Factors Influencing Performance of Life Insurance Services in Tanzania: A Case Study of National Insurance Corporation of Tanzania

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ABSTRACT

The main objective of this study was to identify factors influencing the performance of life insurance service in Tanzania as an effort to contribute and promote insurance sector as an effective catalyst for economic growth. The study was based on data collected from the National Insurance Corporation of Tanzania which covered period of 16 years from 1995 to 2010. Data from annual reports, publications, market performance reports and documentation were obtained. Simple descriptive statistics and graphical analysis were used to describe selected variables. Multiple linear regression analysis was used as sole data analysis methods for research hypotheses. The results show Net Premium Written has been explained by new policies written, the industry market share, the costs of advertisement and marketing, the total number of registered insurance companies, the number of life insurance companies and the early claims settlement.

Key words: Life insurance, NIC, net premium written

BACKGROUND INFORMATION

With the increasing demands of customers, insurance sector has become competitive. The one for all or all for one syndrome is being given a go- by. Customers are becoming increasingly aware of their expectations, and demand higher standards of services, as technology is enabling them to make comparisons quickly and accurately. Their perceptions and expectations are continually evolving, making it difficult for service providers to measure and manage services effectively. The researcher wants to explore factors that affect the potential customer to seek for insurance services in Tanzania and how those factors affect the life insurance company's performance. The amount of Premium collected from policyholders who are insured with the National Insurance Corporation of Tanzania ltd (NIC) has been fluctuating year after year. Figure 1 indicates that premium trend was increasing from the year 1963 until 1998 when it started to decrease gradually. This was resulted from the Government policy of Liberalization and privatizations of financial sectors and insurance sector was among them. Many other insurance companies have been formed. This policy has increased competition in the market because new players lure away the NIC's market share. We are all aware of the essential role that insurance services play as a commercial and infrastructural service. From an infrastructural perspective it promotes financial and social stability, mobilizes and channel savings, supports trade, commerce and entrepreneurial activity and improves the quality of the lives of individuals. Governments all over the world are faced with challenges relating to the

regulatory environment, emerging global trends in the insurance sector, technological innovations and liberalization of the insurance sector. Despite the fact that NIC is having branches in each region in Tanzania and offer both long-term insurance services (life) and non life services (general), its market share has dropped significantly up to year 2010.

The potential impact of the operations of insurance companies on the activities of the policyholders, the economy as a whole and the impact of emerging trends in the global insurance market has raised public awareness about the benefits of insurance. There are two detailed studies on the determinants of life insurance demand, one taking into consideration only the Asian countries and the other based on 68 economies. The former study by Ward et al. (2003) and the later by Beck et al. (2003) evolves around the issue of finding the cause behind variations in life insurance consumption across countries. After almost three decades of empirical work in this direction, it is still hard to explain the anomalous behavior of Asian countries with higher savings rate, large and growing population, relatively low provision for pensions or other security and a sound capital market but comparatively low per-capita consumption of insurance. Except Japan, most of the Asian countries have low density and penetration figures. The insurance industry, in most of the Asian economies were publicly owned and remained isolated from domestic private or foreign participation. But, regulatory reforms and policy changes in the ASEAN economies in the post financial crisis period, liberalization process in some of the SAARC countries, China's accession to WTO and creation of Hong Kong SAR had led to phenomenal changes in the growth pattern of insurance industry in these economies. Insurance Conference held in Dar es Salaam in year 2010 shows that only about 1% of Tanzanians are registered in various insurance products, Jagjit Singh, (2010) and lack of awareness seems to be the source. As it is difficult to predict the future and much other uncertainty (Sonia, 2002), this paper reports on a research study intended to examine factors that influence the performance of life insurance services and whether they have statistical significant influence on volume of premium collections by the giant insurance company, NIC.
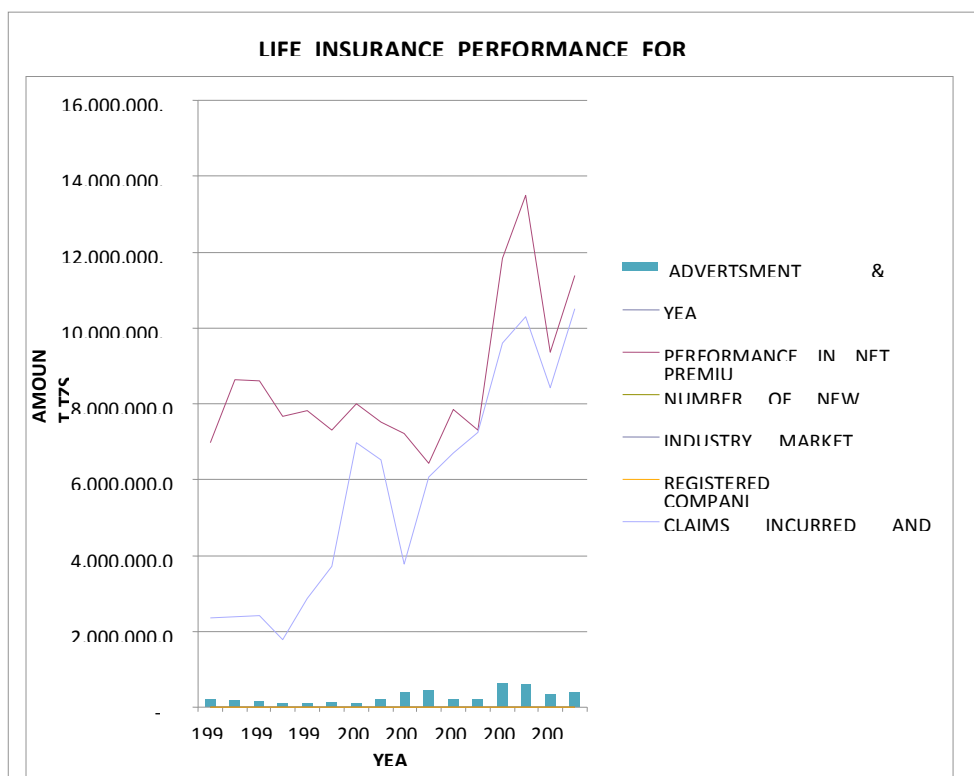

Figure 1: NIC Life Insurance performance for 15 years from 1995-2010
Source: NIC Annual reports (1995-2010)

Research objective
Specifically this paper intends to cover the following three objectives;

o Describe factors which influence the performance of life insurance services in form of the net premium written

o Assess extent at which the selected factors affecting written premium are linearly correlated to each other

o Analyze the causal-effect influence of the selected factors in the performance of the company in form of premium written.

