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Effects of Pricing and Reinsurance Practices on Performance of General Insurance Firms in East Africa

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Abstract
General insurance firms' performance is associated with numerous factors, including optimal pricing and appropriate reinsurance coverage both of which form part of the actuarial risks of these firms. This study examined how pricing and reinsurance practices influence the performance of non-life insurers in East Africa. Secondary and primary data were collected from 82 general insurance firms from Tanzania, Kenya and Uganda. The study showed a statistically significant and positive association between pricing and reinsurance practices and non-financial performance. Further, a statistically insignificant relationship between pricing and reinsurance practices and financial performance was revealed. From the findings, the implication is that general insurance firms need to engage in pricing and reinsurance practices that are closely linked to the company's underwriting strategy for better results. The study recommends that for general insurance firms to improve their overall performance they should focus on other relevant factors besides pricing and reinsurance practices.

Keyword: Pricing, Reinsurance, Firm Performance, General Insurance Firms

1. Introduction

Insurance companies bear risks and undertake risk management through analysis and evaluation of risks that exist in virtually all economic sectors, thus provide reassurance to most entities in any economy. In doing this they use past experience and make assumptions about the future (Trowbridge, 1989). Actuarial risk results if such assumptions turn out to be incorrect. Insurers should therefore take systematic measures in handling actuarial risk which includes among others, proper pricing and appropriate reinsurance. Prices charged should be sufficient for profitability while the reinsurance process should be appropriate for the portfolio being handled (Santomero & Babble, 1997).

It is important that the insurance sector performs well in any economy as this contributes to the overall prosperity of that nation. Actuaries normally measure and evaluate risks in order to price them appropriately by using data mining tools, sophisticated regression analysis and stochastic models (Dowd et al., 2007). They consider the number of claims (frequency) and their gravity or severity, uncertainty and inflation to adequately price the risks as they all impact on premiums (Promislow, 2011; Baranoff *et al*., 2009). Through reinsurance, risks are transferred wholly or partially, from an insurer to a reinsurer hence is insurance for insurance companies, and is one of tools employed by insurers to cater for insurance claims. Reinsurance also caters for large losses by protecting against catastrophic exposures, risk concentration and the volatility of underwriting results of the cedant. (Udaibir, *et al.*, 2003). The retention ratio (net premiums/gross premiums) is that portion of risk not passed on to the reinsurers and mirrors the insurer's overall underwriting strategy (Charumathi, 2012). Berger and Udel (1993) note that disciplined observance of underwriting guidelines and execution of a comprehensive program of reinsurance are both critically essential in management of catastrophe risks. According to IRA (2014), general insurance firms otherwise known as non-life insurance companies dominate the insurance industry in East Africa in terms of numbers and amount of gross written premiums. The performance of these firms is therefore important to the growth of this sub-sector.

The general well being of a firm over time is normally reflected in its performance. Kaplan and Norton (1996) look at it from various perspectives. The indicators of financial performance include profitability shown by numerous ratios for example: return on asset (ROA), return on equity (ROE), return on sales, profit margin and return on investments (ROI) (Zender, 2004; Ross *et al.,* 2009). Insurer profitability is measured by the excess returns over the expenses incurred in underwriting the business. It comprises part of the general financial management and is key in augmenting owners' wealth. Non-financial measurement aspects comprise of operational performance, overall effectiveness and efficiency including quality of service, increased market share in comparison to competitors, uniqueness and reputation that contribute to enhanced performance. (Lewin & Minton, 1986). However, some of these measures may be difficult to quantify objectively. In assessing performance, both quantitative and qualitative measures should be considered in arriving at an appropriate measure of overall firm performance (Udaibir, *et al.*, 2003).

