2011). An analysis of the relationship between HR professionals' competencies and firms' performance in Malaysia. *The International Journal of Human Resource Management*, 22(5), 1054–1068.
- Lowry, P. B., & Gaskin, J. (2014). Partial least squares (PLS) structural equation modeling (SEM) for building and testing behavioral causal theory: When to choose it and how to use it. *IEEE Transactions on Professional Communication*, 57(2), 123–146.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(2), 135–172.
- Lundqvist, S. a. (2014). An exploratory study of enterprise risk management: Pillars of ERM. *Journal of Accounting, Auditing & Finance*, 29(3), 393–429.
- Mahmoud, N., & Ahmed, E. M. (2014). Factors affecting risk management practices and financial performance of Iraqi private banks. *Middle-East Journal of Scientific Research*, 22(7), 971–977.
- Malik, S. A., & Holt, B. (2013). Factors that affect the adoption of Enterprise Risk

- Management (ERM). *OR Insight*, 26(4), 253–269.
- Manab, N. A. (2009). *Enterprise wide risk management (EWRM) implementation, compliance and value creation among public listed companies (PLCs) in Malaysia*. Faculty of Business Management. Universiti Teknologi Mara, Malaysia.
- Manab, N. A., & Ghazali, Z. (2013). Does Enterprise Risk Management Create Value. *Journal of Advanced Management Science Vol, 1*(4), 358–362.
- Manab, N. A., & Kassim, I. (2012). Moderating effect of leadership on a success factors of enterprise-wide risk management practices. In *3rd International conference on Business and economics* (pp. 1727–1741).
- Manab, N. A., Kassim, I., & Hussin, M. R. (2010). Enterprise-wide risk management (EWRM) practices: between corporate governance compliance and value. *International Review of Business Research Papers*, 6(2), 239–252.
- Manab, N. A., Othman, S. N., & Kassim, I. (2012). Enterprise-wide risk management best practices: The critical success factors. *International Journal of Sustainable Development*, 4(3), 1–10.
- Markowitz, H. (1952). Portfolio selection. *The Journal Of Finance*, 7(1), 77–91.
- Martens, B., & Teuteberg, F. (2011). Risk and compliance management for cloud computing services : Designing a reference model. In *Proceedings of the Seventeenth Americas Conference on Information Systems, Detroit, Michigan 4th-7th, August*.
- Martin, W. E., & Bridgmon, K. D. (2012). *Quantitative and statitstical research methods: From hypothesis to results* (1st ed., Vol. 1). San Francisco: Jossey Bass.
- Mayer, C. (2001). Investment and growth: The role of corporate governance. Economic Growth and Government Policy. *HM Treasury Book*, 73–77.
- Mbizi, R., Hove, L., Thondhlana, A., & Kakava, N. (2013). Innovation in SMEs : A review of its role to organisational performance and SMEs operations sustainability. *Interdisciplinary Journal of Contemporary Research in Business*, 4(11), 370–389.
- Mcging, S., & Brown, A. (2013). Board leadership in a complex world- optimising value from risk and opportunity. In *Actuaries Institute Summit* (Vol. 61, pp. 0–33).

- McKinnon, J. ., Harrison, G. ., Chow, C. ., & Wu, A. (2003). Organizational Culture (OC): Association with commitment, job satisfaction, propensity to remain, and information sharing in Taiwan. *International Journal of Business Studies*, 11(1), 25–44.
- Mcleod, R., & Scheel, G. P. (2004). *Management information system*. New Jersey: Pearson Education.
- McNish, R., Schlosser, A., Selandari, F., Stegemann, U., & Vorholt, J. (2013). *Getting to ERM: A road map for banks and other financial institutions*. McKinsey & Company.
- McShane, M. K., Cox, L. A., & Butler, R. J. (2010). Regulatory competition and forbearance: Evidence from the life insurance industry. *Journal of Banking & Finance*, 34(3), 522–532.
- McShane, M. K., Nair, A., & Rustambekov, E. (2011). Does enterprise risk management increase firm value? *Journal of Accounting, Auditing & Finance*, 26(4), 641–658.
- Megginson, L. C., Mosley, D. M., & Pietri, P. J. (1989). *Management: concepts and applications* (3rd ed.). New York: Harper & Row Publishers.
- Mehran, H. (1995). Executive compensation structure, ownership and firm performance. *Journal of Financial Economics*, 38(2), 163–184.
- Meier, R. L. (2000). Integrating enterprise wide risk management concepts into industrial technology curricula. *Journal of Industrial Tecnology*, 16(4), 1–15.
- Mentzas, G., Apostolou, D., & Young, R. (2003). *Knowledge asset management: beyond the process-centred and product-centred approaches*. London: Springer.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass.
- Meulbroek, L. (2002). The promise and challenges of integrated risk management. *Risk Management and Insurance Review*, 5(1), 55–66.
- Mikes, A., & Kaplan, R. S. (2013). Towards a contingency theory of Enterprise Risk Management. *Harvard Business School*, 43.
- Mikes, A., & Kaplan, R. S. (2014). *Towards a contingency theory of enterprise risk management*. *Harvard Business School Working Paper*.
- Miller, K. D. (1992). A framework for integrated risk management in international

- business. *Journal of International Business Studies*, 23(2), 311–331.
- Miller, L. E., & Smith, K. L. (1983). Handling nonresponse issues. *Journal of Extension*, 21(5), 45–50.
- Minnesota Department of Transportation. (2013). *Enterprise risk management framework and guidance*.
- Moeller, R. R. (2007). *COSO enterprise risk management: Understanding the new integrated ERM framework*. Hoboken, NJ: John Wiley & Sons, Inc.
- Moeller, R. R. (2011). *COSO enterprise risk management: Establishing effective governance, risk and compliance processes*.
- Mohammad, S. J. (2014). Strategic cost-cutting in information technology : Toward a framework for enhancing the business value of IT. *Iranian Journal of Management Studies (IJMS)*, 7(1), 21–39.
- Monda, B., Giorgino, M., Psrvlxp, Q., Monda, B., & Giorgino, M. (2013). *An ERM maturity model*. Enterprise Risk Management Symposium. Chicago, IL, IL: Management, Economics and Industrial Engineering Department.
- Moorhead, R., & Vaughan, S. (2012). *Legal risk: Definition, management and ethics*. Retrieved from <http://www.ucl.ac.uk/laws/law-ethics>
- Morsing, M., & Oswald, D. (2009). Sustainable leadership: management control systems and organizational culture in Novo Nordisk A/S. *Corporate Governance*, 9(1), 83–99.
- Muller, S., & Supatgiat, C. (2007). A quantitative optimization model for dynamic risk-based compliance management. *IBM Journal of Research and Development*, 51(3.4), 295–307.
- Murphy, G. B., Trailer, J. W., & Hill, R. C. (1996). Measuring performance in entrepreneurship research. *Journal of Business Research*, 36, 15–23.
- Murphy, K. R., Myors, B., & Wolach, A. (2014). *Statistical power analysis: A simple and general model for traditional and modern hypothesis tests* (4th ed.). New York: Routledge.
- NAICOM. (2010). *National Insurance Commission: Corporate strategic plan*. Retrieved from <http://naicom.gov.ng/>
- NAICOM. (2012). *National insurance commission guideline for developing a risk framework for insurers and reinsurers in Nigeria*. Abuja, Nigeria.
- National Archives. (2008). *Managing information risk: A guide for accounting*

- officers, board members and senior information risk owners. crown.*
- National Association of Corporate Directors (NACD). (2009). *Report of the NACD blue ribbon commission on risk governance: Balancing risk and reward.* Retrieved from <https://www.nacdonline.org>
- National Bureau of Statistics. (2013). *2012 and estimates for 2013 Gross Domestic Product for Nigeria.* Retrieved from <http://www.nigerianstat.gov.ng/>
- Ngo, H.-Y., & Loi, R. (2008). Human resource flexibility, organizational culture and firm performance: an investigation of multinational firms in Hong Kong. *The International Journal of Human Resource Management, 19*(9), 1654–1666.
- Nickmanesh, S., Andira, H., Musram, M., Akbari, A., Zohoori, M., Musram, H. A. M., & Akbari, A. (2013). Enterprise risk management and performance in Malaysia. *Interdisciplinary Journal of Contemporary Research in Business, 5*(1), 1–38.
- Nicolas, V. (2012). *Financial reform after the crisis : An early assessment.*
- Niskanen, T. (2015). Leadership relationships and occupational safety and health processes in the finnish chemical industry. In *Integrated Occupational Safety and Health Management* (pp. 185–220). Springer International Publishing.
- Nocco, B. W., & Stulz, R. M. (2006). Enterprise risk management: Theory and practice. *Journal of Applied Corporate Finance, 18*(4), 8–20.
- Nonaka, I., Toyama, R., & Konno, N. (2000). SECI, Ba, and leadership: a unified model of dynamic knowledge creation. *Long Range Planning, 33*(1), 6–34.
- Nor, F. M., Shariff, F. M., & Ibrahim, I. (2010). The Effects of Concentrated Ownership on The Performance of The Firm : Do External Shareholdings and Board Structure Matter ?, *30*, 93–102.
- Norman, G. R. (1985). *Assessing Clinical Competence: Knowledge sharing.* New York: Springer.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.
- Nweze, C. (2015). Fixing skills gap in banking. *The Nation.*
- Obalola, D. M., Akpan, T. I., & Olufemi, A. A. (2014). The relationship between enterprise risk management (ERM) and organizational performance : Evidence from Nigerian insurance industry. *Research Journal of Financial and Accounting, 5*(14), 152–161.

- Oghojafora, A. E. B., Olayemia, O. O., Okonjia, S. P., & Okolieb, J. U. (2010). Poor corporate governance and its consequences on the Nigerian banking sector. *Serbian Journal of Managenet*, 5(2), 243–250.
- Okafor, C. (2008). Shared values and organizational performance of Nigerian companies : An empirical analysis. *Asian Journal Scientific Research*, 1(3), 265–273.
- Okafor, F. C. (2012). Addressing the problem of non-response and response Bias. *Journal of Applied Statistics*, 1(1), 91–97.
- Okereke-onyiuke, N. (2010). *The Nigerian Stock Exchange: A review of market performance in 2009 and the outlook for 2010*.
- Oladapo, A., & Richard, O. (2012). The implications of global financial crisis on the Nigerian capital market performance : An empirical investigation (2000-2008). *European Journal of Humanities and Social Sciences*, 16(1), 1–18.
- Olamide, O., Uwalomwa, U., & Ranti, U. O. (2015). The effect of risk management on bank's financial performance in Nigeria. *Journal of Accounting and Auditing: Research & Practice*, 2015(1), 1–7.
- Oldfield, G. S., & Santomero, A. M. (1997). The place of risk management in financial institutions. *Sloan Management Review*, 39(1), 33–46.
- Olusegun, A. A., Ganiyu, S. O., & Oluseyi, A. A. (2013). The impact of financial development on economic growth. *American Journal of Business and Management*, 2(4), 347–356.
- Onour, I. a. (2009). *The global financial crisis and equity markets in middle east oil exporting countries*. Retrieved from <http://www.docudesk.com>
- Onwuegbuzie, A. J., & Collins, K. M. T. (2007). A Typology of mixed methods sampling designs in social science research. *The Qualitative Report*, 12(2), 281–316.
- Organization for Economic Cooperation and Development [OECD]. (1999). *Reducing the risk of policy failure: Challenges for regulatory compliance*.
- Organization for Economic Cooperation and Development [OECD]. (2009). *The corporate governance lessons from the financial crisis: Feburary report*.
- Otway, H. J., & Keil, T. (1982). Reflections on risk perceptions and policy. *Risk Analysis*, 2, 69–82.
- Oyejide, T. A., & Soyibo, A. (2001). Corporate governance in Nigeria. In