Research Hypotheses
The General Hypothesis of the study is that the selected study factors have significant influence on the performance of the life insurance services in Tanzania. Specifically the following hypotheses were tested:

o Number of new life insurance policies has a statistically significant positive influence on life insurance premium

o The company's market share has a statistical negative influence on the life insurance premium collection.

o Life insurance premium decreases with increase in the costs of advertisement and marketing

o There is no influence of number of registered insurance company on the life premium collection

o Additional registered life insurance company has a negative influence in the life insurance premium.

o Claims payments have negative influence on the company premium performance.

LITERATURE REVIEW
Theoretical literature Review
Studies on life insurance consumption dates back to Heubner (1942) who postulated that human life value has certain qualitative aspects that gives rise to its economic value. But his idea was normative in nature as it suggested 'how much' of life insurance to be purchased and not 'what' will be purchased. There were no guidelines regarding the kind of life policies to be selected depending upon the consumers capacity and the amount of risk to be carried in the product. Economic value judgments are made on both the normative as well as positive issues. Later studies on insurance gradually incorporated these issues via assimilating developments in the field of risk and uncertainty following works by von Neumann and Morgenstern (1947), Arrow (1953), Debreu (1953) and others. The economics on insurance demand became more focused on evaluating the amount of risk to be shared between the insured and the insurer rather than evaluation of life or property values. This emerged because it was risk associated with individual life or property that called for an economic valuation of the cost of providing insurance.

Life insurance is essentially a form of saving, competing with other forms of saving in the market. The theory of life insurance demand thus developed through the life-cycle model(s) of saving. Let a person's income rate and his consumption plan are represented by a continuous function of time $y(t)$ and $c(t)$ respectively. Using the expected utility framework in a continuous time model, Yaari (1965) studied the problem of uncertain lifetime and life insurance. Including the risk of dying in the life cycle model, he showed conceptually that an individual increases expected lifetime utility by purchasing fair life insurance and fair annuities that give the expected payment which satisfy the police holder. Simple models of insurance

demand were proposed by Pratt (1964), Mossin (1969), Smith (1968) and others; considering a risk adverse decision maker with an initial wealth *W*. The results indicate that demand for life insurance varies inversely with the wealth of the individuals. Hakansson (1969) used a discrete-time model of demand for financial assets and life insurance purchase in particular to examine bequest motive in considerable detail. Pissarides (1980) further extending Yaari's work proved that life insurance was theoretically capable of absorbing all fluctuations in lifetime income. Lewis (1989) found out that the number of dependents as an influence on the demand for life insurance.

Insurance allows people to prepare themselves for the unexpected by taking cover for a specified fee known as premium. Once a customer is insured he is supposed to be compensated immediately when the loss occurred. Most of the time people do take insurance because it is the law which require them and not because they want to cover themselves. Sometimes the quality of the service as well as the advertising does inspire people. Factors affecting Life assurance services may be; the price or premium charged by the insurers; the performance of the company in the industry; the cost incurred in order to advertise insurance products; the number of other companies providing the same or related services; the early or quick settlement of the customers claims as well as other benefit like bonuses

Empirical literature Review
Most of the studies had focused on both the demand side factors and the supply side factors. Headen and Lee (1974) studied the effects of short run financial market behavior and consumer expectations on purchase of ordinary life insurance and developed structural determinants of life insurance demand. They considered three different sets of variables: first, variables stimulating demand as a result of insurer efforts (e.g. industry advertising expenditure, size of the sales force, new products and policies, etc.); second, variables affecting household saving decision (e.g. disposable, permanent and transitory income, expenditure expectation, number of births, marriages, etc.) and lastly, variables determining ability to pay and size of potential markets (e.g. net savings by households, financial assets, and consumer expectation regarding future economic condition). They concluded that life insurance demand is inelastic and positively affected by change in consumer sentiments; interest rates playing a role in the short run as well as in the long run.

Using an international dataset (12 countries over a period of 12 years) to examine the relationship between property liability insurance premiums and income, Beenstock et al. (1988) found out that marginal propensity to insure i.e., increase in insurance spending when income rises by 1$, differs from country to country and premiums vary directly with real rates of interest. Assuming a two period simple model; they considered the case when wealth *W* is reduced by *G* following a loss and no insurance purchased in the first period. If there had been some insurance purchased than wealth in the first period equals (*W- premium paid*) and assuming loss, end period wealth is (*G – sum insured*). Thus, again the decision of consumer and his/her initial wealth status too are significant factors when short run or long run consumption of insurance is considered.

The study by Truett et al. (1990) discussed the growth pattern of life insurance consumption in Mexico and United States in a comparative framework, during the period 1964 to 1984. They assumed that at an abstract level demand depends upon the *price* of insurance, income level of individual, availability of substitute and other individual and environment specific characteristics. Further, they experimented with demographic variables like age of individual insured(s) and population within the age group 25 to 64 and also considered education level to have some bearing on insurance consumption decision. They concluded the existence of higher

income inelasticity of demand for life insurance in Mexico with low income levels. Age, education and income were significant factors affecting demand for life insurance in both countries.

Starting with a brief review of Lewis's theoretical study and an assumption that inhabitants of a country are homogeneous relative to those of other countries, the study by Browne et al. (1993) expanded the discussion on life insurance demand by adding newer variables namely, average life expectancy and enrollment ratio of third level education. The study based on 45 countries for two separate time periods (1980 and 1987) concluded that income and social security expenditures are significant determinants of insurance demand, however, inflation has a negative correlation. Dependency ratio, education and life expectancy were not significant but incorporation of religion, a dummy variable, indicates that Muslim countries have negative affinity towards life insurance.

Based on a cross-sectional analysis of 45 developing countries, Outreville (1994) analyzed the demand for life insurance for the period 1986. In his study he considered variables such as agricultural status of the country represented by the percentage of agricultural labor force; health status of the country in terms of amenities like percentage of population with access to safe drinking water; percentage of labor force with higher education and the level of financial development as factors explaining insurance demand other than the variables we have discussed above. Two dummy variables were used to reflect the extent of competition in the domestic market and foreign participation in the countries considered. The analysis shows that personal disposable income and level of financial development significantly relates to insurance development. Since the political philosophy regarding market openness varies from country to country, market structures dummy appeared to be significant.