2. Literature Review

Insurance risk is related to the types of insurance business the company writes. Some products have less risk (for example household insurance) than others (like motor insurance). To manage insurance risk, the company has to ensure that its products are priced sufficiently for profitability (McGregor, 2007). In insurance pricing, it is common to have several classes or risks, on which base rates are given, depending on demographic aspects (such as gender, age, health status, occupation and schooling), nature of business and property characteristics. The rates are modified to reflect experience factors like frequency and severity of past losses as well as other elements like loadings to cover the uncertainty elements especially due to inflation (Promislow, 2011). Policy pricing should therefore reflect both the expected losses and return on funds. The interest assumptions thus employed in developing insurance prices is of vital significance (Gerber, 1979). Actuaries calculate these rates using various procedures and techniques, the most modern including sophisticated regression analysis, stochastic models and data mining tools (Baranoff *et.al.* 2009; Fernandez, 2009).

Insurance risks can be reduced through the use of reinsurance. Reinsurance can also help lower instability in an insurer's solvency, the level of reserves required and improve financial performance as the available capital will be used more efficiently. The use of reinsurance can also assist in increasing a firm's underwriting capacity enabling it expand its ability to withstand catastrophes, access to rating expertise and better product development drawn from the reinsurer. This is especially if a company is offering a particular line of insurance for the first time (Carter, 2004; Actuarial Education Company, 2014). A rapidly expanding company can also shift some of its liabilities to a reinsurer to avoid impairing its capital and increase its capacity to pay claims (Baranoff et al., 2009; Mose & Kuloba, 2013). Insurer profitability is therefore positively related to insurance risk management through reinsurance (Berger et al.*,* 1992). Theoretically profitable insurance companies are those which have optimal underwriting strategies and higher retention rates (Charumathi, 2012). Low retentions could lead to unusually high underwriting losses due to high reinsurance premiums, leading to a depletion of equity capital. This could hurt the cedant's financial position irreparably (Booth et al., 1999). Despite reinsurance being a tool for risk management and associated with many benefits it may contribute to some other additional risks of an insurer such as legal risks, residual insurance risks, liquidity risks and counterparty risks. Interrelation of these risks therefore makes reinsurance a complex matter (Cummins and Trainar, 2009).

According to Chen & Wong (2004), profit enhances the solvency position of the insurer and plays a critical role in persuasion of investors to fund the business. Insurance companies may choose to expand their activities when profits are high by seeking new riskier business. This may lead to price reductions or offering of better policy covers for the same price. The consequences would be business disruptions and large losses incurred in alleviating these risks (Tahir & Razali, 2011). Under-pricing can also play a role in adverse changes in loss distributions leading to underwriting losses and in turn lower financial performance (Cummins & Danzon, 1991; Harrington & Danzon, 1990). Expansion in underwriting capacity through reinsurance may also

increase competition, leading to lower premium rates and reduction in underwriting standards, thus causing underwriting losses which in turn leads to poor financial performance (Udaibir, *et al*., 2003).

In designing their pricing and reinsurance strategies, general insurance firms should therefore consider several factors for improved performance. The factors will normally vary depending on the firm's corporate structure, size, nature of business and financial strength (Ismail, 2013). These, together with structured investment guidelines, human capital attributes such as skills, knowledge, experience as well as system measures such as innovative activities and real time information availability for front line staff will clearly significantly impact firm performance (Kaplan and Norton (1996; S&P, 2005).

Various related studies in this area include Berger *et al.* (1992) in the US who established that insurer profitability is positively related to insurance risk management through reinsurance as well as a study by Shiu (2004) in the UK which established that great dependence on reinsurance may lead to a reduction in insurer profitability. Cummins (1991), using financial and statistical models to determine insurance pricing established that insurers will perform better if they perform their underwriting and reinsurance programs well and price the underlying risks correctly. Mwelu et al., (2014) in a risk management and profitability study carried out in Uganda established that the risk management process influences changes in levels of firm performance. A study to determine factors that predict failure of US P & C insurance firms by Kim *et al.*, (1995), found that a number of variables, including pricing, recoveries from reinsurance and loss reserves were important predictors.

