

What Drives the Development of Life Insurance Sector? Empirical Evidence from Tanzania

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Abstract

The study was conducted to examine determinants of life insurance development in Tanzania where by inflation rate, interest rates, income level, domestic savings and financial depth as independents variables while life insurance development specified by premium written was a dependent variable. The study guided by, the ex post facto research design. The study population consist the whole macroeconomic environment where sample of five aspects named interest rates, income level, domestic savings, financial depth and inflation rate selected with coverage of twenty-three (23) years from 1996 to 2018. The study employed a purposeful sampling technique to select five aspects of macroeconomic factors. The study employed secondary data pooled from the Tanzania Insurance Regulatory Authority (TIRA), Bank of Tanzania (BOT) and National Bureau of Statistics (NBS). Basing on the hypotheses testing the study found that financial depth and interest rate have a statistically positive influence on life insurance development. Moreover, inflation rate, income level and domestic savings have a statistically negative influence on life insurance development at 5% significant level. The study findings provide insights from a practical point of view on the determinants of life insurance development in developing countries like Tanzania, thus filling the gap in the literature reviews. The study findings serve as guidance to regulators and policymakers on what set of factors to review and incorporate into policy in order to foster positive development of life insurance in Tanzania.

Keywords: Life Insurance Development, Macroeconomic Variables, Financial Sector Development, Developing Economies and Tanzania

1. Introduction

Life insurance has taken on increasing importance as a way for individuals, families and companies to manage risk (Omollo, 2016). Recognizing the life insurance industry's critical role in the economy, governments worldwide place a higher premium on fostering insurance sector development. Among the initiatives that have intensified by the government over time are the establishment of policies and regulations that foster expansion of life insurance coverage through time (Alhassan & Biekpe, 2016). The success of recognition of life insurance as important aspect in the economies for many countries manifest through gross premiums increased by 4% in 2019, remaining consistent with the trend in 2017 and 2018 at the global level (OECD, 2021). In east Africa, Kenya's insurance penetration level is the highest in East Africa at 2.3% while both Tanzania and Uganda are at 0.5% and 0.8% penetration rates respectively (AKI, 2020). According to World Bank (2021) Life insurance premium volume to Gross Domestic Product (%) in Kenya was reported at 1.0414 % in 2019 while 0.21494 % in Uganda and 0.0806 % in Tanzania.

Despite the fact that life insurance appears to grow over time in terms of premiums paid at varying levels from country to country with Tanzania seems to be the lowest in east Africa, according to TIRA (2020), the life insurance industry's development in Tanzania manifests itself in a variety of ways. Gross premiums written by Tanzanian insurers amounted to TZS 104.3 billion, compared to TZS 80.8 billion in 2017, representing an increase of 29%. In 2018, Tanzania's life insurance portfolio consisted of group life (79.7%), individual life (20.0%), and other life (0.3%). On a class-by-class basis, the highest growth rate in Tanzania's life business was experienced by group life with 38.6%, followed by other life (12.5%) and individual life (1.3%). Life insurers' assets rose by 7.7% in 2017–2018, from TZS 222.8 billion to TZS 240 billion, while their liabilities increased by 9.5% during the same period, from TZS 171.1 billion to TZS 187.3 billion. Despite a good trend in terms of premium increments over time, studies on factors that lead to life insurance sector development as measured by premiums are still scanty in the context of Tanzania. In light of this strand, our study conducted to examine the determinants of life insurance sector development in Tanzania. Our study considers interest rates, income level, domestic savings, financial depth and inflation rate as independent variables to guide the study objectives.

This paper is organized according to sections. The introduction is covered in Section 1. Section 2 contains the literature review and the development of hypotheses. The literature review examines empirical evidence pertaining to life insurance development determinants. Section 3 describes the methodology used to collect and analyze data. Section 4 presents the findings and results discussion. Section 5 presents the study's conclusion and recommendations.