There are two detailed studies on the determinants of life insurance demand, one taking into consideration only the Asian countries and the other based on 68 economies. The former study by Ward et al. (2003) and the later by Beck et al. (2003) evolves around the issue of finding the cause behind variations in life insurance consumption across countries. After almost three decades of empirical work in this direction, it is still hard to explain the anomalous behavior of Asian countries with higher savings rate, large and growing population, relatively low provision for pensions or other security and a sound capital market but comparatively low per-capita consumption of insurance. Except Japan, most of the Asian countries have low density and penetration figures.

The two main services provided by life insurance: income replacement for premature death and long-term savings instruments, are the starting point for Beck et al. (2003). They considered three demographic variables (young dependency ratio, old dependency ratio and life expectancy), higher levels of education and greater urbanization as independent factors in explaining insurance demand. Economic variables like Gini index and Human development index are new additions along with institutional variables reflecting political stability, access to legal benefits and an index of institutional development were used. The analysis considering the time period 1961 to 2000 shows that countries' with developed banking system, high income and lower inflation have higher life insurance consumption. The association of insurance demand with demographic is not statistically strong however older the population, higher tends to be insurance consumption. The luxury good nature of insurance did not reflect through its association with income distribution.

In contrast to Beck et al. (2003) results, the study by Ward et al (2003) is indicative of the fact that improved civil rights and political stability leads to an increase in the consumption of life insurance in the Asian region as well in the OECD region. Following Laporta et al (1997, 1998, and 2000) works relating to supportive aspect of legal environment for finance, they too considered the same in determining insurance demand. Analyzing the data from 1987 through 1998 for OECD and Asian countries, they observed that income elasticity between developed economies and emerging economies are consistent with "*S*-cure" insurance growth findings by Enz (2000). One basic factor that puts a brake on growth is low propensity to consume: low propensity for life insurance, not necessarily because of considerations of affordability nor because of inadequate range of insurance products and services. Rajni M. Shah (2008). The major determining factor is lack of awareness of life insurance per se. And this phenomenon is not confined to rural and semi rural segments of society: it pervades urban populace as well.

Policy review
In Tanzania all insurance businesses are regulated by Tanzania Insurance Regulatory Authority (TIRA). TIRA was established under Section 5 of the Insurance Act No. 10 of 2009 which provides that there is established a body to be known as the Tanzania Insurance Regulatory Authority; that subject to the general supervision of the Minister, the Authority shall be charged with the responsibility of coordinating policy and other matters relating to insurance in the United Republic and that the Authority shall be a body corporate with perpetual succession and a common seal and shall, its corporate name, be capable of suing and being sued; capable of borrowing money, acquiring and disposing of property; and capable of doing all other things which a body corporate may lawfully do.

Insurance business is divided into two main classes that are General Insurance Business and Long Term Assurance Business. General Insurance business comprises the following classes: accident, sickness, land, vehicles, railway rolling, aircraft, ships, goods in transit, fire and natural forces, damage of property, motor vehicle liability, aircraft liability, liability for ships, general liability, credit, surety ship, miscellaneous, legal expenses, and assistance (as per Part B of the Second Schedule of the Insurance Act 2009). Long Term Assurance business is defined as meaning life and annuity business, marriage and birth business, linked long term business, and permanent health insurance business (as per Part A of the Second Schedule of the Insurance Act 2009).

Research gap
Most of the researches discussed in the empirical review section were on the demand and supply side. They do not explain much on the side of the insurance companies and how they perform in terms of volume premium collections. Factors such as income, knowledge, age, awareness, low propensity to consume have put break to low propensity for life insurance. This is not necessarily because of considerations of affordability not because of inadequate range of insurance products and service Rajni (2008) but the major determining factor is lack of awareness of life insurance per se; and this phenomenon is not confined to rural and semi rural segments of society: it pervades urban populace as well. Most such persons cannot possibly pay for the care they would need if they were uninsured. They might be forced to deplete their assets and the risk to health and future earnings for such persons can be substantial and therefore they may be willing to buy insurance. Does the premium set by insurance companies ensue reasonably affordable to the potential customers? The researcher discovered that the factors influencing the performance of insurance companies in terms of volume of premium collected have not properly been explained in developing country like Tanzania.

RESEARCH METHODOLOGY

Research design and Data

The research followed a descriptive research design paradigm where time series data were used. Secondary Desk review off documentary data from annual reports, financial analysis reports and actuarial data were used. Desk review method was used to collect data from the annual financial reports from the NIC Ubungo Branch and NIC Headquarter offices. Other supplementary data were extracted from ISA and TIRA and these data covers the period of 15 years from 1995-2010. The period was selected so as to enable establishment of reasonable conclusion for the study. Data from TIRA and ISD were used to obtain data for other insurance market share performances. Interviews with key informants were used to the marketing experts and the company actuarial manager for clarification and verification of the contradicting observations.

Operationalisation of variables

Dependent variable

This study uses performance of life insurance services in Tanzania as a dependent variable. This performance is measured by the amount of net written premium collected so as to determine if the life insurance services trends in business. Premium means a consideration paid by insured or policy holder. A premium calculation for life insurance depends on the sum assured, age and occupation. Life premium is paid either on monthly, quarterly half yearly of yearly installment for the period of term of assurance.

This amount is measured in terms of Tanzanian Shillings. The researcher has used net written premium instead of gross premium since the gross premium contain the premium which is not for the company but for the reinsurance business. The gross premium is ceded to other insurance companies in or outside Tanzania who also contribute to the losses occur which are bared by NIC.

Independent Variables

The factors identified by the researcher which influence the performance of the life insurance services are the number of new policies written, the company market share, and the costs incurred in advertisement and marketing, the number of registered insurance companies as well as the early settlement of claims.

New Written Policies

A policy is an insurance contract which stipulates the benefits, the term of assurance, the name of the policyholder and installment payment. The number of new policies was obtained from the actuarial data reports by sorting yearly from 1995 to 2010 by using Microsoft excel.