3. Research Problem

The main role of insurers is to undertake risks and in the process may end up underwriting very risky business. If a general Insurer fails, this may likely be due to a weak actuarial risk management program for example by having inadequate reinsurance leading to interruption of their operations and high mitigation expenses (Udaibir *et al.*, 2003). An insurer may succumb to altering their pricing assumptions and resort to price undercutting in order to survive the competition. Many firms advance under-pricing justifications based on arguments of company size, retaining market share and reputation and this often also includes arguments of retaining agent and broker allegiance. This misalignment of interests may in the long-run lead to insurer bankruptcy. There is need therefore to maintain optimal pricing models and reinsurance strategies in order to reduce insurer exposure to underwriting losses for improved performance.

Pricing and premium determination as well as reinsurance practices are some of the main factors that have a bearing on the performance of insurers. Empirical studies in a number of countries have tried to establish whether some specific firm characteristics have a relationship with general insurers' firm performance viz:- Mwangi & Iraya (2014), Chen & Wong (2004), Shiu (2004), Adams & Buckle (2003) and Cummins (1991). Very few studies have however

been carried out to establish the influence of pricing and reinsurance practices on general insurance firms' performance mostly in developing nations. This justifies a study in this area especially within the African context. The study predicts that pricing and reinsurance practices significantly influence the performance of general insurers in Kenya, Uganda and Tanzania.

4. Data and Methodology

A descriptive research design was employed by this study. The target population was all the 82 general insurers in the East African nations of Kenya, Tanzania and Uganda as at December 31, 2015. Primary data on non-financial performance, pricing and reinsurance practices was collected from the reinsurance and underwriting managers. Secondary data of a period of 5 years from 2010 to 2014 was obtained from the firms' annual financial reports.

The dependent variable in this study is performance, both financial and non-financial. Financial performance was represented by return on assets (ROA) generated using Net income before Tax and total assets while non-financial performance consisted of attributes of service quality/market share, reputation and innovation. Pricing and reinsurance practices represent the independent variable. A 5-point Likert scale was used to measure the non-financial variables from 1 to 5 denoting strongly disagree, disagree, neutral, agree, and strongly agree respectively. Non-financial performance was measured from very poor to excellent performance with scores ranging from 1 to 5 respectively.

The following hypotheses were tested:-

H1a.   There is a significant relationship between pricing and reinsurance practices and financial firm performance

H1b.   There is a significant relationship between pricing and reinsurance practices and non-financial firm performance

The linear regression models used to test the hypotheses were:

$FP = \alpha + \beta_1 (PR) + \beta_2 (RR) + e$ …………………………………….. (i)
$NFP = \alpha + \beta_1 (PR) + \beta_2 (RR) + e$ …………………………………... (ii)

Where,

Variable	Description / represented by
Financial Performance (FP)	Return On Assets (ROA)
Non-Financial Performance (NFP)	Composite score for innovation, service quality and reputation
Pricing (PR)	Composite score for pricing practices
Reinsurance (RR)	Composite score for reinsurance practices
α	Regression constant or Intercept
β_1, β_2	coefficient for the respective determinant
e	Error term

Mean and standard deviation were used to reflect the responses on reinsurance and pricing practices and non-financial performance. The relationship between the variables was analysed using regression analysis.

5. Results and Discussion

Responses were received from 70% of the firms that participated in the study. Table 1 and 2 (details in appendix) show a summary of the descriptive statistics. Results show that on average, the respondent firms optimally apply the pricing and reinsurance practices. Non-financial performance results also generally reflect good performance in service quality as well as reputation but lower performance with respect to innovation. Table 3 reflects these results.