- Conference on Corporate Governance, Avvra, Ghana* (pp. 29–30). Accra, Ghana.
- Ozcelik, G., & Ferman, M. (2006). Competency approach to human resources management:Outcomes and contributions in a Turkish cultural context. *Human Resource Development Review*, 5(1), 72–91.
- Ozsahin, M., Zehir, C., & Acar, a. Z. (2011). Linking leadership style to firm performance: the mediating effect of the learning orientation. *Procedia - Social and Behavioral Sciences*, 24(1986), 1546–1559.
- Paape, L., & Spekle, R. F. (2012). The Adoption and design of enterprise risk management practices: An empirical study. *European Accounting Review*, 21(3), 533–564.
- Pagach, D., & Warr, R. (2007). *An empirical investigation of the characteristics of firms adopting enterprise risk management* (No. 27695–7229). North Carolina.
- Pagach, D., & Warr, R. (2010). *The Effects of enterprise risk management on firm Performance* (Vol. 9). Retrieved from <http://ssrn.com/abstract=1155218>
- Pagach, D., & Warr, R. (2011). The characteristics of firms that hire chief risk officers. *Journal of Risk and Insurance*, 78(1), 185–211.
- Pallant, J. (2011). *SPSS survival manual: A step by step guide to data analysis using SPSS* (4th ed.). Australia: Allen & Unwin.
- Papalexandris, A., Ioannou, G., Prastacos, G., & Soderquish, K. E. (2005). An integrated methodology for putting the balanced scorecard into action. *European Management Journal*, 22(2), 214–227.
- Peasnell, K. V, Pope, P. F., & Young, S. (2003). Managerial equity ownership and the demand for outside directors. *European Financial Management*, 9(2), 231–250.
- PENCOM. (2015). *Regulation on investment of pension fund assets*. Abuja Nigeria. Retrieved from http://pencom.gov.ng/download/adverts/DRAFT_AMENDED
- Penrose, E. T. (1959). *The theory of the growth of the firm*. New York: Wiley.
- Perez-Lopez, S., & Alegre, J. (2012). Information technology competency, knowledge processes and firm performance. *Industrial Management & Data Systems*, 112(4), 644–662.
- Pergola, T. M., Joseph, G. W., & Jenzarli, A. (2009). Effects of corporate governance and board equity ownership on earnings quality. *Academy of*

- Accounting and Financial Studies Journal*, 13(4), 87–114.
- Plowman, D. A., Solansky, S., Beck, T. E., Baker, L., Kulkarni, M., & Travis, D. V. (2007). The role of leadership in emergent, self-organization. *Leadership Quarterly*, 18(4), 341–356.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *The Journal of Applied Psychology*, 88(5), 879–903.
- Podsakoff, P., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12(4), 531–544.
- Pooser, D. M. (2012). *An empirical examination of the interrelations of risks and the firm's relation with enterprise risk management*. Ann Arbor: The Florida State University.
- Pooser, D. M., & McCullough, K. A. (2012). *ERM determinants, use and effects on the firm*. St. John's University.
- Power, M. (2009). The risk management of nothing. *Accounting, Organizations and Society*, 34(6–7), 849–855.
- Power, M., Ashby, S., & Polermo, T. (2013). *Risk culture in financial organisations (A research report)*. London. Retrieved from <http://www.lse.ac.uk/CARR>
- Pratt, J. .., & Zeckhauser, R. J. (1985). *Principals and agents: the structure of business*. Boston.
- PricewaterCoopers. (2014). *Breaking the rules: Achieving breakthrough innovation in financial services*. New York. Retrieved from www.pwc.com/ng
- PricewaterhouseCoopers. (2004). *Managing risk: An assessment of CEO perspectives*. New York.
- PricewaterhouseCoopers. (2008). *Does ERM matter? Enterprise risk management in the insurance industry: A global study*. New York. Retrieved from www.pwc.com/gx/en/insurance/pdf/erm_survey.pdf
- PriceWaterhouseCoopers. (2013). *Financial focus: Risk and regulations*. New York. Retrieved from www.pwc.com/ng/en/assets/pdf/financial-focus-december-2013.pdf
- Proshare. (2008). Pension Assets Hit N1.098tr. Retrieved from <http://www.proshareng.com/news/8331>
- Protiviti. (2006). *Guide to enterprise risk management: Frequently asked questions*.

Retrieved from www.proviti.com

- Protiviti Inc. (2014). *Establishing and nurturing an effective risk culture: Enabling the chief risk officer's success*. Retrieved from <http://www.protiviti.com/en-US/Documents/White-Papers/Risk-Solutions/CRO-Series4-Establishing-and-Nurturing-an-Effective-Risk-Culture-Protiviti.pdf>
- Puni, A., Ofei, S. B., & Okoe, A. (2014). The effect of leadership styles on firm performance in Ghana. *International Journal of Marketing Studies*, 6(1), 177–186.
- Purdy, G. (2010). ISO 31000 : 2009 setting a new standard for risk management. *Risk Analysis*, 30(6), 881–886.
- Queensland. (2011). *A Guide to Risk Management, The State of Queensland (Queensland Treasury) July*.
- Quinn, J. B. (2000). Outsourcing innovation: the new engine of growth. *Management Review*, 41, 13–28.
- Quon, T. K., Zeghal, D., & Maingot, M. (2012). Enterprise Risk Management and Firm Performance. *Procedia - Social and Behavioral Sciences*, 62, 263–267.
- Ram, J., & Corkindale, D. (2014). How “critical” are the critical success factors (CSFs)? Examining the role of CSF for ERP. *Business Process Management Journal*, 20(1), 151–174.
- Ramayah, T., Yeap, J. A. L., & Ignatius, J. (2013). An empirical inquiry on knowledge sharing among academicians in higher learning institutions. *Minerva*, 51(2), 131–154.
- Raminta-Pucetaite, N. (2014). The effect of leader-member exchange on organizational innovativeness: Findings from a Lithuanian public sector organization. *Journal of International Scientific Publications*, 8, 159–171.
- Ranong, Rp. N., & Phuenngam, W. (2009). *Critical success factors for effective risk management procedures in financial industries*. Umeå University.
- Ravichandran, T., Lertwongsatien, C., & Lertwongsatien, C. (2005). Effect of information systems resources and capabilities on firm performance: A resource-based perspective. *Journal of Management Information System*, 21(4), 237–276.
- Rehman, A., Baloch, Q. B., Afeef, M., & Saleem, M. (2015). Relationship between information sharing and risk management practices with financial performance:

- Evidence from Pakistani banking sector. *Journal of Managerial Sciences*, 9(2), 138–146.
- Reinartz, W., Haenlein, M., & Henseler, J. (2009). An empirical comparison of the efficacy of covariance-based and variance-based SEM. *International Journal of Research in Marketing*, 26(4), 332–344.
- Rejda, G. E. (2005). Risk management and insurance. Boston: Addison Wesley.
- Rejda, G. E., & McNamara, M. J. (2014). *Principles of risk management and insurance: Twelfth edition*. New York: Pearson Education Limited.
- Ren, H., Chandrasekar, K., & Li, B. (2012). Moderating effects of board and managerial incentive on the relationship between R & D investment and firm performance- Evidence from listed manufacturing firms in China. *The Journal of International Management Studies*, 7(1), 41–55.
- Rettab, B., Brik, A. Ben, & Mellahi, K. (2009). A study of management perceptions of the impact of corporate social responsibility on organisational performance in emerging economies: The case of Dubai. *Journal of Business Ethics*, 89, 371–390.
- Richardson, H. A., Simmering, M. J., & Sturman, M. C. (2009). A tale of three perspectives: Examining post hoc statistical techniques for detection and corrections of common method variance. *Organizational Methods*, 12(4), 762–200.
- Rigdon, E. E., Schumacker, R. E., & Wothke, W. (1998). A comparative review of interaction and nonlinear modeling. In R. E. Schumacker & A. G. Marcoulides (Eds.), *Interaction and nonlinear effects in structural equation modeling* (pp. 1–16). Mahwah, NJ: Lawrence Erlbaum Associates Publisher.
- Riivari, E., Anna-Maija, Kujala, J., & Heiskanen, E. (2011). The relationship between organisational innovativeness and the ethical culture of organisations in the public sector. In *EURAM (European of Management) Conference*.
- Riley, R. A., Pearson, T. A., & Trompeter, G. (2003). The value relevance of non-financial performance variables and accounting information: The case of the airline industry. *Journal of Accounting and Public Policy*, 22(3), 231–254.
- Ringle, C. M., Wande, S., & Becker, J.-M. (2014). Smartpls 3.0. Hamburg: SmartPLS.
- Ringle, C., Wende, S., & Will, A. (2005). SmartPLS 2.0 (Beta). Hamburg.

- Risk and Insurance Management Society. (2007). *RIMS risk manager core competency model*. Retrieved from <https://www.rims.org>
- Ritala, P., Olander, H., Michailova, S., & Husted, K. (2014). Knowledge sharing, knowledge leaking and relative innovation performance: An empirical study. *Technovation*, 35, 22–31.
- Roach, R. D. (2007). The board of directors' role in compliance and ethics. *Journal of Health Care Compliance*, (December), 49–53.
- Robbins, S. P. (2003). *Organizational behavior*. Upper Saddle River, NJ: Prentice Hall.
- Robert, M. M., & Krishna, D. (2007). *A comprehensive approach to enterprise risk information management. TERADATA: Raising Intelligence*. Retrieved from <http://www.teradata.com/resources/white-papers>
- Rochart, J. . (1979). Chief executives define their own data needs. *Harvard Business Review*, 57(2), 81–93.
- Rockart, J. F. (1978). *A new approach to defining the chief executive's information needs* (No. 1008–78.).
- Rodriguez, E., & Edwards, J. (2010). People, technology, processes and risk knowledge sharing. *Electronic Journal of Knowledge Management*, 8(1), 139–150.
- Rodriguez, E., & Edwards, J. S. (2008). Before and after modelling: Risk knowledge management is required. *The Society of Actuaries*.
- Rodriguez, E., & Edwards, J. S. (2009a). Applying knowledge management to enterprise risk management: Is there any value in using KM for ERM? *Journal of Risk Management in Financial Institutions*, 2(4), 427–437.
- Rodriguez, E., & Edwards, J. S. (2009b). Knowledge management and enterprise risk management implementation in financial services. In *Enterprise Risk Management* (pp. 1–17). Retrieved from www.ermssymposium.org/2009/pdf/
- Rose, R. C., Kumar, N., Abdullah, H., & Ling, G. Y. (2008). Organizational culture as a root of performance improvement: Research and recommendations. *Contemporary Management Research*, 4(1), 43–56.
- Rosen, D., & Zenios, S. A. (2001). *Enterprise-wide asset and liability management: Issues, institutions and models*. Nicosia, Cyprus.
- Roslan, A., & Dahan, H. M. (2013). Mediating effect of enterprise risk management