The company's Market share

The company market share data were obtained from the ISD and TIRA annual reports were by they were measured by dividing company's gross premium to the total premium collected by all registered insurance companies in Tanzania. The market share is calculated in terms of percentage.

The costs of advertisement and marketing

The costs of advertisement means all costs incurred in marketing products, participating in products promotions, the entertainment expenses for corporate agents and brokers and other customers. A researcher obtained these costs from the NIC Annual Financial Reports for the period of 16 years.

The Registered Insurance Companies

Each year new insurance companies are formed and registered. A list of registered insurance companies obtained from the ISD/TIRA annual market reports. From 1963 when NIC was formed till 1997 when the economy was liberalized, there was only one insurance company providing both services of life and non life insurance. After the government introduced new policies of free market economy, many insurance companies where forms, some providing both life and non life services and other providing only life insurance. The researcher decided to establish whether the increase in number of insurance companies had any influence on the company's life insurance services as this also lured the market share.

Life Insurance Companies

The available number of companies offering either or both life insurance products was used as a factor in determining the performance of life insurance. This was selected to find whether the company offering life assurance products have influence in the life performance in them of premium collection. This factor was selected in the context that if a company specialize on a given product, then the performance is expected to be the best.

Claims settlement

The claim in life means the maturity cases whose terms have expired. The claims settlement amount includes the matured claims as well as the long outstanding claims. It is assumed that the early and quick payments of claims do influence the company's performance. These data were obtained from the NIC annual reports

Data processing and analysis

This study was quantitative in nature where descriptive statistics and bivariate correlation analysis were used to establish the relationship between study variables. Measures of central tendencies were mainly used for quantifying study variables. Karl Pearson's coefficient of correlation was used to measure the degree of relationship between variables. The third method employed was Multiple Linear Regression Analysis to determine influences of life insurance. Equation 1 is a regression model employed.

$$Y = A_0 + A_1X_1 + A_2X_2 + A_3X_3 + A_4X_4 + A_5X_5 + A_6X_6 + e \quad \dots\dots\dots\dots\dots\dots\dots\dots\dots(1)$$

Where Y　　　　= dependent variable
　　　X_{1-6}　　 = Independent variables
　　　A_0　　　= Constant
　　　A_{1-6}　　 = are variable coefficients
　　　E　　　= error term

Substituting with selected variables, equation 1 can be rewritten as seen in structural model 2.

$$PREM = A_0 + A_1NUMPOL + A_2 MARSHAR + A_3ADVERT + A_4REGINSUR + A_5 LIFCOY + A_6CLAIMSET + e \ .(2)$$

Where:
PREM　　　　= Net Written Premium as a measure of performance
NUMPOL　　　= Number of new policies written each year
MARSHAR　　= Company's market share in the industry
ADVERT　　　= Advertisement and Marketing costs
REGINSUR　　= Total Registered Insurance Companies
LIFCOY　= Life Insurance Companies
CLAIMSET　　= Claims Incurred and Settled
e = error term

Theoretically, the coefficients A_1, A_2, A_3, A_4, A_5 and A_6 are parameter coefficients and they should be greater than 0.

Appendix 1 shows dataset for all the study variables. The data collected were audited and approved by the relevant authority. Data were processed and cleaned to compute study variables by use of MS Excel and as a results some relationships were obtained and graphs were drawn between variables so as to determine the relationships. Descriptive statistics methods do measure the relationship between the dependent and independent variables.

RESEARCH FINDINGS

Description of variables and their relationships

Relationship between the net premium collected and the variables influencing it

From the above figure, it can be seen that the net written premium increase with increase in the costs of marketing, the claims settlement, the number of life insurance companies as well as the number of registered insurance companies. But the number of new policies and the company market share decreases with increase in premium collections. At the beginning 1995-2001, premium collections were increasing with decreasing in the number of new policies written. These may be explained as the policies underwritten with low sum assured figures hence low amount of premium collections. The company market shares has an inverse relationship with the premium performance, the number of registered insurance companies as well as the number of life insurance companies increase with increase in the premium collections.
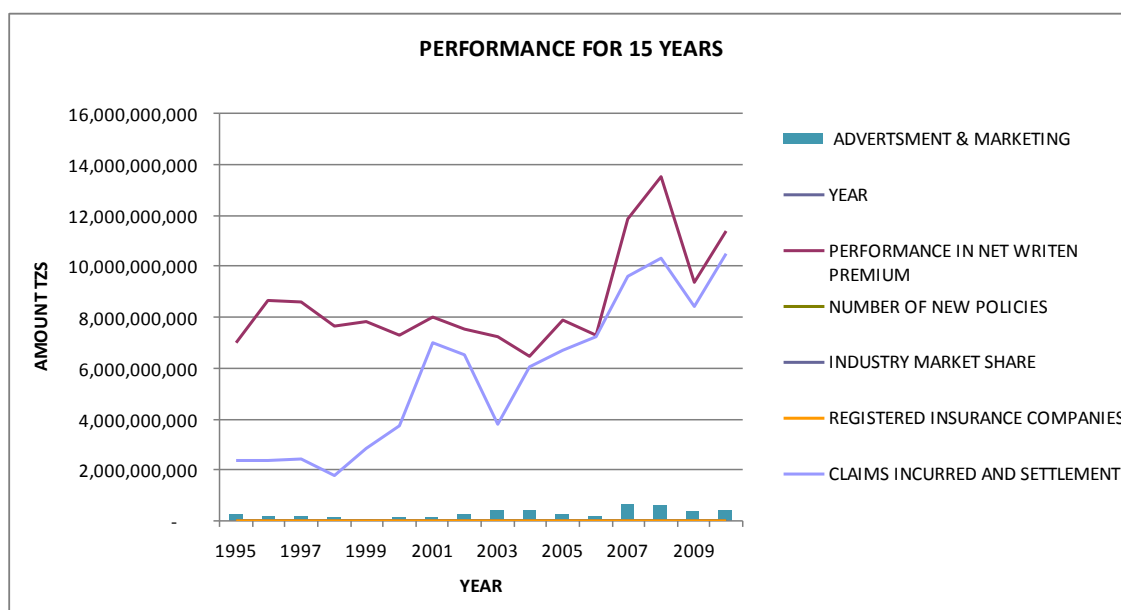