Table 1: Mean Scores for Pricing and Reinsurance

Practice	Mean	Std Deviation	SK	KU	CV
Pricing Practices	3.75	.994	-.993	.974	0.27
Reinsurance Practices	3.83	.775	-1.232	2.197	0.20

Table 2: Summary of Non-Financial Performance

Indicator	Mean	Std Deviation	SK	KU	CV
FP (ROA)	5.99	9.057	-.421	3.126	1.51
NFP (Innovation, Service quality, reputation)	3.93	.838	-.773	.936	0.22

Source: Research Data
N =57: CV is coefficient of variation; Std Deviation is standard deviation, , KU is kurtosis; SK is skewness

Table 3- Regression Results: Dependent Variable-Financial Performance; Predictors - Pricing and Reinsurance practices

a) Model Summary

Model	R	R Square	Adjusted R square	Standard error of the estimate
1	.124[a]	.015	-.021	.189

a. Predictors: (Constant), Pricing, Reinsurance

b) ANOVA (Goodness of Fit)

Model		Sum of squares	df	Mean square	F	sig
1	Regression	0.030	2	0.015	.424	.656[b]
	Residual	1.934	54	0,036		
	Total	1.956	56			

a. Dependent Variable: Performance (Financial)
b. Predictors: (Constant), Pricing , Reinsurance

c) Regression Coefficients[a]

Model		B	Std error	t	Sig.
	Constant	0.270	0.194	1.396	0.168
	Pricing practices	-0.185	0.205	-0.903	0.371
	Reinsurance practices	0.043	0.164	0.265	0.792

a. Dependent Variable: Performance (Financial)

Table 3 (a-c) shows the regression results with financial firm performance being predicted by reinsurance and pricing practices. The models reveal an insignificant statistical relationship between reinsurance, pricing practices and financial firm performance (P>.05) with $\bar{R}^2$ = .015, F (2, 54) = .424, with a standard error of .189). Reinsurance and pricing explain only 1.5% of the variation in financial firm performance. Model coefficients as reflected in Table 3(c) show both Pricing (β = -0.185), p>0.05) and reinsurance (β = 0.043, p>0.05) as insignificant predictors of financial firm performance. The explanation could be that the several other variables that affect insurance risk like claims management and underwriting were not considered in this study. Other variables which especially affect financial performance of general insurers like liquidity, financial leverage and earnings assets were also not included in this study.

Table 4(a-c) reflects the regression results with non-financial performance being predicted by pricing and reinsurance practices.

Table 4: Regression Results: Dependent Variable- Non-Financial Performance; Predictors - Pricing and Reinsurance practices

a) Model Summary

Model	R	R Square	Adjusted R square	Standard error of the estimate
1	.374[a]	.140	.108	.080

a. Predictors: (Constant), Pricing, Reinsurance

b) ANOVA (Goodness of Fit)

Model		Sum of squares	df	Mean square	F	sig
1	Regression	0.057	2	0.028	4.378	.017[b]
	Residual	0.349	54	0.006		
	Total	0.406	56			

a. Dependent Variable: Performance (Non-Financial)

b. Predictors: (Constant), Pricing, Reinsurance

c) Regression coefficients[a]

Model	B	Std error	t	Sig.
Constant	0.5419	0.0822	6.5925	0.000
pricing practices	0.1468	0.0869	1.6892	0.047
Reinsurance practices	0.1574	0.0696	2.2624	0.027

a. Dependent Variable: Performance (Non-Financial)

The results reveal a relationship that is statistically significant between the independent variable (pricing and reinsurance practices) and the dependent variable (non-financial performance) ($P<.05$), with $R^2 = .140$, F (2, 54) = 4.378, and a standard error of .080. 14% of non-financial performance variations are accounted for by pricing and reinsurance practices. As shown in Table 4(c) the model coefficients show pricing and reinsurance practices as significant predictors of non-financial performance with pricing (β = .1468), p<0.05) and reinsurance practices (β = -1574, p< 0.05).

The resultant model is therefore specified as:

NFP= 0.542 + .147 PR +.157RR

6. Conclusion and Recommendation

The descriptive statistics findings revealed optimal pricing and reinsurance practices by the firms as would be expected. However, the influence of pricing and reinsurance practices on financial performance as hypothesized was insignificant. This may be explained by the fact that other important variables that impact on insurance risk management and financial performance were not included in the study. As hypothesized, pricing and reinsurance practices positively and significantly impact non-financial performance of non life insurance companies in the east African countries of Tanzania, Kenya and Uganda. This implies that a profit oriented general insurer should directly relate its pricing function with the underwriting function and reinsurance program for enhanced performance. The findings of the study are of significance to general insurers in East Africa as they point to optimized pricing and reinsurance programs which will in turn translate to better quality service, reputation, enhanced business and better performance.

