

The Influence of Inflation in Insurance Business in Nigeria

Obinna Chilekezi

Department of Entrepreneurship, Joseph Ayo Babalola University Ikeji Arakeji, Osun State.

Corresponding author: ugobichi@yahoo.com

Abstract

Inflation plays very important role in the operations of an entity in any economy. The insurance industry is not an exception to the influence of inflation in its operations. Inflation could in no small way impact on the growth of the insurance industry. The main aim of this study is to examine the influence of inflation on this sector and how it affects the operations in the sector. The Methodology of the study is both doctrinal and qualitative whilst employing non-random sampling technique. The study used mainly secondary materials and it found from the reviewed literatures that inflation has significant influences on the operation of the insurance business. The study recommends that operators of insurance business should be mindful of the impact of inflation especially in determining the rate of premiums to charge for the non-tariffed products. The study concludes that there is a long run relationship between insurance operations and inflation in Nigeria and a rise in inflation will lead to a rise in cost of running insurance companies.

Keywords: Claim, Inflation, Influence, Insurance, Premium.

Introduction

In our elementary study of risk in insurance, risk is classified into three different types with one of them being fundamental risks. Fundamental risk we were told are those risks that affect everyone or institutions in the society or group. The learning went further to let us know that a good example of fundamental risk is inflation. As once there is inflation everyone and institutions in the society would be affected. The current reality has shown how this works. Take for instance, the removal of subsidy on petrol in Nigeria by the President Tinubu government has made prices to skyrocket. All the facets of the society are affected with the insurance industry not being exempted from the impact of inflation, more so that like other institutions we buy petrol and other products in the market. The insurance industry will also have to pay for services rendered to especially in its risk assessment or claims administrations (the claims costs) and the actual cost of claims, among others. The staff of most of the companies will also agitate for salary increase like their counter parts in the other sectors of the economy.

It is pertinent to note that the term inflation takes the first and foremost place at the meetings where commercial transactions are discussed, also plays a dominant part in the insurance industry. What actually do we mean by inflation? In a simple manner inflation could be seen as an increase of the level of prices, or as a decrease of monetary value. For instance, the naira exchange from \$1 to N245 in 2015 to \$1 to N820. It is important to add that monetary value is the purchasing power of a certain unit a currency, say naira, and measured by examining the price of certain sample of goods, is inversely proportionate to the price level.

Inflation, according to Oner (2010) has plunged countries into long periods of instability with Central bankers been referred to as "inflation hawks." The problem of inflation had been tool for election campaigns, for example in 1974 that was the main thrush of President Gerald Ford of USA who had dubbed inflation as Public enemy No. 1 in the United States. Inflation, therefore, is typically a broad measure, such as the overall increase in prices or the increase in the cost of living in a country. But it

can also be more narrowly calculated—for certain goods, such as food, or for services, such as a haircut, for example (Oner, 2010). He further added that inflation represents how much more expensive the relevant set of goods and/or services has become over a certain period, most commonly a year.

Inflation as measured by the consumer price index reflects the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly. The Laspeyres formula is generally used in arriving in the changes for the years and this is shown below.

- Nigeria inflation rate for 2021 was **16.95%**, a **3.71% increase** from 2020.
- Nigeria inflation rate for 2020 was **13.25%**, a **1.85% increase** from 2019.
- Nigeria inflation rate for 2019 was **11.40%**, a **0.7% decline** from 2018.
- Nigeria inflation rate for 2018 was **12.09%**, a **4.43% decline** from 2017

Date	Inflation Rate (%)	Annual Change
2008	11.5811	6.19
2009	12.555	0.97
2010	13.7202	1.17
2011	10.84	-2.88
2012	12.2178	1.38
2013	8.4758	-3.74
2014	8.0625	-0.41
2015	9.0094	0.95
2016	15.6753	6.67
2017	16.5235	0.85
2018	12.0947	-4.43
2019	11.3968	-0.7
2020	13.246	1.85
2021	16.9528	3.71

The data source as "www.macrotrends.net".