- practices on risk culture and organizational performance. In *Proceeding of the World Conference on Integration of Knowledge* (pp. 10–15).
- Ross, S. A., Westerfield, R. W., & Jaffe, J. (2002). *Corporate finance* (6th ed.). New York: McGraw-Hill/Irwin.
- Rostami, A., Sommerville, J., Wong, L. I., & Lee, C. (2015). Risk management implementation in small and medium enterprises in the UK construction industry. *Engineering, Construction and Architectural Management*, 22(1), 91–107.
- Ruan, W., & Tian, G. (2011). Managerial ownership, capital structure and firm value: Evidence from China's civilian-run firms. *Australasian Accounting Business and Finance Journal*, 5(3), 73–92.
- Rubera, G., & Kirca, A. H. (2012). Firm innovativeness and its performance outcomes: A meta-analytic review and theoretical integration. *Journal of Marketing*, 76(May), 130–147.
- Ryan, G., Emmerling, R. J., & Spencer, L. M. (2009). Distinguishing high-performing European executives: The role of emotional, social and cognitive competencies. *Journal of Management Development*, 28(9), 859–875.
- Sabato, G. (2009). Financial crisis : Where did risk management Fails? Retrieved from <http://ssrn.com/abstract=1460762>
- Saeidi, P., Sofian, S., Zaleha, S., & Abdul, B. (2014). A proposed model of the relationship between enterprise risk management and firm performance. *International Journal of Information Processing and Management*, 5(2), 70–80.
- Sahin, I. (2006). Detailed review of Roger's diffusion of innovations theory and educational technology-related studies based on Rogers' theory. *The Turkish Online Journal of Educational Technology*, 5(2), 14–23.
- Salkind, N. J. (1997). *Exploring research* (3rd ed.). Upper Saddle River, NJ: Prentice Hall.
- Sanda, A., Sackey, J., & Falholm, Y. (2011). Managerial competence and non-performance of small firms in a developing economy. *Interdisciplinary Journal of Contemporary Business Studies*, 2(3), 6–24.
- Sanusi, L. S. (2010a). *Global financial meltdown and the reforms in the nigerian banking sector*. Retrieved from <https://www.cbn.gov.ng/OUT>
- Sanusi, L. S. (2010b). *The Nigerian banking industry: What went wrong and the way*

- forward.* Abuja Nigeria: CBN.
- Sarstedt, M., Ringle, C. M., Smith, D., Reams, R., & Hair, J. F. (2014). Partial Least Squares Structural Equation Modeling (PLS-SEM): A useful tool for family business researchers. *Journal of Family Business Strategy*, 5(1), 105–115.
- Sattler, H., Völckner, F., Riediger, C., & Ringle, C. M. (2010). The impact of brand extension success drivers on brand extension price premiums. *International Journal of Research in Marketing*, 27(4), 319–328.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students* (5th ed.). India: Pearson Education.
- Schein, E. H. (2004). *Organizational Culture and Leadership*, 2nd Edition. San Francisco: Jossey-Bass.
- Schmit, J. T., & Roth, K. (1990). Cost effectiveness of risk management practices. *Journal of Risk and Insurance*, 455–470.
- Schroeter, K. (2008). *Competence literature review. Competency & Credentialing Institute*. Retrieved from www.cc-institute.org/docs/default-document-library
- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: a path model of individual innovation in the workplace. *Academy of Management Journal*, 37, 580–607.
- Seamer, M., Choi, B. B., & Lee, D. (2009). *Determinants of the Rigour of Enterprise Risk Management Strategies : Evidence from Australia*.
- SEC. (2011). *Code of corporate governance for public companies in Nigeria*.
- SEC. (2012). *The Nigerian capital market: Submission by Securities and Exchange Commission*.
- Sekaran, U. (2003). *Research methods for business: A skill building approach. PhD Proposal* (4th ed., Vol. 1). New York: John Wiley & Sons Ltd.
- Sekaran, U., & Bougie, R. (2010). *Research methods for business: A skill building approach* (5th ed.). UK: John Wiley & Sons, Inc.
- Sekaran, U., & Bougie, R. (2013). *Research methods for business: A skill building approach* (5th ed.). India: Wiley.
- Sekerci, N. (2013). Does enterprise risk management create value for firms ?: Evidence from Nordic countries. In *7th Nordic Econometric Meeting 2013 in Bergen* (pp. 1–43).
- Sharma, P. N., & Kim, K. H. (2013). A comparison of PLS and ML bootstrapping

- techniques in SEM: A Monte Carlo study. In M. Harald, T. Kristin, T. Valeriya, K. Achim, P. Erik, & A. Herve (Eds.), *New perspectives in partial least squares and related methods* (Vol. 56, pp. 201–208). New York: Springer-Verlag.
- Shattell, M. (2004). Risk: A concept analysis. In *Nursing forum* (Vol. 39, pp. 11–17). Wiley Online Library.
- Shecterle, R. (2010). Toyota supply chain lacked risk management oversight. *Industry Week*.
- Shimpi, P. (2005). ERM from compliance to value. *Financial Executive*, 21(6), 52–55.
- Simkins, B. J., & Smithson, C. (2005). Does risk management add value? A survey of the evidence. *Journal of Applied Corporate Finance*, 17(3), 8–17.
- Simona-Iulia, C., & Simona-Iulia, C. (2014). *Comparative study between traditional and enterprise risk management: A theoretical approach. Annals of the University of Oradea, Economic Science Series* (Vol. 23). Annals of the University of Oradea, Economic Science Series.
- Society of Actuaries. (2010). *A new approach for managing operational risk*.
- Soegomo, B. R., Habsyi, T. Al, & Arif, I. (2014). The influence of company strategy towards enterprise risk management , organizational culture , supply chain management and company performance. *Global Advanced Research Journal of Educational Research and Review*, 3(2), 28–34.
- Sorensen, J. B. (2002). The strength of corporate culture and the reliability of firm performance. *Administrative Science Quarterly*, 47(1), 70–91.
- Soyemi, K. A., Ogunleye, J. O., & Ashogbon, F. O. (2014). Risk management practices and financial performance : evidence from the Nigerian deposit money banks (DMBs). *The Business and Management Review*, 4(4), 345–354.
- Spender, J.-C., & Grant, R. M. (1996). Knowledge and the firm: Overview. *Strategic Management Journal*, 17(S2), 5–9.
- Ssekakubo, J., Ndiwalana, G., & Lwanga, F. (2014). Managerial competency and the financial performance of savings, credit and cooperative societies in Uganda. *International Research Journal of Arts and Social Science*, 3(3), 66–74.
- Stahl, J. (2007). The influential leader. *Fall*, 49–54.
- Steinberg, R. M. (2011). *Governance , Risk Management , and Compliance: It can't happen to us-avoiding corporate disaster while driving success*. New Jersey:

- John Wiley & Sons, Inc.
- Stone, M. (1974). Cross validatory choice and assessment of statistical predictions. *Journal of the Royal Statistical Society, 36*(2), 111–147.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage Publications Inc.
- Stulz, R. M. (1996). Rethinking risk management. *Journal of Applied Corporate Finance, 9*(3), 8–25.
- Subramanian, A. (1996). Innovativeness: Redefining the concept. *Journal of Engineering and Technology Management, 13*, 223–243.
- Subramanian, A., & Nilakanta, S. (1996). Organizational innovativeness: Exploring the relationship between organizational determinants of innovation, types of innovations, and measures of organizational performance. *Omega, 24*, 631–647.
- Suliyanto, S., & Rahab, R. (2012). The role of market orientation and learning orientation in improving innovativeness and performance of small and medium enterprises. *Asian Social Science, 8*(1), 134–145.
- Sweeting, P. (2011). *Financial enterprise risk management*. (C. Daykin, Ed.). New York: Cambridge University Press.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). New York: Pearson Education.
- Tahir, I. M., & Razali, A. R. (2011). The relationship between enterprise risk management (ERM) and firm value: Evidence from Malaysian public listed companies. *International Journal of Economics and Management Sciences, 1*(2), 32–41.
- Tajeddini, K. (2016). Analyzing the influence of learning orientation and innovativeness on performance of public organizations. *Journal of Management Development, 35*(2), 134–153.
- Tajudin, M. M., Musa, O., & Musa, N. C. (2012). Effects of organizational culture, market orientation, and innovativeness toward new product performance amongst Malaysian SMEs. *International Journal of Innovation and Business Strategy, 1*(December), 24–48.
- Tan, J. (2001). Innovation and risk-taking in a transitional economy: A comparative study of Chinese managers and entrepreneurs. *Journal of Business Venturing, 16*, 359–376.

- Tariq, Y. Bin, & Abbas, Z. (2013). Compliance and multidimensional firm performance: Evaluating the efficacy of rule-based code of corporate governance. *Economic Modelling*, 35(February), 565–575.
- Teece, D. (2000). Strategies for managing knowledge assets: the role of firm structure and industrial context. *Long Range Planning*, 3, 35–54.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(March), 509–533.
- Tharenou, P., Donohue, R., & Cooper, B. (2007). *Management research methods* (1st ed.). New York: Cambridge University Press.
- The Economist Intelligence Unit. (2014). *Risk-informed innovation: Harnessing risk management in the service of innovation*. Retrieved from www.gbm.hsbc.com/~media/gbm/reports/insights/risk-informed-innovation.pdf
- The Joint Forum. (2005). Compliance and the compliance function in banks. *Access*, (April).
- The World Bank. (2011). *Report on the observance of standards and codes(ROSC)*.
- The World Bank. (2013). *World development report 2014: Managing risk for development*.
- Thornton, G. (2009). *Enterprise risk management: Creating value in a volatile economy. Addressing the concerns of the Corporate Governance Community Summer*.
- Togok, S. H., Ruhana, C. I., & Zainuddin, S. (2014). Review of enterprise risk management (ERM) Literature. In *International Conference on Technology and Business Management, March 24-26 University of Malaya*. (pp. 1–13).
- Togok, S. H., Ruhana, C., & Zainuddin, S. (2013). Operationalising Enterprise Risk Management (ERM) Effectiveness. *Journal of Accounting Perspectives*, 7(1).
- Torbira, L. L., & Ngerebo-A, T. A. (2012). The impact of insurance risk management on fixed capital formation in Nigeria. *International Journal of Development and Economic Sustainability*, 1(4), 1–13.
- Uadiale, O. M. (2010). The impact of board structure on corporate financial performance in Nigeria. *International Journal of Business and Management*, 5(10), 155–166.
- University of Oxford. (2014). *Unprecedented technological risks*.