2. Relevant Literature Review and Hypothesis Development

Insurance is a protection against financial loss arising on the happening of unexpected event. Life insurance as an investment tool as well, in order to overcome the difficulties caused by the death of the head of household and aging and senility. In many countries with life insurance, a great resource for the entire community, which can be obtained from the

insurance taken for his development of the insurance industry and can be applied in other sectors or service. Generally, life insurance policies can be seen as a protection against the impact of financial loss or its equivalent that would result should the insured passed away. Insurance industry plays a key role in countries growth and development. Given the significant effect of economic environment on insurance industry, researchers have always attempted to identify the variables that determine insurance sector development by using different methodologies and measurements, hence come up with contradictory findings. Studies of Mishra (2014) and Zadeh and Amini (2015) confirmed a positive relationship between life insurance development and income, while studies of Shi et al. (2015) and Alhassan and Biekpe (2016) confirmed a negative influence of income on life insurance development. On the other hand, Sliwinski et al. (2013) and Zerriaa and Noubbigh (2016) confirm a positive association between inflation and life insurance development, while Mishra (2014) and Alhassan and Biekpe (2016) confirm a negative relationship between inflation and life insurance development. Other studies such as Brokesov á et al. (2014) and Jahromi and Goudarzi (2014) confirm the insignificant influence of inflation on life insurance development. Zerriaa et al. (2017) confirm that life is positively influenced by income and financial development, while inflation and interest do not have any influence on life insurance development. Studies by Heo et al. (2013), Mishra (2014), and Parida and Acharya (2014) confirmed a positive association between savings and life insurance. Sen and Madheswaran (2013) confirmed an inelastic relationship between savings and life insurance development. On the other hand, studies by Alhassan and Biekpe (2016) and Zerriaa and Noubbigh (2016) confirmed that financial depth positively influences life insurance development. Furthermore, studies by Otuteye and Adiko (2015) and Sliwinski et al. (2013) confirmed the positive influence of GDP, interest rates, inflation, and financial development on life insurance development. Sodokeh (2015) confirms that interest rates are positively related to gross written premiums as a measure of life insurance development. Zerriaa and Noubbigh (2016) confirmed that income, inflation, and interest rates influence life insurance development in a positive way. Milijana et al. (2017) confirm that GDP has a positive influence while interest rates have a negative influence on life insurance development. Furthermore, Mathew and Sivaraman (2021) confirmed that interest and income are negatively related to life insurance development. In light of these contradictory findings from previous empirical studies, the following null hypotheses were developed and tested by the study:

- H1: There is no statistically significant relationship between interest rates and life insurance sector development in Tanzania
- H2: There is no statistically significant relationship between income level and life insurance sector development in Tanzania
- H3: There is no statistically significant relationship between domestic saving and life insurance sector development in Tanzania
- H4: There is no statistically significant relationship between financial depth and life insurance sector development in Tanzania

H5: There is no statistically significant relationship between inflation rate and life insurance sector development in Tanzania

3. Research Methodology

This section covers the methodology applied for data analysis.

3.1 Scope, Target Population and Sample Size

The study was conducted in Tanzania whereby population was the whole macroeconomic environment where sample of five (5) aspects named interest rates, income level, domestic savings, financial depth and inflation rate was selected with coverage of twenty-three (23) years from 1996 to 2018. Macroeconomic environment selected since it determines how other sector performing. This means stability of macroeconomic environment associated with good performance of other sectors positively. Selected sample size of five macroeconomic environments with coverage of twenty-three (23) years provides complete access to data with coverage of two business cycles that suit for quantitative data analysis.

3.2 The Criteria for Sample Selection

The study employed a purposeful sampling technique to select five aspects of macroeconomic factors (interest rates, income level, domestic savings, financial depth, and inflation rate). To be selected as part of a representative sample, aspects of the macroeconomic environment should have a wider discussion of empirical studies in relation to life insurance demand from the year 2012 to the year 2021. In addition, to be selected, an aspect of the macroeconomic environment must have a complete data set as per the coverage of the study (1996-2018).

3.3 Data Source

The study employed secondary data pooled from the TIRA, BOT and NBS, with coverage of twenty-three (23) years' period. Secondary data collected divided into two (2) sets. The first data set covered of independent variables named; interest rates, income level, domestic savings, financial depth, and inflation rate collected from World Bank, IMF, BOT and NBS. On the other hand, the second data set consisted of dependent variables named insurance sector development collected from TIRA. The study employed secondary data because it is less expensive and easier to access, and it save time because a particularly good sample of data already exists for coverage of the study period.

3.4 Variables and Measurements

The study was guided by independent variable and Dependent variables as indicated by Table 1.