Statement of problem

Inflation is a problem to the insurance industry. Unlike other sectors that could easily raise their prices, this is not so with insurance as some of the rates used in arriving at the requisite premiums are either regulated by the industry regulator or the market as a whole. More so, most buyers of insurance products always frown at any attempt of increasing insurance rates. Inflation affects the general income of an insurance company and would also increase the cost of claims after a loss has occurred.

Research Objectives

The main objective of the study is to examine the influence of inflation in insurance business in Nigeria and how it impacted on the operators' performances in the economy while the specific objective are to:

- i. determine the impact of inflation on the insurance business;
- ii. examine the relationship between inflation and profitability of the insurance business; and
- iii. identify the effect of inflation on claims' costs.

Research Questions

- i. Are there any impact of inflation on insurance business?
- ii. Is there any significant relationship between inflation and profitability of the insurance business?
- iii. What is the effect of inflation on claims' costs?

Literature Review

Conceptual Review

Inflation

Inflation is now rampant in most economies with Nigeria not being an exception. Inflation affects all sectors of the economy including the insurance industry. Inflation negatively affects both the life insurance and non-life insurance (Prodanov et al (2022); Omoke, (2012) and Epetimehin, (2011). According to Prodanov, et al. (2022) most often, the reason for this is the difficulty in predicting future results, the impossibility of adequately assessing technical reserves, the deteriorating outlook for the presentation of financial assets in insurance portfolios. Increased inflation affects the structure of the insurance market by increasing the share of compulsory insurance (Prodanov, et al 2022). In efforts to fight impact of inflation on the insurance industry, Hakansson (1969) introduced a multi-period model of the rational purchase of insurance that allows inflation to be included as a factor without being explicitly introduced into the analysis in contrast to a number of one-period and two-period models that do not allow the introduction of an inflation parameter (Richard, 1975), (Yaari, 1965). Babbel studied the impact of inflation on the sales of indexed life insurance policies in an attempt to mitigate the value erosion caused by inflation.

Inflation, according to Ibrahim (2019) is the long-term increase in prices of services and goods due to the devaluation of currency. A good example is what is happening in the Nigerian economy presently. Ibrahim (2029) further posited that even though inflation is a bad thing, it might be a good thing to entrepreneurs. In summation, high inflation rate problems arise when there is an unexpected increase of prices of goods and services within an economy. If incomes don't increase as the inflation increases, everyone's purchasing power will be effectively reduced which in turn leads to a stagnant or slow economy. The insurance industry is not insulated from this type of problem.

Insurance business

Insurance business is facing a lot of challenges which is not peculiar to the Nigerian environment. According to Deloitte (2023) most insurers have the potential to achieve even greater social good largely because they already act as society's "financial safety net," providing a backstop against financial loss for innumerable risks worldwide. This they could through realising they have a bigger role to play in helping prevent risk, mitigating loss severity, and closing life and non-life protection

gaps in global markets, especially in the face of the growing number of what appear to be financially unsupportable risks. This is anchored on the fact that an insurance business is a business that is set up to protect other businesses. This they do by providing covers for the impact of pure risks to the operation of these other businesses.

For an insurance company to operate it must exist in line with the required legislations of the country of its operations.

As important as insurance is, there are significant risk exposures and losses that are not covered by insurance but could be; Ariss & Iyehen (2022) posited that protection gaps exist in every country – emerging, developing and developed. They added that these gaps were greater in emerging and developing economies, where the consequences of uninsured risks can be even more severe and long-lasting, because of the lack of personal or state resources to meet these losses. Ariss & Iyehen (2022) further noted that these consequences play out almost every day across the world. To emphasize on the importance of regulation to the insurance market, Noordhoek, Marcous & Schanz (2022) argued that to build political support, it is important for policymakers to appreciate the essential role of insurance in economic and societal prosperity, and devote sufficient attention and resources to insurance regulation and supervision as well as financial education.