- Uwuigbe, O. R., & Fakile, A. S. (2012). The effects of board size on financial performance of banks: A study of listed banks in Nigeria. *International Journal of Economics and Finance*, 4(2), 260–267.
- Uzkurt, C., Kumar, R., Kimzan, S. H., & Eminoglu, G. (2013). Role of innovation in the relationship between culture and firm performance: A study of the banking sector in Turkey. *Emerald Insight*, 16(1), 92–117.
- Vakola, M., Soderquist, K. E., & Prastacos, G. P. (2007). Competency management in support of organisational change. *International Journal of Manpower*, 28(3/4), 260–275.
- Verma, S. P., & Medves, J. (2006). Core Competencies for Health Care Professionals: What Medicine, Nursing, occupational therapy, and physiotherapy Share. *Journal of Allied Health*, 35(2), 109–116.
- Vintila, G., & Gherghina, C. S. (2014). Insider ownership and the value of the Bucharest stock exchange listed companies: Convergence-of-interest or entrenchment effect? *International Journal of Economics and Financial Issues*, 4(1), 183–195.
- Vo, D., & Phan, T. (2013). Corporate governance and firm performance: Empirical evidence from Vietnam. *Journal of Economic Development*, (April 2013), 62–78.
- Wang, C. L., Ahmed, P. K., Catherine, W. L., & Pervaiz, K. A. (2004). The development and validation of the organisational innovativeness construct using confirmatory factor analysis. *European Journal of Innovation Management*, 7(4), 303–313.
- Wang, Z., Wang, N., & Liang, H. (2014). Knowledge sharing, intellectual capital and firm performance. *Management Decision*, 52(2), 230–258.
- Weerawardena, J., & O'Cass, A. (2004). Exploring the characteristics of the market-driven firms and antecedents to sustained competitive advantage. *Industrial Marketing Management*, 33(5), 419–28.
- Westphal, J. D., & Stern, I. (2006). The other pathway to the boardroom: Interpersonal influence behavior as a substitute for elite credentials and majority Status in obtaining board appointments. *Administrative Science Quarterly*, 51(2), 169–204.
- Westphal, J. D., & Zajac, E. J. (1995). Who Shall Govern ? Demographic Similarity

- , and New Director Selection. *Administrative Science Quarterly*, 40(1), 60–83.
- Williams, A., & Heins, M. H. (1995). *Risk Management and Insurance*. New York.: McGraw-Hill.
- Wilson, I. (2006). Regulatory and institutional challenges of corporate governance in Nigeria post banking consolidation. *Nigerian Economic Summit Group*, 12(2), 1–10.
- Wolf, R. (2008). The Evolution of Enterprise Risk Management. *The Actuary*, (July), 19–22.
- Woon, L. F., Azizan, N. A., & Samad, M. F. A. (2011). A strategic framework for value enhancing enterprise risk management. *Journal of Global Business and Economics*, 2(1), 23–47.
- Wright, P., Kroll, M., Krug, J. A., & Pettus, M. (2007). Influences of top management team incentives on firm risk taking. *Strategic Management Journal*, 28(1), 81–89.
- Yam, R. C. M., & Chan, C. (2015). Knowledge sharing, commitment and opportunism in new product development. *International Journal of Operations & Production Management*, 35(7), 1056–1074.
- Yaraghi, N., & Langhe, R. G. (2011). Critical success factors for risk management systems. *Journal of Risk Research*, 14(5), 551–581.
- Yazid, A. S., Hussin, M. R., & Daud, W. N. W. (2011). An examination of enterprise risk management (ERM) practices among the government-linked companies (GLCs) in Malaysia. *International Business Research*, 4(4), 94–103.
- Yeasmin, S., & Rahman, K. F. (2012). Triangulation research method as the tool of social science Research. *BUP Journal*, 1(1), 154–163.
- Young, S., & Perez, E. (2002). Finance chief of WorldCom got high marks on Wall Street. *Wall Street Journal*, P. B1.
- Yow, S., & Sherris, M. (2008). Enterprise risk management, insurer value maximisation, and market frictions. *ASTIN Bulletin*, 38(1), 293–339.
- Zaim, H., Yasar, M. F., & Unal, O. F. (2013). Analyzing the effects of individual competencies on performance: A field study in services industries in Turkey. *Journal of Global Strategic Management*, 2(7), 67–67.
- Zhao, X., Hwang, B.-G., & Low, S. P. (2013). Critical success factors for enterprise risk management in Chinese construction companies. *Construction*

- Management and Economics*, 31(12), 1199–1214.
- Zhao, X., Hwang, B.-G., & Low, S. P. (2014). Enterprise risk management implementation in construction firms: An organizational change perspective. *Management Decision*, 52(5), 814–833.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). *Business research methods* (8th ed.). Canada: South-Western, Cengage Learning.
- Zumitzavan, V., & Udchachone, S. (2014). The impact of different styles of leadership and levels of organisational innovation on organisational performance: A case of hospitality industry in Thailand. *WSEAS Transactions on Business and Economics*, 11, 272–282.
- Zurich. (2011). Risk management in a time of global uncertainty. *Harvard Business Review*, 1–29.



Appendix A: Questionnaire



Dear Sir/Madam,

A SURVEY ON ENTERPRISE RISK MANAGEMENT (ERM) PRACTICES AND THE PERFORMANCE OF FINANCIAL INSTITUTIONS IN NIGERIA

The objective of this research is to get an overall picture of risk management practices and its effect on the performance of financial institutions in Nigeria. Specifically, the outcome of this study will enable organisations to enhance their expertise, resources, and to manage risks efficiently. The questionnaire will take between 15 and 20 minutes to complete.

May I assure you that the information you would provide will be treated with utmost confidentiality. No aspects of the firm's name will appear in any report. Kindly be as candid as possible in responding to the questions. It is my hope that with your cooperation, the data collected will provide vital information concerning ERM practices and will aid further research effort in the area.

While awaiting your earliest response, please accept the assurances of my highest regards.

Yours sincerely,

Idris Ahmed

Doctoral Researcher,

School of Economics, Finance and Banking,

Universiti Utara Malaysia,

Matric Number: s95394

Mobile: +2348034067017 or +60105109085

Student e-mail: iahmednq@gmail.com

PART 1: Background Questions on Risk Management Status

S/No	Please answer question one by ticking the appropriate boxes.	Yes	No
1.	Do you consider risk management a priority for your firm?		
2.	Our risk management initiative is driven by our desire to (Please select all that apply)		
i.	Improve risk assessment process.		
ii.	Improve measurement and quantification of financial risks.		
iii.	Improve the measurement and quantification of operational risks.		
iv.	Improve the measurement and quantification of strategic risks		
v.	Improve the internal risk reporting processes		
vi.	Improve the risks management decision-making		
vii.	Incorporate risks considerations into incentive compensation		
viii.	Improve interaction and efficiency among departments/units.		

	Please if question 3 is “NO”, skip to question 6	Yes	No
3.	Does your organisation implement ERM framework?		

4.	When does your organisation start operating under this framework?	
i.	1-5 Years	
ii.	6-10 years	
iii.	11 years and above	

5.	Which of the following best describes the status of your organization's ERM activities?	
i.	Fully implemented across organisation	
ii.	Partially implemented business segments	
iii.	At initial stage of preparation	

6.	What are the potential challenges affecting the success of ERM activities in your firm?	
i.	Improving risk management efficiency	
ii.	Uncertain regulatory environment	
iii.	Managing Change	
iv.	Attracting and retaining talent	
v.	Data & technology management	
vi.	Fear of compliance failure	

7	What are the motivations for your organisations to adopt ERM? (Please select all that apply)
i.	Regulatory compliance
ii.	Mandate from board of directors
iii.	Technology advancement
iv.	Improve corporate governance
v.	Complex global environment
vi.	Competitive pressure
vii.	Stakeholder pressure
viii.	Surge for best business practices

8	Which areas of risk represent the greatest potential threats and becomes a priority to your organisation. Please rate each type of risk between 1=top area of focus and 4=Not an area of focus				
	Types of Risks	1	2	3	4
i.	Financial risk				
ii.	Operational risk				
iii.	Strategic risk				
iv.	Reputational risk				
v.	Legal risk				

Part 2: ERM Framework

Universiti Utara Malaysia

Please indicate in your opinion to what extent do you agree with the following statement concerning ERM program in your organisation. Use the scales provided below to indicate your level of agreement or disagreement with each statement by circling the appropriate boxes.								
Strongly disagree		Disagree	Neutral	Agree	Strongly agree			
1		2	3	4	5			
S/N	Statement			Level of Agreement				
	In my organisation							
RMF1	there is common understanding about ERM objectives			1	2	3	4	5
RMF2	there is a common terminology and set of standard of risk management			1	2	3	4	5
RMF3	information about risk pass across the entire firm			1	2	3	4	5
RMF4	there is a rigorous assessment process of risk (identification, analysis & evaluation)			1	2	3	4	5
RMF5	Risk is integrated across all functions of business units			1	2	3	4	5
RMF6	the ERM objective reduces risk of non-compliance			1	2	3	4	5
RMF7	there is a strategy for tracking the cost of compliance			1	2	3	4	5
RMF8	key risk indicators are integrated to keep risk on track			1	2	3	4	5

RMF9	ERM is integrated with the key performance indicators (KPI)	1	2	3	4	5
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Part 3: Board Equity Ownership

Please indicate in your opinion to what extent do you agree with the following statement concerning whether the “Equity shareholding of the board of directors” motivates them in fulfilling their monitoring role toward ensuring good risk management practices. Please circle the appropriate answer

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

S/N	Statement In my organisation	Level of Agreement				
		1	2	3	4	5
BEO1	all executive directors own shares of this firm after excluding stock options held	1	2	3	4	5
BEO2	all non-executive directors own shares of this company after excluding stock options held	1	2	3	4	5
BEO3	directors equity shareholding motivates them to monitor efficiently and ensure that risk management decisions are implemented	1	2	3	4	5
BEO4	decrease in the shares held by board of directors reduces their monitoring capability	1	2	3	4	5
BEO5	increase in the number of shares held by the board of directors increase their ability to monitor	1	2	3	4	5
BEO6	non-executive directors are paid in cash and some form of equity shares compensation	1	2	3	4	5
BEO7	all executive directors are paid entirely in some form of equity shares compensation	1	2	3	4	5

Part 4: ERM Success Factors

Please indicate in your opinion to what extent do you agree with the following statement concerning factors that influence ERM effectiveness in your organisation. Use the scales provided below to indicate your level of agreement or disagreement with each statement by circling the appropriate boxes.

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

A. Compliance

S/N	Statement In my organisation	Level of Agreement				
		1	2	3	4	5
COP1	our internal culture has become much more focus on compliance	1	2	3	4	5
COP2	top management emphasized more on governance	1	2	3	4	5
COP3	procedures for compliances are developed by management	1	2	3	4	5
COP4	compliance decisions are implemented to avoid sanctions	1	2	3	4	5
COP5	the ERM practices support strong corporate governance	1	2	3	4	5
COP6	risk management programme is upgraded to comply with standards of listing requirements	1	2	3	4	5
COP7	risk management programme is upgraded to comply with Basel capital accord	1	2	3	4	5

COP8	risk management programme is upgraded to comply with risk standards and policies	1	2	3	4	5
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B. Risk Management Information System

S/N	Statement The information system in my organisation	Level of Agreement				
		1	2	3	4	5
RMI1	provides support for the risk modelling process	1	2	3	4	5
RMI2	provides access to experience in terms of risk analysis	1	2	3	4	5
RMI3	provides adequate data management support	1	2	3	4	5
RMI4	provides capacity to improve work performance	1	2	3	4	5

C. Risk Culture

S/N	Statement In my organisation	Level of Agreement				
		1	2	3	4	5
RMC1	organisational structure improves risk reporting	1	2	3	4	5
RMC2	organisational structure improves risk communication process	1	2	3	4	5
RMC3	employee reward structures are aligned to risk-adjusted measures	1	2	3	4	5
RMC4	sufficient resources are committed to risk management programme	1	2	3	4	5
RMC5	senior management & the board of directors provide clear information on the risk appetite	1	2	3	4	5
RMC6	ERM is integrated into management's decision-making processes	1	2	3	4	5
RMC7	CRO has a role to play in strategic business decisions	1	2	3	4	5
RMC8	risk management training covers both the policy, methodology, and practices	1	2	3	4	5

D. Risk knowledge Sharing

S/N	Statement In my organisation	Level of Agreement				
		1	2	3	4	5
RKS1	employees are willing to share risk knowledge	1	2	3	4	5
RKS2	there is proper record keeping concerning risk events	1	2	3	4	5
RKS3	there is good access to work experience	1	2	3	4	5
RKS4	there is an appropriate environment to discuss results inter-departmentally	1	2	3	4	5
RKS5	there is an appropriate environment for solving and sharing of risk solutions	1	2	3	4	5

E. Staff Competence

S/N	Statement In my organisation	Level of Agreement				
		1	2	3	4	5
SCP1	staff members use analytical skills in dealing with risk management issues	1	2	3	4	5

SCP2	staff members approached their jobs with a high level of commitment	1	2	3	4	5
SCP3	staff members understand their risk management responsibilities	1	2	3	4	5
SCP4	Staff members possess the requisite knowledge and the technical skills for complex financial transactions	1	2	3	4	5
SCP5	organisation's formal performance appraisal gives high rating to staff analytical abilities	1	2	3	4	5

F. Organisational Innovativeness

S/N	Statement My organisation	Level of Agreement				
		1	2	3	4	5
OIN1	frequently introduces new ideas	1	2	3	4	5
OIN2	use current techniques to manage risk	1	2	3	4	5
OIN3	is creative in dealing with risk management issues	1	2	3	4	5
OIN4	introduces efficient risk management methodologies in all its dealings and operations	1	2	3	4	5
OIN5	integrate risk management with key performance indicators	1	2	3	4	5
OIN6	does not perceive newness as something risky, and resisted	1	2	3	4	5

G. Leadership Role

H.