The linear regression model presumed only pricing and reinsurance practices as the determinants of the performance of general insurers in East Africa. However, other actuarial risk management practices such as claims management and underwriting programs and, other variables including leverage, liquidity, and investment income among others do significantly affect the performance of the general insurance firms but were not covered by the study. Future studies need to consider these variables for more conclusive findings.

7. References

1. Actuarial Education Company. (2014). Institute and Faculty of Actuaries, London
2. Almajali, A. Y., Alamro, S. A. & Al-Soub, Y. Z. (2012). Factors affecting the financial performance of Jordanian insurance companies listed at Amman Stock Exchange. *Journal of Management Research, 4(2), 266-289*
3. Baranoff, E. G., Sager, T. W., & Shi, B. (2019). Semi-parametric modeling as a managerial tool for solvency. *Journal of Risk and Insurance, 67(3), 369-396*
4. Berger, L. A., Cummins, D. J. & Tennyson, S. (1992). Reinsurance and the liability insurance crisis. *Journal of Risk and Uncertainty, 5(1),253-272*

5. Berger, A. N. & Udell, G. F. (1993). *Securitization, risk and the liquidity problem in banking, in structural change in banking.* M. Klausner and L. J. White, eds., Irwin Publishing, Homewood, IL, p. 227-91

6. Booth, P., Chadburn, R., Cooper, D., Haberman, S. & James, D. (1999). *Modern Actuarial Theory and Practice*, Chapman and Hall, U.K.
7. Carter R. L. (2004). *Risk Management*: C.I.I Tuition Service Study Course 313, London

8. Charumathi, B. (2012). On the Determinants of Profitability of Indian Life Insurers − An Empirical Study: *Proceedings of the World Congress on Engineering* 1, 978-988. *WCE , London, U.K*
9. Chen, R. & Wong, K. A. (2004). The determinants of financial health of Asian insurance companies. *The Journal of Risk and Insurance, 71(3), 469-499.*
10. Cummins, J. D. (1991). Statistical and financial models of insurance pricing and the insurance firm. *The Journal of Risk and Insurance,* 58 (2), 261-302

11. Cummins, J. D. & Trainar, P. (2009). Securitization, insurance, and reinsurance, *Journal of Risk and Insurance. 76(3), 463–492*

12. Cummins, J. D. & Danzon, E. (1991). Price Shocks and Capital Flows in Liability Insurance. *working paper, Wharton School, University of Pennsylvania*

14. Dowd, K., Bartlett, D. L., Chaplin, M., Kelliher, P. & O'Brien, C. (2007). *Risk Management In The UK Insurance Industry: The Changing State of Practice*. Centre for Risk & Insurance Studies, University of Nottingham

14. Fernández, C. (2009). *Risk Management in the Insurance Business Sector*, Everis MFC Artes Gráficas, S.L.
15. Gerber, H. U. (1979). *An Introduction to Mathematical Risk Theory,* Homewood, 111 Irwin).

16. Harrington, S. E. & Danzon, E. (1990). *Price cutting in liability insurance markets*, working paper, Department of Insurance and Risk Management. The Wharton School, University of Pennsylvania
17. IRA. (2014). Kenya Insurance industry Annual Report, available at ira.*go.ke*

18. Ismail, M. (2013). Determinants of financial performance: The case of general takaful and insurance companies in Malaysia. *International Review of Business Research Papers, 9(6), 111-130*

19. Kaplan, R. S. & Norton, D. P. (1996). *The Balanced Scorecard: Translating Strategy into Action.:* Harvard Business School Press, Boston

20. Kim, Y. D., Anderson, D. R., Amburgey, T. L. & Hickman, J. C. (1995). The use of event history analysis to examine insurer insolvencies. *Journal of Risk and Insurance*, 62(1), 94 - 110

21. Lewin, A. Y. & Minton J. W. (1986). Determining Organizational Effectiveness: Another look, and an agenda for research, *Management Science*, 32(5),514-538.