Table 1. Study Variables Measurements

S/N	Variable	Measure	Reference	Justification
1	Life Insurance Development	Premium Written %GDP	Mathew. and Sivaraman (2021), Reddy <i>et al</i> (2019)	Insurance
2	Interest Rate	Real Interest Rate	Mathew. and Sivaraman (2021), Reddy <i>et al</i> (2019)	Insurance
3	Income Level	Nominal GDP per capital income	Zerriaa <i>et al</i> (2017), Reddy <i>et al</i> (2019)	Insurance
4	Financial depth	Broad money as percent of GDP	Mathew and Sivaraman. (2021),	Insurance
5	Domestic Savings	Gross Domestic Savings	Mishra (2014), Reddy <i>et al</i> (2019)	Insurance
6	Inflation rate	The consumer price index of the countries	Mathew and Sivaraman. (2021), Reddy <i>et al</i> (2019)	Insurance

Source: Researchers (2022).

3.5 Data Analysis and Model Specifications

The study analyzed data by using E-View-13 Software where Robust Regression model employed and borrowed from the study of Khan et al. (2021). The study employed robust regression model because it is sensitive and robust against the existence of outliers. A robust regression is an iterative procedure that is designed to overcome the problem of outliers and influential observations in the data and minimize their impact over the regression coefficients. Through robust regression model, the study employed Hubers' M-estimation method with the Least trimmed squares technique (LTS). The study employed Least trimmed squares (LTS) because it is a highly robust and comparatively efficient estimator among all the robust estimators available. According to Rousseau and Leroy (1987), LTS technique minimizing the trimmed sum of the squared residuals and is a modified form of the TLS estimator which corresponds to the more central values by ignoring the extreme observations in the ordered data. Thus, the equation specified as follows;

$$Y \text{ Log } (PM) = \beta_0 + \beta_1 \text{ Log}(IR) + \beta_2 \text{ Log}(INC) + \beta_3 \text{ Log}(DS) + \beta_4 \text{ Log}(FD) + \beta_5 \text{ Log}(INFR) + u_t$$

Where;

Y=Life insurance Demand

PM=Premium Written

IR=Interest rates

INC=Income level

DS=Domestic savings

FD= financial depth

INFR= Inflation rate

$u_t = \text{Error Term}$

$\beta_0 = \text{Constant}$

β_1 to $\beta_5 = \text{Beta Coefficients indicating sensitivity of the variables}$

4. Findings and Discussion of Results

This section divided into two parts where by first part cover descriptive statistics while second part cover regression results and discussions.

4.1 Descriptive Analysis

The study was conducted to examine the determinants of life insurance development in Tanzania. Study descriptive statistics analysis conducted to establish statistical distributions of the study variables whereby mean, median, coefficients of variation, standard deviation, skewness, kurtosis and Jarque-Bera tests employed. Findings of the study according to table 2 indicating summary of the descriptive statistics on study variables. Findings of the study indicating life insurance has a mean of 0.08% with maximum of 20% and minimum of 4%. This means life insurance is developing by an average of 0.08% percent on average which is below the current state of penetration in Africa. The current penetration rate for the entire continent also stands at 3% of the value of US\$61.1 billion in 2019 (Africa Insurance Market -2020). This is not a good trend for the country with more that 50 million populations. While inflation measured by CPI confirm has a mean of 8% with maximum of 20% and minimum of 3%. This means price level is increasing in Tanzania by 8% which is higher that insurance penetration rate and income level hence not a good trend. The impact of inflation on insurance business is that in the future years the renewal of the same number of policies will reflect higher written premium (Mutasa, 2015). Inflation as persistence price increase indicates that a higher inflation rate will increase the value of the subject matter to be insured by the insuring public. On the part of the insurer, the claims cost, loading expenses, and administration expenses of the insurance companies which will invariably resulted to a rise in their premium rating in the future, and this will decrease the consumption of insurance policies in the state economy (Chude & Chude, 2015).

Income level measured by GDP as a measure of income level has a mean of 3% with maximum of 5% and minimum of 1%. This is an indication that Income level is growing with an average of 3% with maximum growth of 5% while minimum growth of 3%. This means people level of income is growing at an average of 3% higher than life insurance development but lower than increasing of price level hence bad trend. Generally, an economy with high inflation, the value of money makes it difficult to justify current expenditures on future fixed payments that are rapidly decreasing in value. Financial depth has a mean of 17% with maximum of 35% and minimum of 03%. This means depth of the financial system as measured by money supply is growing with an average of 17% with maximum of 35% and minimum of 0.3%. This means depth of the financial system in the economy as presented by money supply is growing by 17% which is higher that insurance penetration rate hence good trend. The volume of money supply in circulation in an economy is an important indicator of economic deepening and determines the pace of any economic activities (Bakare, 2011). By

increasing the money supply the apex bank encourages the consumption of individuals in the economy, hence influences lending and investment as a result of decreases in the interest rate. The multiplier effect of this on the buying of insurance policies is that there will be enough money for an individual household to save for the consumption of insurance. However, the low money supply in the economy would pose an adverse effect the discretionary income of consumers. This will in turn affect the demand for insurance products and leads to lower development of the sector.