S/N	Statement My organisation	Level of Agreement				
		1	2	3	4	5
LF1	the board give priority to risk management issues	1	2	3	4	5
LF2	top management take responsibility for risk management activities	1	2	3	4	5
LF3	our CRO facilitates the deployment of best risk management practices across the entire firm	1	2	3	4	5
LF4	our CRO analyses large volume of data and extracts key information to top management	1	2	3	4	5
LF5	top management provides facilities and infrastructure to support risk management initiative	1	2	3	4	5
LF6	our CRO arrange risk management education and training for all employees	1	2	3	4	5

Part 5: Firm Performance

The statements below assess both the financial and non-financial performance of firms. Please indicate your opinion to what extent do you think your firm has performed in the last **three years** based on the rating scale provided. Kindly circle the appropriate answer.

Significantly Decrease	Decrease	Neutral	Increase	Significantly Increase
1	2	3	4	5

S/N	Statement on financial performance	Level of Agreement				
FP1	the yearly profit and sales growth	1	2	3	4	5
FP2	the Return on Assets (ROA) yearly growth	1	2	3	4	5
FP3	the Return on Equity (ROE) yearly growth	1	2	3	4	5
FP4	the overall sale's growth	1	2	3	4	5
FP5	the attainment of yearly financial performance targets	1	2	3	4	5
FP6	the stability of earnings	1	2	3	4	5
S/N	Statement on non-financial performance	Level of Agreement				
FP7	the firm's capacity to meet strategic goals	1	2	3	4	5
FP8	the quality of strategic and operational decisions	1	2	3	4	5
FP9	the quality of services provided to customers	1	2	3	4	5
FP10	the level of customer satisfaction	1	2	3	4	5
FP11	relative to other competitors, our customer base	1	2	3	4	5
FP12	the firm's management accountability	1	2	3	4	5

Part 6 : Profile : Participants details (Please read and tick as appropriate)

Years of work-experience	
Less than 1 year	
1-5 years	
6 -10 years	
11 years and above	
Highest Educational Qualification	
Doctorate Degree	
Master's Degree	
First Degree	
Others, please specify	
Your position in the organisation	
Chief Risk Officer	
Chief Financial Officer	
Top Level Manager	
Head of Risk Management Department	
Others, Please specify.....	

Kindly indicate your willingness if you could avail us the opportunity to have a face-to-face interview regarding risk management practices in your organisation Yes [] No [].

Thank you once again.

Appendix B: Missing Value Analysis

	N	Mean	Std. Deviation	Missing		No. of Extremes	
				Count	Percent	Low	High
WorkExp	163	2.94	.795	0	.0	0	0
Qualification	163	2.33	.719	0	.0	0	0
Position	163	2.86	1.116	0	.0	0	0
Riskmgtpriority	163	1.02	.235	0	.0	.	.
Driversofriskmgt	163	1.53	.772	0	.0	0	0
ERMFramworkimplentn	163	1.01	.110	0	.0	.	.
ERMcomencement	163	1.88	.709	0	.0	0	0
ERMstatus	163	1.57	.745	0	.0	0	0
Motivationtoadoptperm	163	1.80	.862	0	.0	0	0
ERMchallenges	160	1.88	.927	3	1.8	0	0
FinRisk	163	3.85	.500	0	.0	.	.
OperationRisk	161	3.87	.476	2	1.2	.	.
StratRisk	159	3.69	.656	4	2.5	.	.
ReputnlRisk	162	3.33	.819	1	.6	7	0
ForeignExchange	159	2.95	.745	4	2.5	.	.
LegalRisk	159	3.06	.748	4	2.5	5	0
PoliticalRisk	161	2.87	.943	2	1.2	0	0
Cybersecurity	162	3.48	.782	1	.6	5	0
ClimateChange	163	2.41	1.153	0	.0	0	0
RMF1	163	4.21	.859	0	.0	7	0

	N	Mean	Std. Deviation	Missing		No. of Extremes	
				Count	Percent	Low	High
RMF2	161	4.06	.764	2	1.2	4	0
RMF3	161	4.13	.759	2	1.2	5	0
RMF4	162	4.09	.783	1	.6	7	0
RMF5	163	4.03	.773	0	.0	7	0
RMF6	163	4.12	.792	0	.0	6	0
RMF7	162	4.01	.764	1	.6	6	0
RMF8	163	4.03	.652	0	.0	.	.
RMF9	161	4.01	.750	2	1.2	.	.
BEO1	163	4.17	.678	0	.0	2	0
BEO2	161	4.11	.680	2	1.2	1	0
BEO3	163	4.06	.739	0	.0	2	0
BEO4	161	3.86	.818	2	1.2	0	0
BEO5	163	4.01	.762	0	.0	6	0
BEO6	163	4.03	.652	0	.0	.	.
BEO7	163	4.00	.745	0	.0	.	.
COP1	163	4.23	.756	0	.0	3	0
COP2	161	4.29	.636	2	1.2	2	0
COP3	162	4.23	.602	1	.6	2	0
COP4	162	4.25	.722	1	.6	3	0
COP5	163	4.31	.707	0	.0	3	0
COP6	161	4.24	.687	2	1.2	2	0
COP7	163	4.11	.745	0	.0	6	0

	N	Mean	Std. Deviation	Missing		No. of Extremes	
				Count	Percent	Low	High
COP8	163	4.26	.760	0	.0	4	0
RMI1	162	4.32	.594	1	.6	0	0
RMI2	163	4.27	.646	0	.0	1	0
RMI3	161	4.29	.704	2	1.2	2	0
RMI4	163	4.28	.713	0	.0	3	0
RMC1	163	4.13	.671	0	.0	4	0
RMC2	162	4.23	.655	1	.6	3	0
RMC3	161	4.30	.699	2	1.2	3	0
RMC4	163	4.25	.721	0	.0	3	0
RMC5	162	4.18	.686	1	.6	2	0
RMC6	161	4.40	.665	2	1.2	0	0
RMC7	163	4.06	.731	0	.0	5	0
RMC8	163	3.93	.659	0	.0	.	.
RKS1	162	3.86	.810	1	.6	0	0
RKS2	163	3.90	.631	0	.0	0	0
RKS3	161	4.07	.717	2	1.2	3	0
RKS4	163	4.06	.739	0	.0	2	0
RKS5	163	3.86	.816	0	.0	0	0
SCP1	163	4.39	.633	0	.0	0	0
SCP2	162	4.33	.600	1	.6	0	0
SCP3	162	4.26	.736	1	.6	3	0
SCP4	162	4.30	.706	1	.6	1	0

	N	Mean	Std. Deviation	Missing		No. of Extremes	
				Count	Percent	Low	High
SCP5	163	4.23	.714	0	.0	4	0
OIN1	163	3.94	.772	0	.0	.	.
OIN2	161	4.03	.754	2	1.2	3	0
OIN3	162	4.06	.832	1	.6	7	0
OIN4	163	4.13	.774	0	.0	5	0
OIN5	162	4.07	.842	1	.6	9	0
OIN6	163	4.08	.875	0	.0	10	0
LF1	162	2.96	.644	1	.6	.	.
LF2	163	3.12	.679	0	.0	4	0
LF3	163	2.92	.720	0	.0	0	0
LF4	163	2.71	.895	0	.0	0	3
LF5	163	2.84	.693	0	.0	0	1
LF6	162	1.86	.792	1	.6	0	7
FFP1	163	4.27	.629	0	.0	2	0
FFP2	162	4.29	.607	1	.6	1	0
FFP3	163	4.20	.590	0	.0	1	0
FFP4	163	4.11	.619	0	.0	.	.
FFP5	163	4.28	.583	0	.0	0	0
FFP6	163	4.29	.655	0	.0	3	0
NFP1	162	3.81	.973	1	.6	0	0
NFP2	163	3.77	.964	0	.0	3	0
NFP3	163	3.91	.834	0	.0	0	0

	N	Mean	Std. Deviation	Missing		No. of Extremes	
				Count	Percent	Low	High
NFP4	163	3.82	.838	0	.0	1	0
NFP5	163	3.85	1.014	0	.0	0	0
NFP6	163	3.79	.935	0	.0	4	0

a. Number of cases outside the range (Q1 - 1.5*IQR, Q3 + 1.5*IQR).

b. Indicates that the inter-quartile range (IQR) is zero.



Appendix C: Replace Missing Values

	Result Variable	N of Replaced Missing Values	Case Number of Non-Missing Values		N of Valid Cases	Creating Function
			First	Last		
1	ERMchallenges_1	3	1	163	163	MEDIAN(ERMchallenges,ALL)
2	OperationRisk_1	2	1	163	163	MEDIAN(OperationRisk,ALL)
3	StratRisk_1	4	1	163	163	MEDIAN(StratRisk,ALL)
4	ReputnlRisk_1	1	1	163	163	MEDIAN(ReputnlRisk,ALL)
5	ForeignExchange_1	4	1	163	163	MEDIAN(Foreign Exchange,ALL)
6	LegalRisk_1	4	1	163	163	MEDIAN(LegalRisk,ALL)
7	PoliticalRisk_1	2	1	163	163	MEDIAN(Political Risk,ALL)
8	Cybersecurity_1	1	1	163	163	MEDIAN(Cybersecurity,ALL)
9	RMF2_1	2	1	163	163	MEDIAN(RMF2,ALL)
10	RMF3_1	2	1	163	163	MEDIAN(RMF3,ALL)
11	RMF4_1	1	1	163	163	MEDIAN(RMF4,ALL)
12	RMF7_1	1	1	163	163	MEDIAN(RMF7,ALL)
13	RMF9_1	2	1	163	163	MEDIAN(RMF9,ALL)
14	BEO2_1	2	1	163	163	MEDIAN(BEO2,ALL)
15	BEO4_1	2	1	163	163	MEDIAN(BEO4,ALL)
16	COP2_1	2	1	163	163	MEDIAN(COP2,ALL)
17	COP3_1	1	1	163	163	MEDIAN(COP3,ALL)