Figure 2: Relationship between the net premium collected and the variables influencing it
Source: Appendix1 based on data from NIC, TIRA annual reports 1995-2010

The relationship between new policies in net written premium

From the graph 2, the new policies written have inverse relation with premium collected. At the beginning 1995, new policies written were many but the premium collected was low. This may be caused by the fact that the new policies are of small value of sum assured and as a results a many policies with little premium. Premium is calculated from the sum assured figures.
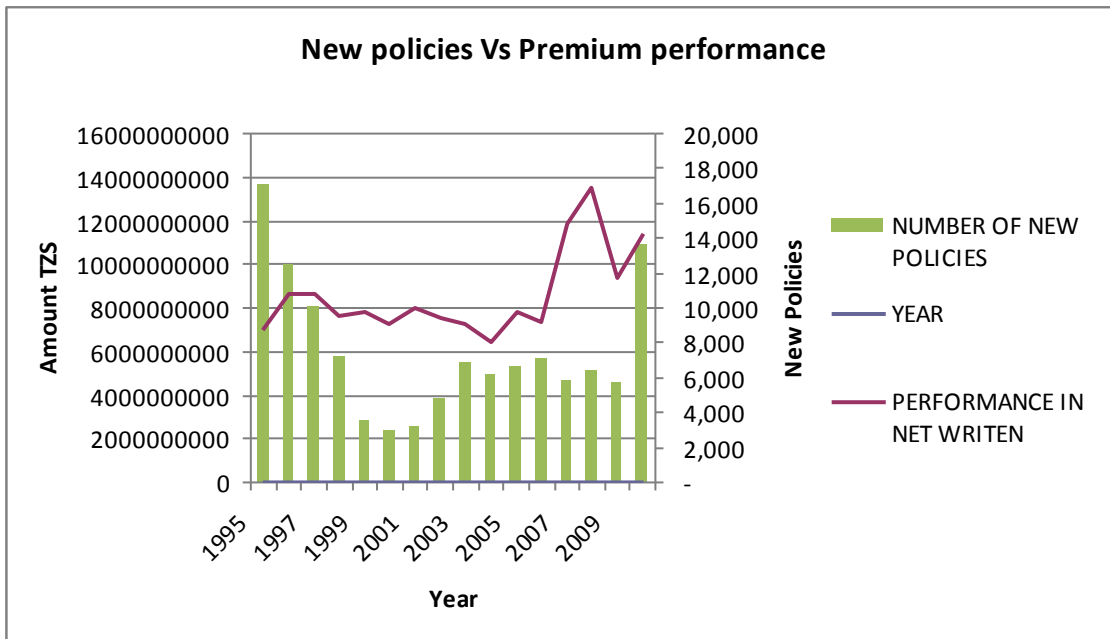
Figure 3: The effect of new policies in net written premium
Data Source: Appendix1 based on data from NIC, TIRA annual reports 1995-2010

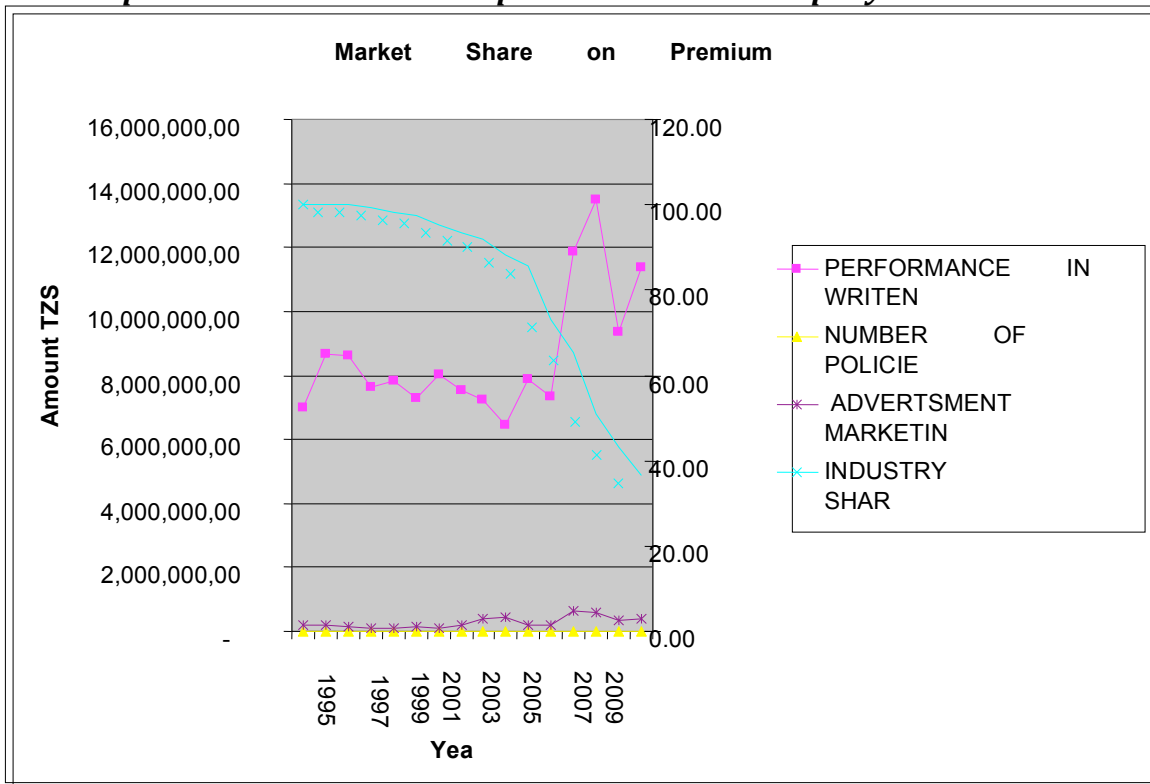*Relationship between the net written premium and the company's market share*

Figure 4: Relationship between net written premium and the company market share
Data Source: Appendix1 based on data from NIC, TIRA annual reports 1995-2010

Figure 4 shows that the market share has indirect relationship with the premium written. The marketing and advertisement costs have direct relationship with the premium collection. The graph shows that there is negative relationship between company performances and its industry market share. This result explains that when the market shares increases, the premium decreases. This can be caused by other factors which influence market share such as type of life products offered for example group life vs. individual life insurance or whether the

policies written are of small value of sum assured. Some companies can have lower market share but have higher net premium written.