Level of domestic savings has a mean of 22% with maximum and minimum of 32% and 5% respectively. Level of domestic savings also indicating the financial sector is highly liquid to support people undertakings to the extent of fostering income level and life insurance demand. This means level of domestic savings is growing with an average of 22% which is higher than insurance penetration but lower than inflation which is not a good trend. According to Ehiogu (2018) if the private savings were to rise, people might or might not be willing to increase their savings in life insurance policies. Mostly important interest rate as indicator of efficiency has a mean of has a mean of 6% while maximum and minimum of 15% and -26 respectively. This means credit market is dominated by real rate of 6% on average which is higher than insurance sector development, level of people income which is not good. As interest rates increase, the investable assets of the insurer will produce a greater return, and increase the total company return. However, this effect can only be offset by lower underwriting profit. A fluctuation in interest rates will bring about variations in the values of a life insurer's assets and liabilities and potentially exposing the company to risk (Mutasa, 2015). For life savings financial instruments, the higher real interest rate will increase the life underwriters' investment returns, and consequentially enable him to have higher revenue of financial relative to real investment for potential policyholders (Berends et al., 2013). The increase in interest rates could decrease the consumption of life insurance policies as high returns on their other assets might switch policyholders from investments in life products to other type of money-making investment (Lenten & Rulli, 2016).

Table 2. Descriptive Analysis Results

	Life Ins	Inflation	Income	Savings	Depth	Interest Rate
Mean	0.08	8.45	3.07	22.18	20.04	6.46
Median	0.07	6.20	3.34	24.25	21.11	7.90
Maximum	0.20	20.98	4.55	32.06	24.65	14.67
Minimum	0.04	3.49	1.05	5.37	12.59	-26.50
Std. Dev.	0.04	4.56	1.05	7.11	3.68	8.19
skewness	2.42	1.28	-0.39	-0.83	-8.51	-2.90
Kurtosis	8.92	3.73	2.05	3.06	2.55	12.64
Jarque-Bera	55.98	6.82	1.44	2.67	2.97	121.14
Probability	0.00	0.03	0.49	0.26	0.23	0.00
Sum	1.79	194.39	70.58	510.13	460.83	148.64
Sum Sq.Dev.	0.03	456.50	24.42	1112.69	297.67	1477.37
Observations	23	23	23	23	23	23

Source: E-View-13 Data Analysis (2022).

4.2 Regression Analysis and Discussions of Findings

The study was conducted to examine determinants of life insurance development in Tanzania using inflation rate, interest rates, income level, domestic savings and financial depth as independent variables, while life insurance development specified by premium written was a dependent variable. The preliminary analysis conducted indicates violations of some of the OLS regression assumptions such as normality due to the presence of outliers as indicated by the normality test whereby Kurtosis is less than 3, hence indicating that the dataset has lighter tails than a normal distribution (less in the tails). The presence of outliers is indicated by positive skewness, which means the tail on the right side of the distribution is longer or fatter, hence the median will be greater than the mode. On the other hand, the RAMSEY test indicates the log version of Robust OLS regression is appropriate to handle such violations and testing of the five null hypotheses as per the study objectives.

Findings of the study according to table 3 indicate robust regression is statistically significant in explaining relationships between dependent and independent variables as indicated by R square (60%) and adjusted R square (46%), which is statistical significance at 0.05 levels. This means adjusted R-square indicates 60% of the variation in the dependent variable (life insurance development) is explained by the changes in the independent variables. In other words, collectively, the changes in inflation rate, interest rates, income level, domestic savings, and financial depth explain 60% of the variation in life insurance development. In contrast, the remaining 40% of changes in life insurance development are explained by other factors not included in the model of this study. Thus, it concludes that all the independent variables used in this study collectively are good explanatory variables of insurance sector development. The most important thing is that the standard error of the regression model (SE) is low (0.09), which means that sample means are close to the population mean and are a good representation of the population as a whole.