	Result Variable	N of Replaced Missing Values	Case Number of Non-Missing Values		N of Valid Cases	Creating Function
			First	Last		
18	COP4_1	1	1	163	163	MEDIAN(COP4,A LL)
19	COP6_1	2	1	163	163	MEDIAN(COP6,A LL)
20	RMI1_1	1	1	163	163	MEDIAN(RMI1,AL L)
21	RMI3_1	2	1	163	163	MEDIAN(RMI3,AL L)
22	RMC2_1	1	1	163	163	MEDIAN(RMC2,A LL)
23	RMC3_1	2	1	163	163	MEDIAN(RMC3,A LL)
24	RMC5_1	1	1	163	163	MEDIAN(RMC5,A LL)
25	RMC6_1	2	1	163	163	MEDIAN(RMC6,A LL)
26	RKS1_1	1	1	163	163	MEDIAN(RKS1,A LL)
27	RKS3_1	2	1	163	163	MEDIAN(RKS3,A LL)
28	SCP2_1	1	1	163	163	MEDIAN(SCP2,A LL)
29	SCP3_1	1	1	163	163	MEDIAN(SCP3,A LL)
30	SCP4_1	1	1	163	163	MEDIAN(SCP4,A LL)
31	OIN2_1	2	1	163	163	MEDIAN(OIN2,AL L)
32	OIN3_1	1	1	163	163	MEDIAN(OIN3,AL L)
33	OIN5_1	1	1	163	163	MEDIAN(OIN5,AL L)
34	LF1_1	1	1	163	163	MEDIAN(LF1,ALL)
35	FFP2_1	1	1	163	163	MEDIAN(FFP2,A LL)

	Result Variable	N of Replaced Missing Values	Case Number of Non-Missing Values		N of Valid Cases	Creating Function
			First	Last		
			1	163	163	
36	NFP1_1					MEDIAN(NFP1,A LL)



Appendix D: Common Method Bias

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.705	11.007	11.007	7.705	11.007	11.007
2	5.769	8.241	19.248	5.769	8.241	19.248
3	4.165	5.950	25.198	4.165	5.950	25.198
4	3.799	5.427	30.625	3.799	5.427	30.625
5	3.537	5.053	35.678	3.537	5.053	35.678
6	3.283	4.690	40.367	3.283	4.690	40.367
7	2.864	4.092	44.459	2.864	4.092	44.459
8	2.564	3.662	48.121	2.564	3.662	48.121
9	2.251	3.215	51.336			
10	1.803	2.575	53.912			
11	1.737	2.481	56.392			
12	1.426	2.037	58.430			
13	1.338	1.911	60.341			
14	1.296	1.851	62.192			
15	1.181	1.687	63.879			
16	1.138	1.625	65.504			
17	1.056	1.509	67.014			
18	1.001	1.430	68.444			
19	.925	1.321	69.765			
20	.918	1.312	71.077			
21	.880	1.257	72.334			
22	.877	1.252	73.587			
23	.834	1.191	74.778			
24	.816	1.166	75.944			
25	.789	1.127	77.071			
26	.765	1.093	78.164			
27	.758	1.082	79.246			
28	.720	1.029	80.275			
29	.715	1.022	81.296			
30	.661	.945	82.241			
31	.615	.879	83.121			
32	.612	.874	83.995			
33	.576	.823	84.818			
34	.562	.803	85.620			

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
35	.546	.780	86.401			
36	.545	.778	87.179			
37	.518	.740	87.918			
38	.496	.708	88.626			
39	.475	.679	89.305			
40	.460	.658	89.963			
41	.456	.651	90.614			
42	.411	.587	91.201			
43	.406	.580	91.781			
44	.387	.553	92.334			
45	.373	.533	92.867			
46	.355	.507	93.374			
47	.342	.489	93.863			
48	.325	.464	94.327			
49	.319	.456	94.783			
50	.300	.429	95.212			
51	.288	.411	95.623			
52	.276	.394	96.017			
53	.258	.368	96.385			
54	.245	.350	96.735			
55	.224	.320	97.055			
56	.212	.303	97.359			
57	.199	.284	97.642			
58	.191	.273	97.915			
59	.181	.259	98.174			
60	.167	.239	98.413			
61	.160	.229	98.642			
62	.149	.213	98.856			
63	.143	.204	99.060			
64	.127	.182	99.241			
65	.120	.172	99.413			
66	.109	.155	99.569			
67	.083	.119	99.688			
68	.082	.116	99.804			
69	.075	.107	99.911			
70	.062	.089	100.000			

Appendix E: PLS Measurement Model Output (Criteria)

E1: Overview

	AVE	Composite Reliability	R Square	Cronbach's Alpha	Communality	Redundancy
BEO	0.718242	0.946845		0.934467	0.718242	
COP	0.514458	0.808254		0.691208	0.514458	
FFP	0.515152	0.808868	0.052506	0.686475	0.515152	0.026822
LFS	0.552870	0.780138		0.655566	0.552870	
NFP	0.707703	0.906253	0.969425	0.861615	0.707703	0.685907
OIN	0.607556	0.885142		0.843423	0.607556	
PERF	0.356461	0.752890	0.327486	0.698448	0.356461	0.026974
RKS	0.515739	0.760529		0.552563	0.515738	
RMC	0.525185	0.813315		0.721453	0.525185	
RMF	0.587897	0.894987		0.859466	0.587898	
RMI	0.553399	0.829722		0.752970	0.553399	
SCP	0.508894	0.837468		0.769747	0.508894	

E2: Latent Variable Correlations

	BEO	COP	FFP	LFS	NFP	OIN	PERF	RKS	RMC	RMF	RMI	SCP
BE O	1.000 000											
CO P	0.059 150	1.000 000										
FFP	0.043 461	0.028 297	1.000 000									
LFS	- 0.188 869	0.127 096	0.032 856	1.000 000								
NF P	- 0.328 850	0.147 633	0.055 505	0.252 543	1.000 000							
OI N	0.119 349	- 0.207 634	0.055 134	0.000 224	- 0.117 485	1.0000 00						
PE RF	- 0.312 875	0.149 817	0.229 141	0.251 938	0.984 594	- 0.1050 77	1.0000 00					

RK S	- 0.385 908	- 0.044 783	0.140 567	0.090 264	0.284 851	- 0.0268 31	0.3017 53	1.0000 00				
RM C	- 0.017 045	- 0.052 805	0.068 710	- 0.027 900	0.202 899	0.1132 61	0.2093 80	0.1094 29	1.0000 00			
RM F	- 0.229 580	- 0.017 735	- 0.003 779	0.117 776	0.260 356	- 0.0659 66	0.2532 50	0.0870 94	0.1250 29	1.0000 00		
RM I	- 0.095 011	- 0.156 355	0.001 539	0.055 632	0.264 490	0.1253 65	0.2591 16	0.1212 86	0.2461 97	- 0.0571 33	1.0000 00	
SC P	- 0.046 965	0.009 790	0.136 906	0.041 163	0.266 620	0.1091 37	0.2838 13	0.3121 55	0.3462 08	0.0099 16	0.2091 59	1.0000 00

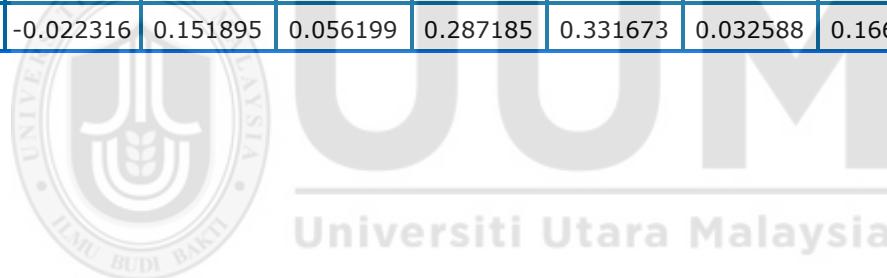


E3: Cross Loadings

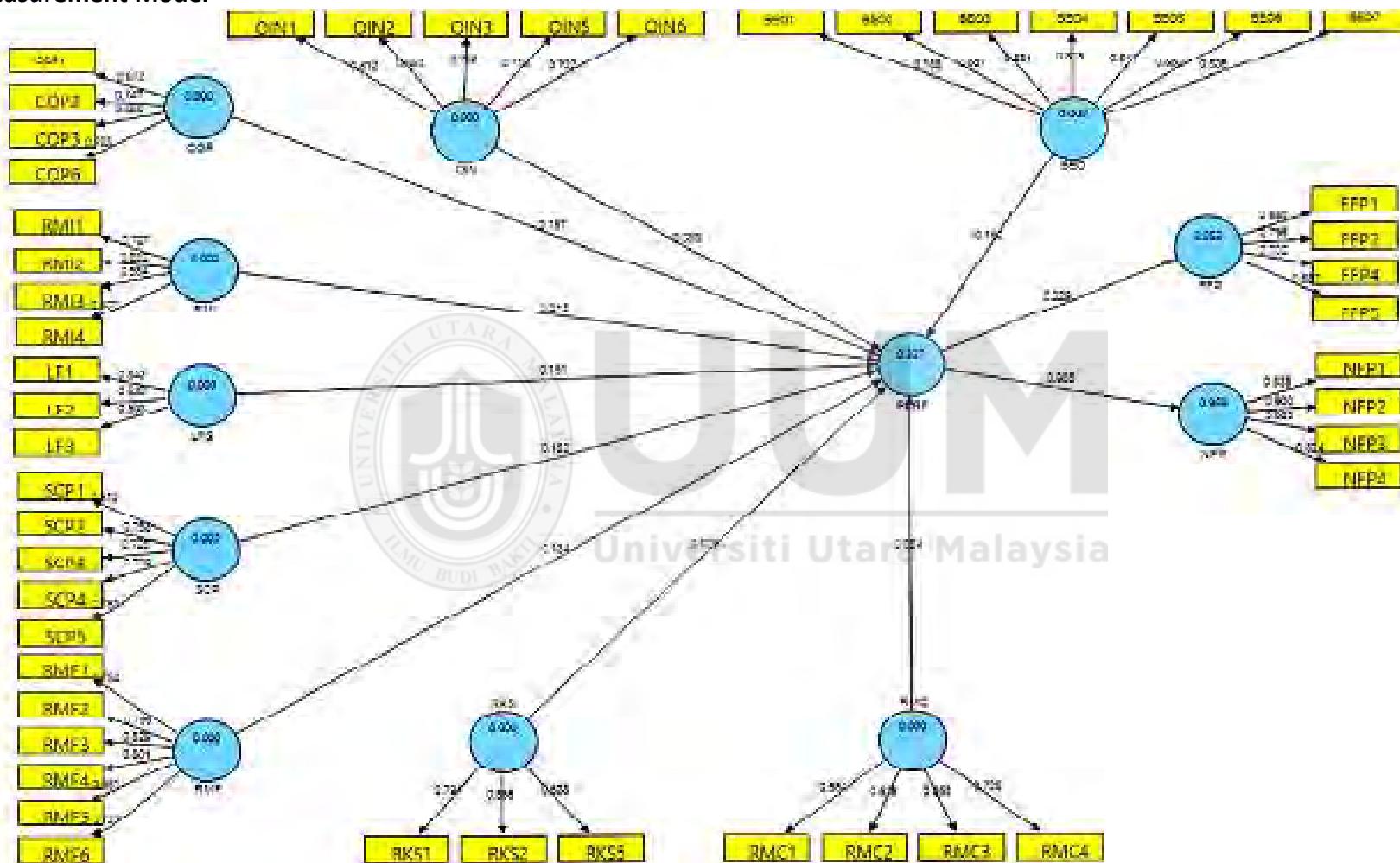
	BEO	COP	FFP	LFS	NFP	OIN	RKS	RMC	RMF	RMI	SCP
BEO1	0.788156	-0.009774	-0.003460	-0.171509	-0.208686	0.106740	-0.373040	-0.031855	-0.236766	-0.057289	-0.062911
BEO2	0.887097	0.063198	0.039019	-0.252703	-0.251139	0.089156	-0.362354	0.030429	-0.200091	-0.042873	-0.038666
BEO3	0.881392	0.061569	-0.012257	-0.189444	-0.262044	0.113272	-0.307113	0.003203	-0.155875	-0.081535	-0.127673
BEO4	0.874778	0.064176	0.048443	-0.188178	-0.331116	0.068958	-0.328941	0.015443	-0.261673	-0.068074	-0.028743
BEO5	0.840611	0.086301	0.071931	-0.095732	-0.303962	0.159320	-0.322596	-0.044243	-0.147449	-0.163061	-0.042862
BEO6	0.849781	0.048157	0.013097	-0.148821	-0.283559	0.083494	-0.315158	-0.065720	-0.166344	-0.075466	-0.026616
BEO7	0.805431	0.019912	0.088124	-0.086884	-0.282313	0.090836	-0.297103	-0.009190	-0.196955	-0.063375	0.040028
COP1	0.011331	0.673045	0.011167	0.111106	0.119014	-0.233916	0.014159	-0.092783	0.040758	-0.085362	0.007747
COP2	-0.014817	0.747307	0.079793	0.101915	0.113694	-0.089919	-0.002919	-0.007214	-0.003828	-0.124226	0.006425
COP3	0.204311	0.656040	-0.045899	0.064657	0.077524	-0.069745	-0.120702	0.008074	-0.064628	-0.094831	0.010657
COP6	0.041165	0.784849	0.002164	0.073534	0.101539	-0.178204	-0.063612	-0.043014	-0.052052	-0.142323	0.004539
FFP1	-0.052328	0.133356	0.679763	0.036101	0.025288	-0.100402	0.037060	-0.034745	-0.010446	-0.059137	0.026671
FFP2	0.080124	-0.041800	0.795990	0.044546	0.060622	0.105339	0.100288	0.084185	0.081138	0.044333	0.150923
FFP4	-0.017308	0.100143	0.701807	-0.012731	0.035109	0.051272	0.130658	0.015534	-0.055946	-0.077815	0.070056
FFP5	0.097933	-0.088315	0.687310	0.021880	0.032431	0.076853	0.135358	0.120464	-0.051088	0.083373	0.129565
LF1	-0.133139	0.119897	0.056764	0.843188	0.220798	-0.035152	-0.002839	-0.019065	0.093176	0.046887	0.078286
LF2	-0.183798	0.092534	-0.001698	0.830303	0.214819	0.036775	0.156813	-0.017131	0.107376	0.065978	-0.010352
LF3	-0.104352	0.059346	-0.000148	0.508174	0.030450	0.010906	0.069034	-0.092220	0.038421	-0.114008	0.003383
NFP1	-0.261376	0.216836	0.117116	0.193458	0.834531	-0.079502	0.212764	0.148534	0.211209	0.312195	0.233362
NFP2	-0.260028	0.165178	0.034576	0.214239	0.899782	-0.097324	0.246810	0.155119	0.196695	0.290965	0.253002