Relationship between the net written premium and costs of advertisement

It can be seen in Figure 5 that the advertisement and marketing costs are directly related to the company's performance. For the period under study, the costs of advertisement have been increasing with increase in premium collections. When a company is a sole provider of a certain service, it might not need to incur a lot of costs to advertise the product. This is because the customer will automatically need its products as there are no competitors who may offer better customer services. These costs are worth when there is stiff competition among companies offering the same type of products. From the finding NIC do not spend too much on adverts may be because of percent it hold on the market share.
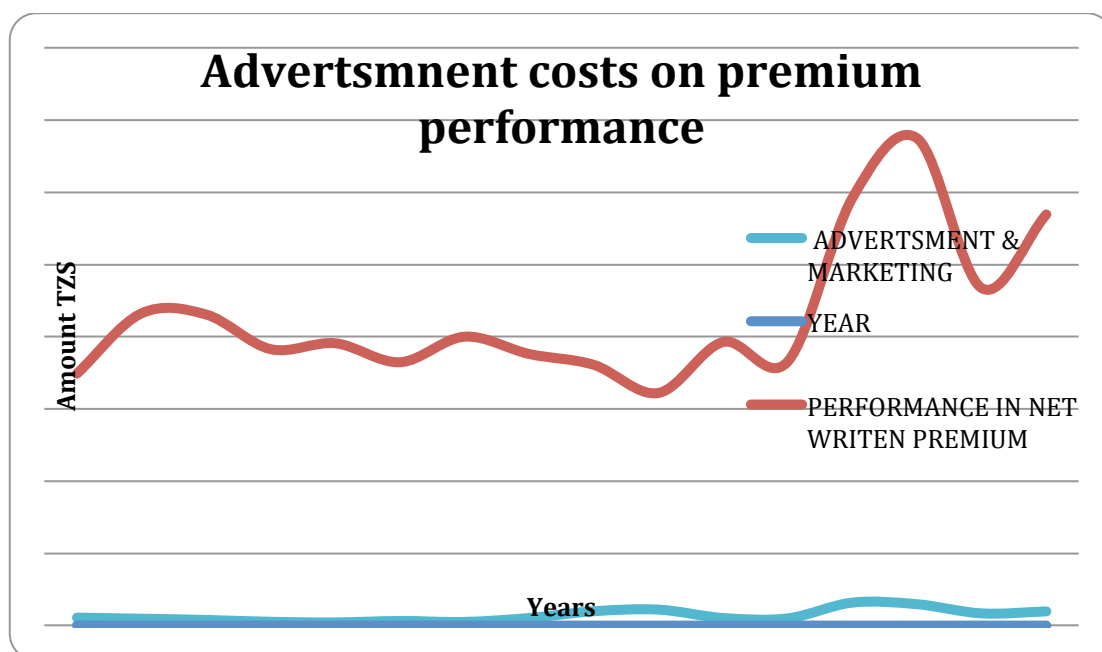

Figure 5: Relationship between costs of advertisement on premium performance
Data Source: *Appendix1 based on data from NIC, TIRA annual reports 1995-2010*

Relationship between the net written premium and life insurance companies

The number companies providing life insurance services have a significant influence in premium collection performance. This is because the market share is reduced and at the same time few available companies fight for the same market. The number of insurance companies offering life insurance services are directly related to the company's life insurance performance. Figure 6 shows that there is direct relationship between the net written premium and the claims settlement. This may be so since the amount paid in settlement of claims is not only for the current period, but also the outstanding amounts results from past non payment of claims. Most of NIC claims were over due in the period under study and hence theirs payment did not mean that they were directly related to the collections of the premium for the same year. The theory behind insurance business is that the more you pay claims the more collection of premium as people will be motivated to write new policies.
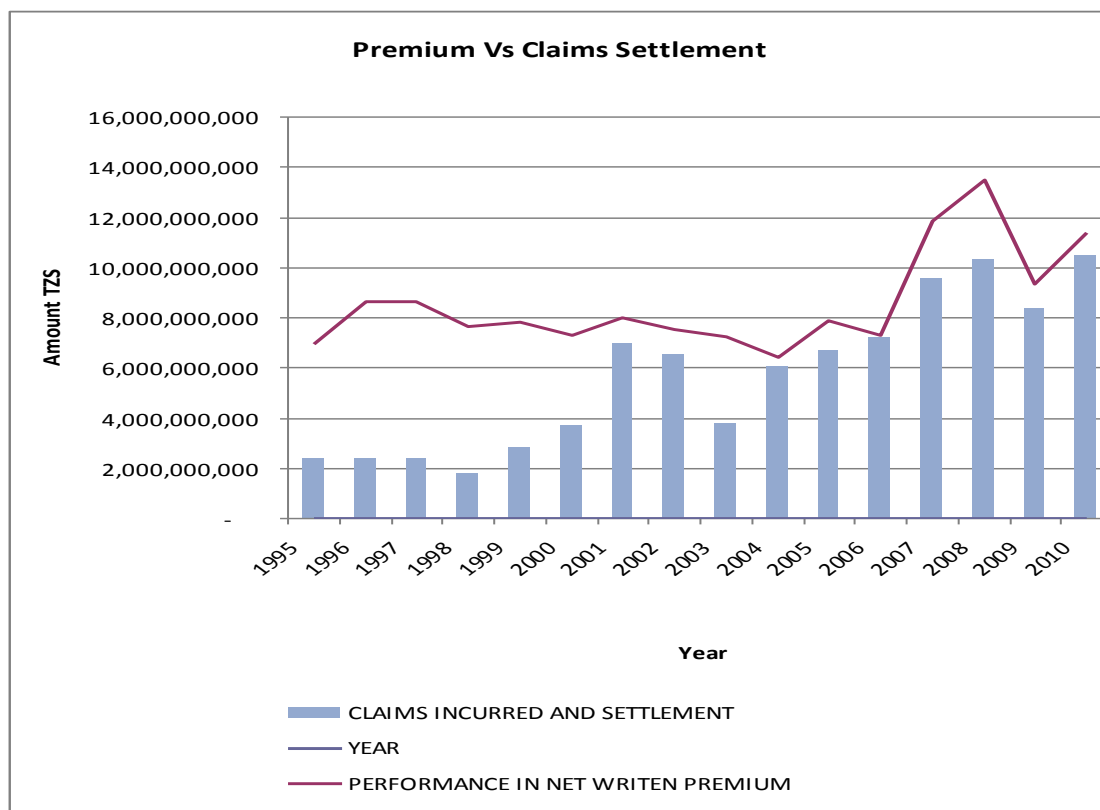
Figure 6: Relationship between net written premium and claims settlements
Data Source: Appendix1 based on data from NIC, TIRA annual reports 1995-2010