22. McGregor, R. P. (2007). *Ruin Theory in Non-Life Insurance*, available on line at voila.net

23. Mose, V. & Kuloba, R. (2013). *Kenya Insurance industry outlook*, Policy Research and Division, IRA

24. Mwangi, M. & Iraya, C. (2014). Determinants of financial performance of general insurance underwriters in Kenya. *Journal of Business and Social Science*, 5(3), 210-215.

25. Mwelu, N., Donatus, M., Rulangaranga, S., Watundu, W. K., & Tindiwensi,C. K. (2014). Risk management and profitability of manufacturing firms in Uganda. *Industrial Engineering Letters, 4 (2), 49-54*

26. Promislow, S. D. (2011). *Fundamentals of Actuarial Mathematics*, 2nd edition, John Wiley and Sons Ltd, UK.

27. Ross, S. A., Westerfield, R. W., Jaffe, J. & Jordan, B. D. (2009). *Modern Financial Management.* 8th Edition. McGraw-Hill.

28. Santomero, A.M. & Babbel, D. F. J. (1997). Financial risk management by insurers: An analysis of the process, *Journal of Risk and Insurance,* 64 (2), 231-270

29. Standard & Poor's. *(2005). Enterprise Risk Management For Financial Institutions: Rating Criteria And Best Practice* The McGraw-Hill Companies, Inc. NY

30. Shiu, Y. (2004). Determinants of United Kingdom general insurance company performance. *British Actuarial Journal,* 10(5), 1079-1110.

31. Tahir, I. M. & Rizali, A. R. (2011). The relationship between enterprise risk management and firm value: Evidence from Malaysian Public Listed Companies, *International Journal of Economics and Management sciences, 1(2),* 32-41

32. Trowbridge, L. C. (1989). Fundamental Concepts of Actuarial Science. Actuarial Education and Research Fund, USA

33. Udaibir, S., Das, N. D. & RiPodpiera, R. (2003). Insurance and Issues in Financial Soundness. *IMF Working Paper*

34. Zender, J. F. (2004). *Evaluating Financial Performance*, Leeds School of Business

Appendix

Pricing Practices

Pricing Practices	Mean	SD	SK	KU	CV
Use of stochastic models/regression/data mining tools as guide in determining premiums	3.31	1.034	-.559	-.402	0.31
Determines / modify future premiums by relying on individual and/or group loss experience	4.16	.774	-1.480	4.428	0.19
Use rate classifications for each class of insurance	4.47	.734	-1.587	2.833	0.16
Load base premiums by a certain margin in order to make profits	3.54	1.196	-.594	-.282	0.34
make allowance for reserves to cover future claims	3.67	1.075	-.809	.274	0.29
Perform rate revisions frequently (every year)	3.47	1.136	-.426	-.577	0.33
Adjust resultant revised rates by rule or judgment	3.19	1.060	-.681	-.130	0.33
Experience policy cancellations and/or rewrite some policies if rates regularly fluctuate	3.44	1.195	-.662	-.523	0.35
Consider stability of loss ratio yearly in premium determination	4.00	.926	-.979	1.053	0.23
Premium rates correctly follow overall trends in the company	3.89	.947	-1.244	1.930	0.24
Develop and uses an experience rating system to determine the next year's premiums	3.81	.990	-1.084	1.071	0.26
Use merit rating (based on loss history) for some classes.	4.02	.855	-1.098	2.011	0.21
N=57: Mean Score	**3.75**	**.994**	**-0.933**	**0.974**	**0.27**