Table 3. Robust Regression Results

Variable	Coefficient	Std. Error	z-Statistic	Prob.
Inflation	-0.04	0.02	-1.94	0.05
Income	-0.30	0.02	-16.78	0.00
Domestic Savings	-0.56	0.02	-30.24	0.00
Financial Depth	0.72	0.04	19.41	0.00
Interest Rate	0.19	0.01	13.10	0.00
C	-1.33	0.05	-26.59	0.00
Robust Statistics				
R-squared	0.60	Adjusted R-squared	0.46	
Rw-squared	0.78	Adjust Rw-squared	0.78	
Akaike info criterion	13.52	Schwarz criterion	31.00	
Deviance	0.10	Scale	0.09	
Rn-squared statistic	4241.26	Prob (Rn-squared stat.)	0.00	
Non-robust Statistics				
Mean dependent var	-1.15	S.D. dependent var	0.16	
S.E. of regression	0.09	Sum squared resid	0.12	

Source: E-View-13 Data Analysis (2022).

To examine whether inflation rate determines life insurance sector development in Tanzania; the following hypothesis was tested: There is no statistically significant relationship between inflation rate and life insurance sector development in Tanzania. Findings of the study according to table 3 indicate that the inflation rate has a negative statistically significant influence on life insurance development ($B=-0.04$, $P\text{-value}\leq 0.05$) hence the null hypothesis is rejected. This implies that the level of inflation rate is downgrading the growing of the insurance sector in Tanzania by 4%. High inflation by itself may increase claim costs on current policies and loss reserves, which in particular slow down insurance development over time. The study's findings are consistent with those of Mishra (2014), Alhassan and Biekpe (2016), Hemrit (2021), Odunayo and Msomi (2021) Segodi and Athenia (2022) confirmed negative influence of inflation on determine life insurance development. To examine the extent to which financial depth determines life insurance sector development in Tanzania, the following hypothesis was tested: There is no statistically significant relationship between financial depth and life insurance sector development in Tanzania. Findings of the study according to table 3 indicate that financial depth has a positive statistically significant influence on life insurance development (0.72 , $P\text{-value}<0.05$) hence the null hypothesis is rejected. This implies that the level of financial depth as measured by money supply favor the development of the life insurance sector; on average, a one percent increase in money supply as a measure of financial depth boost 72% development of life insurance development. High money supply in the economy play an important role in reducing the risk of exposures and vulnerabilities for the less privileged groups, and improving the financial capacity of the insuring public, especially for people to access insurance products. The results of this study are in line with the studies of Sen and Madheswaran (2013), Sliwinski et al. (2013), Mishra (2014), Aguenau et al. (2015), Zadeh and Amini (2015), Zerriaa and Noubbigh (2016), Iyawe and Osamwonyi, (2017), Zerriaa et al. (2017), Reddy et al. (2019), Hodula et al. (2021) results confirm financial depth is a positive significant determinants of life insurance.

To examine the extent to which income level determines life insurance sector development in Tanzania, the following hypothesis was tested: There is no statistically significant relationship between income level and life insurance sector development in Tanzania. Findings of the study according to table 3 indicate that income level has a negative statistically significant influence on life insurance development (-0.30 , $P\text{-value}<0.05$) hence the null hypothesis is rejected. The study's findings are consistent with the findings of Mathew and Sivaraman (2021), who confirm that income is negatively related to life insurance consumption, and Bhatia and Jain (2013), who confirm that income level measured by per capita GDP negatively affects the growth of insurance penetration. In line with this study, Alhassan and Biekpe (2016) and Kabrt (2021) and Segodi & Athenia (2022) confirmed that income led to a decline in life insurance development. To examine the extent to which domestic savings determines life insurance sector development in Tanzania, the following hypothesis was tested: There is no statistically significant relationship between domestic savings and life insurance sector development in Tanzania. Findings of the study according to table 3 indicate that domestic savings have a negative statistically significant influence on life insurance development (-0.56 , $P\text{-value}<0.05$), hence the null hypothesis is rejected. This implies on average domestic savings leads 56 drops down of the life insurance sector

development. The study's findings are consistent with those of Ehiogu (2018) and Li & Li (2020) that confirm domestic savings rates facilitate fall in insurance development.

To investigate the extent to which interest rates determine life insurance sector development in Tanzania, the following hypothesis was tested: There is no statistically significant relationship between interest rates and life insurance sector development in Tanzania. According to table 3, the study's findings show that interest rates has a positive statistically significant influence on life insurance development (0.19, P-value<0.05), so the null hypothesis is rejected. This implies the extent to which real interest rates set by central bank influence 19% of the development of the life insurance sector. The study's findings are consistent with those of Sodokeh (2015) confirm that interest rates have a long-term equilibrium relationship with life insurance. Furthermore, Zerriaa and Noubbigh (2016), Sen and Madheswaran (2013) and Pattarakitham and Rungruengarporn (2016) also confirm that real interest rates are positively determinants of life insurance development.