Correlation analysis

Table 1 presents a bivariate correlation matrix for all the variables used in the regression analysis. Correlation analysis was done to observe the magnitudes and significance of the linear relationship between two independent variables and also between each independent variable and the dependent variable. This study has employed the Karl Pearson's coefficient of correlation (*'r'*) to assess the correlation among variables so as to determine the strength of the relationship. The value of *'r'* lies between +1 and -1. Positive values of *r* indicate positive correlation between the two variables whereas negative values of 'r' indicate negative correlation. A zero value of 'r' indicates that there is no association between the two variables whatsoever. The independent variables which have significant correlation coefficients to the premium collection include industry market share, advert and marketing costs, number of registered insurance companies and claims settlement costs. The Net written premium moves in the positive direction with number of registered insurance companies. Table 1 further shows that there is a significant linear relationship between the volume of premium collected and the number of registered companies at 5% level of significance. At the 1% level of significance, the premium collections increases with advertisement and marketing costs (*'r'*= 0.377) and claims payments (*'r'*= 0.381). However the industry market share changes in the negative direction with the premium collections (*'r'*= -0.438), and the relationship is significant at 1% level of significance.

Table 1: Correlation analysis matrix for selected variables

		New Written Life Policies	Net Written Premium	Industry Market Share	Advert and Marketing Costs	Registered Insurance Companies	Life Insurance Companies	Claim Incurred and Settlement
New Written Life Policies	Pearson Correlation	1						
	Sig. (2-tailed)							
	N	16						
Net Written Premium	Pearson Correlation	.078	1					
	Sig. (2-tailed)	.775						
	N	16	16					
Industry Market Share	Pearson Correlation	-.059	-.338**	1				
	Sig. (2-tailed)	.827	.001					
	N	16	16	16				
Advert and Marketing Costs	Pearson Correlation	.055	.377**	-.354**	1			
	Sig. (2-tailed)	.841	.004	.006				
	N	16	16	16	16			
Registered Insurance Companies	Pearson Correlation	-.283	.203*	-.477**	.410*	1		
	Sig. (2-tailed)	.289	.047	.000	.044			
	N	16	16	16	16	16		
Life Insurance Companies	Pearson Correlation	-.415	.373	-.382**	.403	.433**	1	
	Sig. (2-tailed)	.051	.155	.004	.121	.000		
	N	16	16	16	16	16	16	
Claim Incured and Settlement	Pearson Correlation	-.175	.389**	-.368**	.381**	.333**	.362**	1
	Sig. (2-tailed)	.517	.003	.000	.004	.000	.001	
	N	16	16	16	16	16	16	16

**. Correlation is significant at the 0.01 level   (2-tailed).
*. Correlation is significant at the 0.05 level   (2-tailed).

Data Source: Appendix1 based on data from NIC, TIRA annual reports 1995-2010

The industry market share of the NIC shows to be negatively correlated with advertisement and marketing costs, the number of registered insurance companies, the number of life insurance companies and claims settlement amount. The coefficients between the industry market share and the advert costs are significant at the 0.01 level of significance. The coefficient of -0.354 shows that as the costs of advertisement and marketing increase, the industry market share decreases; hence there is a significant linear negative relationship between the two. The number of registered insurance companies increases with life insurance and claims settlement; and their relationship is significant at 0.01. In general terms, the bivariate correlation coefficients were not very large to pose multicolleanearity threats in the regression analysis. Hence all independent variables were variables were included in the regression analysis as explanatory side of equation 2.

Regression Analysis Results
Regression analysis was done to test the six hypotheses stated in section 1 of this paper. An Ordinary Least Squares Method (OLSM) was used to estimate equation (2) when there are more than two independent variables the analysis concerning relationship is known as multiple correlation and the concerning these relationship is known as multiple regression equation. As mentioned before the model is used to determine if the independent variables have statistical significant influence on dependent variables. An Ordinary Least Squares

Method (OLSM) was used to estimate equation (2). Table 2 presents regression analysis results and here follows we summarise findings for each stated hypotheses.

Table 2: Regression analysis results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.089E7	8.420E6		3.668	.005
	New Written Life Policies	-112.366	114.615	-.123	-.980	.353
	Industry Market Share	-224753.329	76059.959	-.469	-2.955	.016
	Advert and Marketing Costs	1.956	2.538	.170	.771	.461
	Registered Insurance Companies	-804306.075	335109.242	-.355	-2.400	.040
	Life Insurance Companies	1.953E6	1.137E6	.160	1.717	.120
	Claim Incurred and Settlement	-.162	.284	-.0246	-.570	.583

a. Dependent Variable: Net Written Premium

Hypothesis 1 (H₁)

Table 2 indicates that there is a negative relationship between company performance and the number of new policies written each year under study. At the 5% level of significance, the negative influence of number of new written policies is insignificant to the company's performance in terms of volume of premium collected. Hence we accept a null hypothesis that there is no significant relationship between new policies and premium performance (P=.353). For each 100 new policies written, the premium is reduced by 12 Tanzanian shillings. This may not be surprising as the total amount of life premium collected may not be influenced by new policies rather than the former policies which are enforce, not yet matured. This is true for most of life insurance products since they take many years to mature up to 20 years. If a person has a super education provider policy, he contributes each month up to 20 years without renewing the policy unlike motor (non life) policies which are renewable each year. This relationship may be caused by the fact that the new policies are of small value of sum assured and as a results a many policies with little premium. Premium is calculated from the sum assured figures. This finding may justify that it is not necessary that many new policies will results into higher premium collection but only if these policies attract higher figures of premium and sum assured figures

Hypothesis 2 (H₂)

There is negative relationship between company performance and the industry market share each year (table 2). At 5% level of significance the negative influence of the market share is significant to the company performance in terms of the volume of premium collected. Hence we reject the null hypothesis that there is no significant influence of market share on premium performance. Some companies can have lower market share but still maintain higher premium collected. These companies may concentrate on life businesses which provide larger amount of premium and not necessary for them to be leaders in market share. This result explains that when the market shares increases, the premium decreases. This can be caused by other factors which influence market share such as type of life products offered for example group life vs. individual life insurance or whether the policies written are of small value of sum assured. Some companies can have lower market share but have higher net premium written. When NIC's market share was 100% the premium collected was still low. This can be explained by the factor that the policies were of little amount of sum assured which resulted into low figures of premium collected. The fact can be explained may be as most of the policyholders who took the life insurance where teachers, police force, and military people e.t.c. who are paid lower salaries as opposed to other cadre.