	BEO	COP	FFP	LFS	NFP	OIN	RKS	RMC	RMF	RMI	SCP
NFP3	-0.311494	0.046842	0.022277	0.201109	0.803401	-0.124487	0.216090	0.211776	0.255456	0.075737	0.244689
NFP4	-0.277874	0.058777	0.010774	0.242181	0.824203	-0.095951	0.283646	0.171416	0.217002	0.198121	0.164264
OIN1	-0.036652	-0.089510	0.018513	0.086129	-0.098856	0.812071	0.066609	-0.038248	-0.090440	0.057774	0.050268
OIN2	0.170429	-0.199221	0.003689	-0.009612	-0.108917	0.853248	-0.049515	0.171214	-0.048329	0.104027	0.185277
OIN3	0.132958	-0.174740	0.148062	0.000451	-0.111318	0.782321	-0.050301	0.131924	-0.037912	0.125797	0.105378
OIN5	0.110026	-0.191589	0.052672	-0.077423	-0.066504	0.718854	-0.021137	-0.006810	-0.006177	0.071648	-0.049570
OIN6	0.099273	-0.187566	-0.011693	-0.060338	-0.043669	0.722158	-0.084153	0.205351	-0.065682	0.160876	0.061634
RKS1	-0.513512	-0.021476	0.044463	0.132373	0.275406	-0.075649	0.793598	0.059808	0.145235	0.034335	0.243036
RKS2	0.028408	-0.026774	0.216950	0.035142	0.119179	-0.059146	0.666419	-0.009329	-0.014213	0.050724	0.253099
RKS5	-0.196731	-0.053343	0.094429	-0.004762	0.181707	0.092034	0.687971	0.179373	0.008692	0.195853	0.185576
RMC1	0.002029	-0.127166	0.066548	-0.052535	0.075939	0.145625	0.040252	0.653538	0.029530	0.098768	0.268712
RMC2	-0.026442	-0.151233	0.034909	0.006427	0.080802	0.100136	0.134190	0.634737	0.048456	0.152013	0.191135
RMC3	0.014887	-0.038781	0.070505	0.008954	0.222240	0.072309	0.013422	0.862947	0.187775	0.223265	0.242778
RMC4	-0.061462	0.083934	0.022351	-0.070052	0.133218	0.061933	0.196788	0.725300	0.007105	0.202512	0.337774
RMF1	-0.152668	0.032293	0.091273	0.168553	0.181763	-0.035731	0.088649	0.017968	0.753982	-0.032667	-0.041798
RMF2	-0.195018	0.005065	0.086444	0.034973	0.205164	-0.132047	0.062064	0.137908	0.799023	-0.051813	-0.087875
RMF3	-0.205627	-0.011613	-0.083822	0.054393	0.228987	-0.039078	0.047175	0.051164	0.828934	-0.105784	0.048885
RMF4	-0.150358	-0.039091	-0.026240	0.111125	0.221209	-0.085153	0.085230	0.036646	0.800997	-0.086729	0.073859
RMF5	-0.169947	-0.059559	-0.024128	0.093647	0.145273	0.027427	-0.016378	0.138627	0.680861	0.037601	0.035025
RMF6	-0.185534	-0.022891	-0.071962	0.090931	0.202263	-0.004524	0.115147	0.218650	0.726745	0.010811	0.028340

	BEO	COP	FFP	LFS	NFP	OIN	RKS	RMC	RMF	RMI	SCP
RMI1	0.014632	-0.164526	-0.058908	0.059166	0.147812	0.164798	0.066256	0.153171	-0.192855	0.727461	0.172264
RMI2	-0.181401	-0.137128	-0.017454	-0.000474	0.260389	0.047660	0.250076	0.295892	0.081990	0.832128	0.243158
RMI3	0.053614	-0.088939	0.002202	0.015822	0.049081	0.118693	-0.125415	0.069612	-0.129297	0.584002	0.139999
RMI4	-0.035882	-0.088144	0.058233	0.089891	0.218009	0.110564	-0.013754	0.128075	-0.079627	0.806785	0.074936
SCP1	0.052629	0.023093	0.169177	0.066473	0.108933	0.176968	0.204604	0.144550	-0.130452	0.259414	0.611994
SCP2	-0.085790	0.086408	0.049791	0.109947	0.294469	-0.050060	0.244986	0.234226	0.117088	0.068277	0.758034
SCP3	-0.007419	-0.000842	0.097268	-0.062286	0.173284	0.088098	0.240173	0.318536	-0.058536	0.227145	0.724866
SCP4	0.071573	-0.047366	0.119427	0.010537	0.136689	0.252511	0.119977	0.200556	-0.030799	0.104806	0.709109
SCP5	-0.139028	-0.087503	0.110780	-0.022316	0.151895	0.056199	0.287185	0.331673	0.032588	0.166431	0.753028



E4: Measurement Model



E5: Cross Loadings (Discriminant Validity)

ITEMS	BEO	COP	FFP	LFS	NFP	OIN	RKS	RMC	RMF	RMI	SCP
BEO1	.788	.010	.003	.172	.209	-.107	.373	.032	.237	.057	.063
BEO2	.887	-.063	-.039	.253	.251	-.089	.362	-.030	.200	.043	.039
BEO3	.881	-.062	.012	.189	.262	-.113	.307	-.003	.156	.082	.128
BEO4	.875	-.064	-.048	.188	.331	-.069	.329	-.015	.262	.068	.029
BEO5	.841	-.086	-.072	.096	.304	-.159	.323	.044	.147	.163	.043
BEO6	.850	-.048	-.013	.149	.284	-.083	.315	.066	.166	.075	.027
BEO7	.805	-.020	-.088	.087	.282	-.091	.297	.009	.197	.063	-.040
COP1	-.011	.673	.011	.111	.119	-.234	.014	-.093	.041	-.085	.008
COP2	.015	.747	.080	.102	.114	-.090	-.003	-.007	-.004	-.124	.006
COP3	-.204	.656	-.046	.065	.078	-.070	-.121	.008	-.065	-.095	.011
COP6	-.041	.785	.002	.074	.102	-.178	-.064	-.043	-.052	-.142	.005
FFP1	.052	.133	.680	.036	.025	-.100	.037	-.035	-.010	-.059	.027
FFP2	-.080	-.042	.796	.045	.061	.105	.100	.084	.081	.044	.151
FFP4	.017	.100	.702	-.013	.035	.051	.131	.016	-.056	-.078	.070
FFP5	-.098	-.088	.687	.022	.032	.077	.135	.120	-.051	.083	.130
LF1	.133	.120	.057	.843	.221	-.035	-.003	-.019	.093	.047	.078
LF2	.184	.093	-.002	.830	.215	.037	.157	-.017	.107	.066	-.010
LF3	.104	.059	.000	.508	.030	.011	.069	-.092	.038	-.114	.003
NFP1	.261	.217	.117	.193	.835	-.080	.213	.149	.211	.312	.233
NFP2	.260	.165	.035	.214	.900	-.097	.247	.155	.197	.291	.253