5. Conclusions and Recommendations

Insurance is an important intermediary in the financial market and also plays a very vibrant role in the economy by mobilizing savings and supplying long term capital for economic growth and as an asset allocator. The study was conducted to examine the determinants of life insurance development in Tanzania. The study specific objectives guided by inflation rate, interest rates, income level, domestic savings and financial depth as independent variables, while life insurance development specified by premium written was a dependent variable. Based on the hypothesis testing, the study concludes the following: Inflation rate, domestic savings and income level has a negative influence on life insurance development while interest rate and financial depth has a positive influence on life insurance development. A rise in inflation discourages people's incentives to save, leading to monetary uncertainty for the long-run, thus making negative impact on the demand for life insurance. All the same, savings serves as a disincentive to buying more life insurance policies as the general public would prefer to save than insure. Level of income does not support life insurance development given the fact that inflation is very high. The financial depth as indicated by volume of money supply in circulation in an economy is an important indicator of economic deepening where by increasing the money supply the BOT encourages the consumption of individuals in the economy. The real interest rates support the purchase of life insurance as returns on alternative assets does not switch consumers from savings in life insurance to another type of money accumulation.

Basing on study findings, study recommends the following to government, policy makers and Tanzania Revenue Authority. The government should consider further reviewing life insurance laws by enacting tax exemptions granted to insurance companies with a focus on life insurance to foster quick development. The government must increase the openness of our economy and ease of doing business in Tanzania so as to encourage the incoming of foreign life insurance companies. Apart from the often-enforced regulations on insurance companies, the policy must be formulated to enhance life insurance uptake among people, the technical capabilities of insurance companies, and encourage indigenous insurance

companies to do research in life insurance sectors. The Tanzania Insurance Regulatory Authority, in collaboration with the central bank, should cooperate on how best to review the integration of the insurance sector and the macro-economic environment (the financial depth, income level, and domestic savings) so as to foster a positive contribution to life insurance. BOT should consider increasing the depth of the financial sector by offering facilities not only to commercial banks but also to deposit-taking institutions such as microfinance institutions. The Tanzania Insurance Regulatory Authority, which oversees the insurance industries in Tanzania, should de-regulate their markets to boost innovation and demand for life insurance products.

Life insurance companies should focus on development of life insurance products which realistic reflect the financial depth, income level and domestic savings so as to foster positive contributions to development. Life insurance companies should focus on building on an existing product chassis, but developing substantive changes to the product's features, pricing, and experience to create a distinguishable new product experience. The study recommends that life insurance companies should lower their premiums to be affordable to people income level, provide efficiency in claims settlement, improve customer's service and satisfaction, improve agent's integrity to ameliorate the successful penetration of life insurance businesses and companies in Tanzania. The study findings provide insights from a practical point of view on the determinants of life insurance development in developing countries like Tanzania, thus filling the gap in the literature reviews. This is made very clear by the findings of the study, which revealed that for selected determinants, Inflation rate, domestic savings and income level has a negative influence on life insurance development while interest rate and financial depth has a positive influence on life insurance development. Findings of the study contradict with other previous empirical studies conducted in Tanzania while other align with the study findings. On theoretical implication, the study has findings has theoretical contribution through theory of demand for life insurance applicability in Tanzania. The study findings have policy implication by serving as guidance to regulators and policymakers on what set of factors to review and incorporate into policy in order to foster positive development of life insurance in Tanzania.

While there are many factors that determine life insurance development with varying magnitude, the study was confined to five aspects named inflation rate, interest rates, income level, domestic saving, and financial depth as independent variables with coverage of 23 years (1996–2018). Most importantly, there is a scarcity of empirical studies on life insurance in the context of Tanzania. Despite the mentioned limitations, the study managed to select variables that best fit the local context and represent developing countries. The study's time coverage was mostly important because it provided sufficient observations for a suitable range for statistical analysis. The current study sheds light on determinants of life insurance development by considering the financial depth, income level, domestic savings, inflation and interest rate as independent variables while life insurance development confined to premium written. Basing on the study findings, the focus for the coming studies should be on examining life insurance development with a greater emphasis on education, population, dependency ration, life expectancy, credit to private sector, institutional quality and

employment rate as independent variables.

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