Hypothesis 3 (H₃)

It is indicated in table 2 that company performance increases with cost of advertisement and marketing each year under study but the influence is not statistically significant at 5%. Hence we accept a null hypothesis that there is no significant relationship between the advertisement costs and premium performance. For each shilling increase in the costs, the amount of premium increases only by TZS 17. The explanation behind this could be that when a company is a sole provider of a certain service; it might not need to incur a lot of cost to advertise the product. These costs are worth when there is stiff competition among companies offering the same type of products like mobile phone companies like Tigo, Airtel etc. hence it is worth for them to invest in marketing promotion for them and that much in insurance industry. When a company is a sole provider of a certain service, it might not need to incur a lot of costs to advertise the product. These costs are worth when there is stiff competition among companies offering the same type of products. From the finding NIC do not spend too much on adverts may be because of percent it hold on the market share.

Hypothesis 4 (H₄)

Regression results indicate that there is statistically significant negative influence of number of registered insurance company on the life premium collection. This result may be so due to the fact that the available registered companies are not offering only life insurance products hence being many in number they do not have a positive influence in the performance of the life insurance. The results imply that a 10% increase in registered insurance companies will lead to a 3.5% decrease the premium collected is reduced. The explanation may be that the additional companies could be offering other insurance products and as a result a customer may opt for other services.

Hypothesis 5 (H₅)

Results for hypothesis 5 show that there is no significant influence of number of life insurance companies on premium performance although the two variables are positively related. Sometimes there are benefits or extra products offered by a new company such as loans or bonuses which motivate people to require the services and thereby increasing demand for life insurance. This hypothesis holds true as it implies that the marketing campaigns are likely to increase due to increased competition thereby increasing awareness of the products offered including life insurance.

Hypothesis 6 (H₆)

Although the relationship between claims paid and life insurance is insignificant, regression results indicate that increase in payments of claims decreases life premium collections. Results in table 2 imply that a 100% increase in claims payment leads to only 2% decrease in demand for life insurance. The claims paid are long outstanding and not of the current period. So their settlement does not motivate people to take new policies or renew the previous ones. Also the delay in settlement may result into a situation where people surrender their policies. Even if a company uses a lot of its funds to settle claims, if these claims were long time overdue, the net effect is likely not improving the company's performance. It expected that the quick claim payments could motivate people to take new insurance policies or renew others. But from the observations in chapter four, there is indirect relation between the net written premium and claims settlement. This may be because the claims were of longtime and hence they were paid during the period under study. Late payment of claims results into people cancelling the already written policies or let them lapse as they refuse to bring premium.

CONCLUSION AND RECOMMENDATIONS

It is noted in the study that life insurance in Tanzania is still at its infancy stage compared to non life insurance. The study findings suggest that claims settlement, number of life insurance companies, costs of advertisement and new policies showed to have negative correlation with NIC's life insurance. Since NIC does offer both life and non life insurance, it is advised that the settlement of claims on non life insurance should be emphasized. Timely payment of claims will likely motivate people to purchase this product. The companies should also target higher paid customers who will underwrite higher sum assured hence premium collected increase as well as the company performance. NIC, being the only national insurance company in the country, the government may offer special treatment or impose some policies which will enable the company to improve premium collection. In developed countries, health insurance is mandatory as the other social security deduction such as PPF, NSSF. Government may decide to impose compulsory life insurance policies and laws. For instance it should be compulsory for all civil servants to take life insurance covers at NIC or give special exemptions for the company to pay some of the statutory taxes such as corporate tax, withholding tax etc. Given the difficulty in accessing data on life insurance, it is advised that NIC and other insurance companies   should ensure they employ advanced techniques of data storage as well as accounting and insurance packages. This will ensure and enable proper record keeping and enable good and reliable more sound analysis of the company performance in terms of life insurance.

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APPENDIX 1: Data collected from NIC, ISD, TIRA annual reports from 1995-2010

Year	Performance in net written premium	Number of new policies	Industry market share	Advertisement & marketing	Registered insurance companies	Number of life assurance companies	Claims incurred and settlement
1995	6,972,474,900	17,163	100.00%	221,013,061	1	1	2,365,346,735
1996	8,645,348,377	12,522	100.00%	190,631,947	1	1	2,398,101,616
1997	8,616,000,000	10,126	100.00%	156,279,765	1	1	2,405,105,458
1998	7,655,280,334	7,211	99.50%	105,359,609	11	4	1,792,022,533
1999	7,818,976,091	3,559	98.20%	88,137,880	11	4	2,864,451,161
2000	7,293,877,094	3,019	97.30%	127,417,455	11	4	3,714,898,449
2001	8,001,231,012	3,258	95.10%	101,913,333	11	4	6,986,872,987
2002	7,521,930,233	4,881	93.40%	209,708,295	11	4	6,533,054,691
2003	7,221,012,000	6,870	92.08%	397,036,400	12	4	3,778,322,000
2004	6,443,222,000	6,185	88.36%	442,003,271	13	4	6,063,723,000
2005	7,854,476,000	6,632	85.72%	210,262,712	14	5	6,701,813,000
2006	7,313,257,000	7,149	73.03%	200,509,614	17	5	7,233,621,000
2007	11,844,706,000	5,890	65.20%	637,320,160	18	5	9,603,055,000
2008	13,496,451,000	6,387	51.10%	591,820,485	18	5	10,308,994,000
2009	9,346,220,000	5,713	43.30%	338,075,567	24	5	8,415,561,000
2010	11,387,074,000	13,677	36.50%	392,578,000	27	6	10,491,172,000

Source: NIC, TIRA Annual Reports 1995-2010