ITEMS	BEO	COP	FFP	LFS	NFP	OIN	RKS	RMC	RMF	RMI	SCP
NFP3	.311	.047	.022	.201	.803	-.124	.216	.212	.255	.076	.245
NFP4	.278	.059	.011	.242	.824	-.096	.284	.171	.217	.198	.164
OIN1	.037	-.090	.019	.086	-.099	.812	.067	-.038	-.090	.058	.050
OIN2	-.170	-.199	.004	-.010	-.109	.853	-.050	.171	-.048	.104	.185
OIN3	-.133	-.175	.148	.000	-.111	.782	-.050	.132	-.038	.126	.105
OIN5	-.110	-.192	.053	-.077	-.067	.719	-.021	-.007	-.006	.072	-.050
OIN6	-.099	-.188	-.012	-.060	-.044	.722	-.084	.205	-.066	.161	.062
RKS1	.514	-.021	.044	.132	.275	-.076	.794	.060	.145	.034	.243
RKS2	-.028	-.027	.217	.035	.119	-.059	.666	-.009	-.014	.051	.253
RKS5	.197	-.053	.094	-.005	.182	.092	.688	.179	.009	.196	.186
RMC1	-.002	-.127	.067	-.053	.076	.146	.040	.654	.030	.099	.269
RMC2	.026	-.151	.035	.006	.081	.100	.134	.635	.048	.152	.191
RMC3	-.015	-.039	.071	.009	.222	.072	.013	.863	.188	.223	.243
RMC4	.061	.084	.022	-.070	.133	.062	.197	.725	.007	.203	.338
RMF1	.153	.032	.091	.169	.182	-.036	.089	.018	.754	-.033	-.042
RMF2	.195	.005	.086	.035	.205	-.132	.062	.138	.799	-.052	-.088
RMF3	.206	-.012	-.084	.054	.229	-.039	.047	.051	.829	-.106	.049
RMF4	.150	-.039	-.026	.111	.221	-.085	.085	.037	.801	-.087	.074
RMF5	.170	-.060	-.024	.094	.145	.027	-.016	.139	.681	.038	.035
RMF6	.186	-.023	-.072	.091	.202	-.005	.115	.219	.727	.011	.028
RMI1	-.015	-.165	-.059	.059	.148	.165	.066	.153	-.193	.727	.172

ITEMS	BEO	COP	FFP	LFS	NFP	OIN	RKS	RMC	RMF	RMI	SCP
RMI2	.181	-.137	-.017	.000	.260	.048	.250	.296	.082	.832	.243
RMI3	-.054	-.089	.002	.016	.049	.119	-.125	.070	-.129	.584	.140
RMI4	.036	-.088	.058	.090	.218	.111	-.014	.128	-.080	.807	.075
SCP1	-.053	.023	.169	.066	.109	.177	.205	.145	-.130	.259	.612
SCP2	.086	.086	.050	.110	.294	-.050	.245	.234	.117	.068	.758
SCP3	.007	-.001	.097	-.062	.173	.088	.240	.319	-.059	.227	.725
SCP4	-.072	-.047	.119	.011	.137	.253	.120	.201	-.031	.105	.709
SCP5	.139	-.088	.111	-.022	.152	.056	.287	.332	.033	.166	.753

Note: RMF=Risk Management Framework, BEO= Board Equity Ownership, cop=Compliance, RMI=Risk Management Information, RMC=Risk Management Culture, RKS=Risk Knowledge Sharing, SCP=Staff Competence, OIN=Organisational innovativeness, LFS=Leadership Factors, FFP=Financial Firm Performance, NFP= Non-financial Firm Performance.

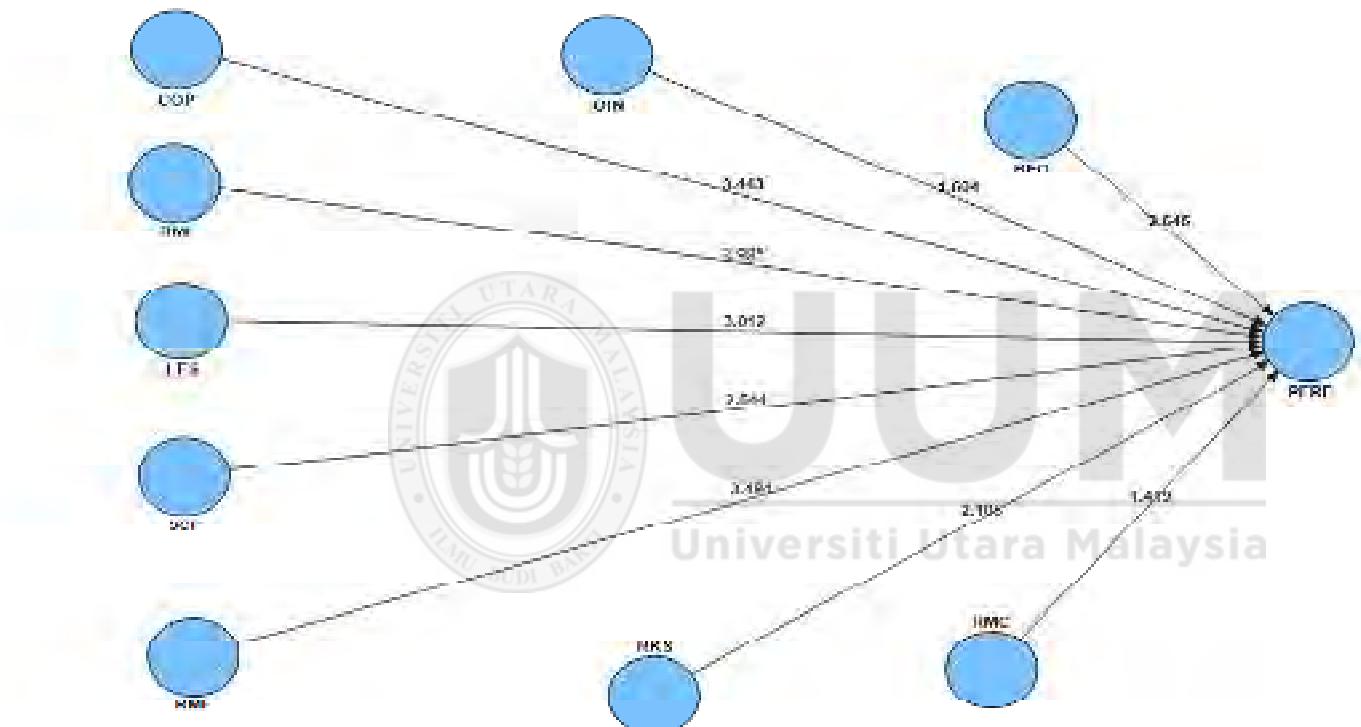


E6: Path Coefficients (Mean, STDEV, T-Values): Direct Relationship

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics (O/STERR)
BEO -> PERF	-0.169446	-0.172660	0.064060	0.064060	2.645124
COP -> PERF	0.165988	0.162507	0.048207	0.048207	3.443208
LFS -> PERF	0.150666	0.151287	0.050020	0.050020	3.012105
OIN -> PERF	-0.092638	-0.092423	0.057759	0.057759	1.603876
RKS -> PERF	0.122777	0.116869	0.058330	0.058330	2.104880
RMC -> PERF	0.084032	0.087787	0.059199	0.059199	1.419471
RMF -> PERF	0.185762	0.184009	0.053164	0.053164	3.494130
RMI -> PERF	0.215484	0.213986	0.054078	0.054078	3.984660
SCP -> PERF	0.159782	0.165862	0.062797	0.062797	2.544417

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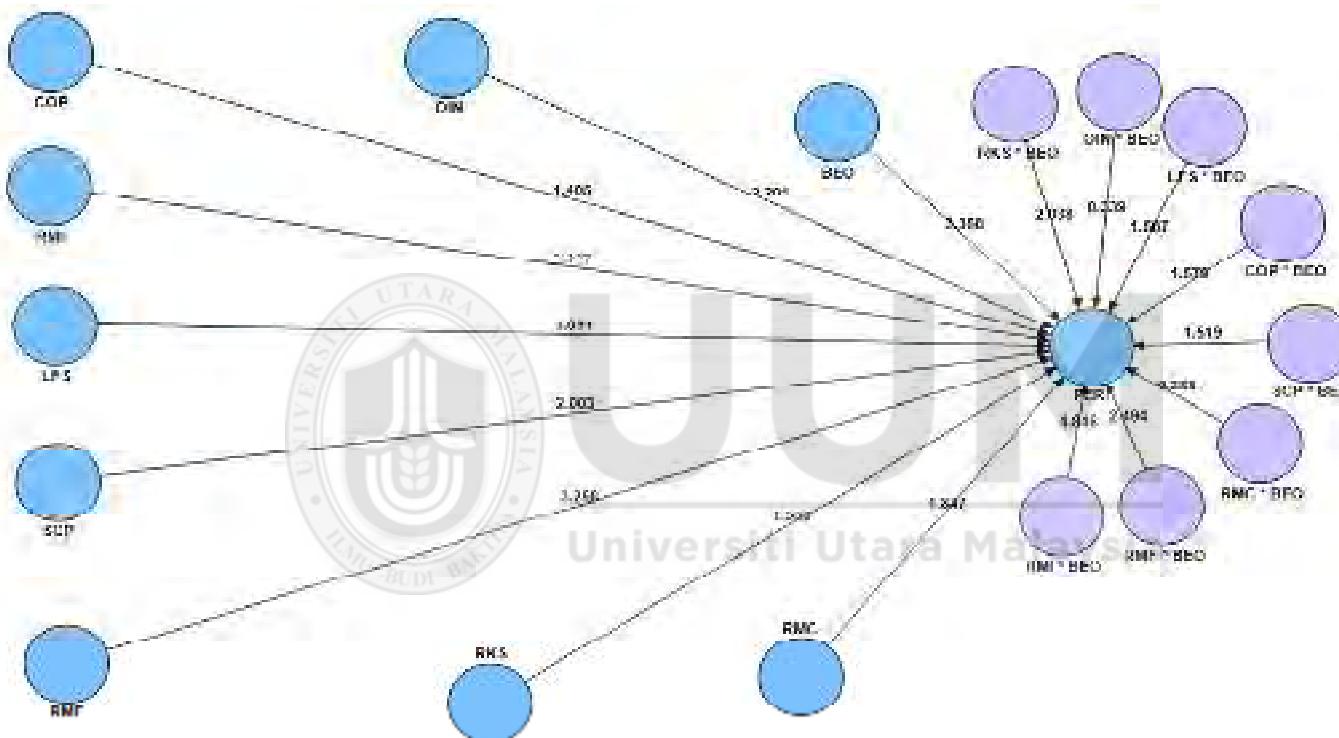
E7: Structural Model Direct



E8: Path Coefficients (Mean, STDEV, T-Values): Moderation Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics (O/STERR)
BEO -> PERF	-0.191497	-0.195492	0.057034	0.057034	3.357595
COP -> PERF	0.068705	0.069538	0.048913	0.048913	1.404640
COP * BEO -> PERF	0.073522	0.072817	0.046575	0.046575	1.578576
LFS -> PERF	0.168032	0.159508	0.054357	0.054357	3.091236
LFS * BEO -> PERF	-0.096357	-0.090224	0.060713	0.060713	1.587092
OIN -> PERF	-0.124564	-0.120232	0.056597	0.056597	2.200883
OIN * BEO -> PERF	-0.018672	-0.011338	0.055119	0.055119	0.338759
RKS -> PERF	0.085893	0.077741	0.055101	0.055101	1.558812
RKS * BEO -> PERF	0.114286	0.116517	0.056068	0.056068	2.038320
RMC -> PERF	0.107851	0.110176	0.058406	0.058406	1.846589
RMC * BEO -> PERF	-0.023765	-0.023885	0.061254	0.061254	0.387973
RMF -> PERF	0.185591	0.188297	0.056968	0.056968	3.257821
RMF * BEO -> PERF	0.163853	0.171557	0.065688	0.065688	2.494429
RMI -> PERF	0.166398	0.170060	0.053389	0.053389	3.116717
RMI * BEO -> PERF	0.261180	0.250254	0.053900	0.053900	4.845678
SCP -> PERF	0.145337	0.138405	0.072572	0.072572	2.002662
SCP * BEO -> PERF	-0.109889	-0.107237	0.072321	0.072321	1.519474

E9: Structural Model with Interaction



E10: Construct Crossvalidated Redundancy

Total	SSO	SSE	1-SSE/SSO
PERF	1304.000000	1163.348300	0.107862