Reinsurance Practices

Reinsurance Practices	Mean	SD	SK	KU	CV
Always arrange sufficient and appropriate reinsurance covers for risks as need be.	4.61	.701	-2.842	11.703	0.15
Retain a larger percentage of the risks in the lines underwritten	3.42	1.281	-.267	-1.267	0.37
Reinsure only the risky classes / those with high loss ratios	2.60	1.321	.554	-.886	0.51
Portfolio has not been affected by catastrophic risks due to appropriate reinsurance arrangements	4.05	.895	-1.190	1.853	0.22
Reinsurance has helped the firm in : Underwriting volatility reduction, expertise, capacity, monitoring exposures of loss reserves	4.24	.610	-.656	-.054	0.14
N=57: Mean Score	**3.83**	**.775**	**-1.232**	**2.179**	**0.20**

Non Financial Firm Performance:

Quality of Service / Market Share	Mean	SD	KU	SK	CV
customer-centre services emphasis	4.54	.540	-1.045	-.472	0.11
High quality services provision those equalling expectations of customers.	4.21	.791	1.035	-.925	0.18
Market share has been maintained for the last few years.	3.69	.921	-.562	-.641	0.24
Process claims are processed within specified period of 14 days	3.81	.968	.132	-.660	0.25
Have mechanisms to ensure satisfactory resolving of complaints by customers	4.12	.589	2.488	-.620	0.14
Quality of service given by firm has enhanced referrals from existing clientele	4.20	.620	-.389	-.124	0.14
Quality service given has contributed to a growing client base	4.35	.789	.638	-.973	0.18
Improved market share is due to firm's competitive advantage	3.82	.849	1.500	-.918	0.22
We have the ability to ascertain the revenues attributable to new market segments	3.91	.889	1.249	-1.057	0.22
We precede others in new and / o/ enhanced product development	3.54	1.012	.163	-.591	0.28
The following events are taken into account with respect to new product development e:					
- Flooding/Terrorism/epidemics -	3.79	1.111	.601	-.822	0.29
- Customer feedback -	4.32	.638	1.699	-.648	0.14
- Competitor actions -	4.00	.788	.612	-.715	0.19
- R regulatory framework changes -	4.10	.809	2.389	-1.058	0.19

Reputation	Mean	SD	KU	SK	CV
In order to improve public trust, our company involves itself in transparent business practices.	4.44	0.598	2.907	-1.053	0.13
Firm's performance has been enhanced due to non involvement in scandals	4.28	0.921	1.009	-1.309	0.22
We undertake activities that take care of all stakeholders' interests.	4.26	0.669	1.079	-0.731	0.16
We also involve ourselves in Corporate Social responsibility (CSR) activities	3.96	0.609	3.872	-1.026	0.15
Claim issues are crucial to our reputation	4.49	0.658	2.329	-1.331	0.15

Innovation	Mean	SD	KU	SK	CV
Our critical processes are all automated	3.89	.900	-.038	-.701	0.23
Our operations computerized and almost entirely paperless	2.81	1.093	-.801	.144	0.39
There are relevant processes/programs to help us be more competitive.	3.54	.825	.779	-.935	0.23
The claims function is fully automated from beginning to end	3.00	1.239	-1.027	.000	0.41
All functions related to other service providers like intermediaries, surveyors, motor assessors, claim adjustors and engineers are wholly automated	2.81	1.060	-1.092	-.065	0.38
We have incorporated social marketing programs for enhanced efficiency in our operations	3.29	.890	.186	-.514	0.27
All personnel are computer literate and fully trained thus enhancing efficiency in performance	4.21	.977	1.647	-1.394	0.23
The Firm has in place infrastructure needed as well as skills and knowledges, for service delivery to cleits and other stakeholders.	4.19	.934	3.825	-1.764	0.22
Mean Score (Non-Financial Performance)	**3.91**	**.838**	**.936**	**-.773**	**0.22**

N =57: SK is skewness SD is standard deviation, CV is coefficient of variation, KU is kurtosis,
Source: Research Data