Inflation and insurance

Inflation attempts to erode the benefits accruable from insurance. Looking at this from the perspective of life assurance, Yamoah (2023) observed that the primary institutions such as insurance companies have been affected. She noted that the effects of inflation on life insurance contracts are distinct because these contracts are mainly designed to cover extended periods and are usually stated in fixed, nominal currency units. The reason being that life insurance values are quantified in fixed nominal currency units, they do not adjust to compensate for the value erosion produced by inflation (Yamoah, 2029). This may be as a result of the fact that the accumulated erosive effects on the insurance values can be substantial because of their long-term nature. Thus, while life insurance products are designed to protect against the perils of longevity and premature death, inflation and a rising cost of living can undermine such protection (Yamoah, 2023).

In the same manner, Ehiogu (2022) had noted that inflation had negative impact on non-life insurance business. This is because apart from reducing the real value of the assets of these companies; it also weakens their solvency margin, which is their ability to meet up with their responsibilities to the insuring public. Inflation no doubt affects the business of insurance in a very negative manner.

Empirical review

There are empirical evidences from Brazil showing that indexing policies does not solve the problem of inflation risk and insurance sales decline in periods of inflation (Babbel, 1981). In same way Epetimehin & Fatoki (2011) examined the impact of inflation on the insurance industry in Nigeria and proved that the persistent high rate of inflation in the Nigerian economy affects the growth of the industry. D'Arcy, Au, & Zhang, (2009) examined that the inflation-adjustment mechanism, and noted that the inflation observed in recent years will continue in the coming years until the claims are settled. In some cases, this can take decades. If inflation during this time period increases, expenses will be more than expected, which will affect long-term liabilities and will form losses. This tends to increase the cost of claims settlement especially for long-tail policies.

Prodanova, et al (2022) in their study titled empirical analysis of the impact of inflation on insurance penetration of non-life in Bulgaria for the period 2007-2021. The results of the literature review show that inflation has an impact on insurance penetration, with the strength of this influence being different for individual countries and depends on the specifics of insurance market, economic development and financial culture of the population. The scholar noted that the dynamics of the consumer price index in general and by groups according to the classification of individual consumption by purpose (COICOP/CPI) were tracked. Special attention was paid to the analysis of the price dynamics trend of motor insurance to property and casualty insurance in the study through the analysis of the structure of household consumption was analysed, thereby highlighting the defining expenses in household budgets and their dependence on price dynamics. The modelling of the trend in the studied time series was performed using the method of least squares, and linear and non-linear functions were tested. Testing for trend in the dynamic series was performed using the first-order autocorrelation coefficient at risk of error 5% and the Box-Pierce (BP) and Box-Ljung (BL) test characteristics. In the study, the standard insurance penetration indicator of non-life insurance and the individual indicators calculated on the basis of gross written premiums by key insurance classes were considered as the resulting (dependent) variable. The determination of the impact of inflation on the insurance penetration of non-life insurance in Bulgaria was carried out by means of regression and correlation analysis of time series for the period 2007-2021. Tests for the presence of correlation in the residual elements around the regression line were based on the Durbin-Watson coefficient (DW). The specificity of the Bulgarian non-life insurance market were analysed on the basis of the private indicators of key insurances for the market. It is known that on the Bulgarian insurance market the largest share was compulsory Motor third party liability insurance, which is confirmed by the structure of household expenses and the higher rates of price growth than those prevailing in household consumption groups according to the classification of individual consumption by purpose compared to motor insurance, and property and casualty insurance were significantly affected by impacts of inflation.

Epetimehin & Fatoki (2011) in their empirical analysis of the impact of inflation on the Nigerian insurance study the recent contribution of high rate of inflation and a general poor economic performance of Nigeria anted that it has presented a serious problem to the insurance industry. The study used the Insurance Industry to show that the persistent high rate of inflation in the Nigerian economy create serious problem for the rapid growth of the Insurance Industry as the study had focused on the Life Insurance product of the Industry which provides a unique product of Insurance Protection and the effect on the product over the years. The study noted that life assurance is an aspect of insurance that provides savings plans and in direct competition with other investment assets from the commercial banks, savings associations, mutual funds, real estate, and also whole life policies (Epetimehin & Fatoki, 2011; see also Omoke, 2012). Their period of study was from 2003-2007. The study looked at the types of life insurance products and the effect inflation has on the demand and costs of the policies as well as the historical performance of the Insurance Industry during the high inflationary period of 2003-2007; and concluded that inflation has negative impact on the insurance industry in Nigeria.

Ehiogu, Eze & Nwite (2011) in an empirical study titled effect of inflation rate on insurance penetration in Nigerian insurance industry investigated the effect of inflation rate on insurance penetration of Nigerian insurance industry using regression analysis for data analysis while data was collected through secondary sources. The study found that inflation rate had a

positive but insignificant effect on insurance penetration of the Nigerian insurance industry which means that the macroeconomic variable (inflation) increase the level of insurance penetration in Nigerian insurance industry but it increases was not significant. The study recommended among other things that effort should be put in place to reduce the level of inflation in Nigeria so that it can have significant effect on insurance penetration in Nigerian insurance industry (see also Omoke, 2012).

The reviewed literatures have shown that like in other sectors of the insurance industry in Nigeria is also facing the challenges from the inflationary spirals in the economy.

Methodology

This research is doctrinal, qualitative, and based on library research covering books, industry reports, published journal articles and internet sources from well-established databases and websites. To highlight the objectives of the study the author emphasised on the import of inflation on insurance business in Nigeria.

Discussions and findings

In the current macro-economic environment, one of the major concerns for the insurance market is the significant increase in inflation experienced since spring 2021. The high uncertainty and the slow recovery after the Covid-19 pandemic outburst in 2020, followed by the Russian invasion of Ukraine in February 2022, have reduced the outlook for growth in Europe and increased downside risks for the future course of the economy. All these events generated and/or amplified existing trends and problems like supply chain disruptions, a mismatch of supply and demand for goods and services, resource limitations raising commodity prices, deglobalisation and a decline in the working age population. The combination of these developments has caused a switch from a long period of low inflation and low interest rates to a new economic environment dominated by stubbornly high inflation and increasing interest rates.

The reviewed empirical studies have shown that inflation always have negative impact on the insurance industry. According to Ehiogu (2021) found that inflation rate did not significantly impact on total premium, total claims and total assets of the nonlife insurance sector in Nigeria. This could be by extension the insurance industry. The danger with this is that if inflation did not increase premium then it will stunt the growth of the industry during an inflationary period.

Inflation could have impact on the profitability thereby reducing positive results from the balance sheets of these company. This will no doubt reduced the return on investment to investors in this sector. More so, that, as a result of the peculiar nature on insurance, insurance companies are not allowed to fix their prices (premium) at will (see Insurance Act, 2003). This will make it difficult for operators to raise their prices and by extension revenue to meet up with their rising expenditures.

There are empirical evidences to show that inflation could negatively influence the cost of claims payment following a loss. Asinya and Uche (2018) had argued that inflation affects life and non-life insurance in a different way; for instance, for non-life insurers, unanticipated inflation leads to higher claims costs, thereby eroding profitability. These scholars found that there is a long run relationship between insurance claims and inflation in Nigeria and a rise in inflation will lead to a rise in cost of insurance claims in the short run but a decrease in the long run. Thus, high rate of inflation has a negative effect on returns of insurance claims in the short run but has an increasing non-significant effect in the long-run in Nigeria (Asinya & Uche, 2018).

Conclusions and Recommendations

Conclusion

Inflation is a big challenge to all facets of insurance operations. It affects such operational modes as claims payment, premium receipts, profitability of operations, growth of business and even on the long run insurance penetration of all the general, life, micro-insurance and takaful insurance models respectively. In this way, this study concludes that there is a long run relationship between insurance operations and inflation in Nigeria and a rise in inflation will lead to a rise in cost of running insurance companies.

Recommendations

In view of the above findings this study recommends that:

- There is therefore need for insurers to evaluate the probability distribution of future adverse inflation events and their correlation with other macroeconomic variables and there is need to establish a higher level of coverage based on the original face value of an insurance policy and a maximum inflation adjustment (Asinya & Uche, 2018).
- The companies should as a part of fact design products that are prone to inflationary spirals which could be attractive to the insuring public thereby increasing demand of their products even during inflationary periods such as we presently have.
- The regulators on whose authority it is to approve rate of premium should work with the operators to ensure that appropriate rates are charged by the operators mindful of the impact of inflations on their operations.

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