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**Manoranjan Nayak**

Faculty, Department of  
Economics, Odisha State Open  
University, Sambalpur,  
Odisha, India

# Growth and performance of insurance sector in Odisha: A case study of Keonjhar District

**Manoranjan Nayak**

## Abstract

The business of insurance is related to the protection of economic values of assets. Every asset has a value. The asset would have been created through the efforts of the owner. The asset is valuable to the owner, because he expects to get some benefit from it.

The word possibility implies uncertainty. Insurance is relevant only if there are uncertainties. If there is no uncertainty about the occurrence of the event, it cannot be insured.

Insurance does not protect the asset. It does not prevent its loss due to the peril. The peril cannot be avoided through insurance. The risk can sometimes be avoided, through better safety and damage control measures. Insurance only tries to reduce the impact of the risk on the owner of the asset and those who depend on that asset. Insurance only compensates for the losses not fully. Only economic consequences can be insured. If the loss is not financial, insurance may not be possible. The risks in case of a human being are related to early death, Living too long, Disabilities, Sickness, Unemployment.

**Keywords:** asset quality, business risk, growth uncertainty, net premium, capital assets, actuarial issue, net technical reserves, market share, liquidity.

## Introduction

The insurance sector has started growing at a rapid pace after it was opened up. The life insurance companies made tremendous contribution in the spreading insurance awareness, expanded market and improve social and economic security, It was also felt that the rapid economic growth witnessed in the 1990, cannot be sustained without thriving insurance sector. The business of insurance is related to the protection of economic values of assets. Every asset has a value. The asset would have been created through the efforts of the owner. The asset is valuable to the owner, because he expects to get some benefit from it (Anderson J. and Brown R, 2005) <sup>[1]</sup>. It is a benefit because it meets some of his needs. The benefit may be an income or in some other form. In the case of a factory or a cow, the product generated by it is sold and income is generated. In the case of a motor car, it provides comfort and convenience in transportation. There is no direct income. Both are assets and provide benefits. Every asset is expected to last for a certain period of time during which it will provide the benefits (Arestis, P, and Demetriades, P. 1997). After that, the benefit may not be available. There is a life-time for a machine in a factory or a cow or a motor car. None of them will last forever. The owner is aware of this and he can so manage his affairs that by the end of the period or life-time, a substitute is made available. Thus, he makes sure that the benefit is not lost. However, the asset may get lost earlier. An accident or some other unfortunate event may destroy it or make it incapable of giving the benefits (Bodla B. S. *et al.* 2003) <sup>[3]</sup>. An epidemic may kill the cow suddenly. In that case, the owner and those enjoying the benefit there from would be deprived of the benefits. The planned substitute would not have been ready. There is an adverse or unpleasant situation. Insurance is a mechanism that helps to reduce the effects of the effects of such adverse situations. It promises to pay the owner or beneficiary of the asset, a certain sum if the loss occurs. The insurance sector is sine-quo-non for development and economic growth of any economy and it has been recognized for many years. The significance of insurance was also acknowledged in the first conference of United Nations Conference on Trade and Development stating that -a sound national insurance and reinsurance market is an essential characteristic of economic growth. (UNCTAD, 1964) <sup>[4]</sup>.

**Corresponding Author:**

**Manoranjan Nayak**

Faculty, Department of  
Economics, Odisha State Open  
University, Sambalpur,  
Odisha, India

## Purpose and Need of Insurance

Assets are insured because they are likely to be destroyed or made non functional before the expected life time, though accidental occurrences. Such possible events are called perils. Fire, floods, breakdowns, lightning, earthquake etc. are perils. If such perils can cause damage to the asset, we say that asset is exposed to that risk. Perils are the events. Risk are the consequential losses or damages. The risk to a owner of a building, because of the peril of an earthquake, may be a few lakhs or a few Crores of rupees, depending on the cost of the building, the contents in it and the extent of damage. The risk only means that there is a possibility of loss or damage. The damage may or may not happen. The earthquake may occur, but the building may not have affected. Insurance is done against the possibilities that the damage may happen. There has to be an uncertainty about risk. The word possibility implies uncertainty. Insurance is relevant only if there are uncertainties. If there is no uncertainty about the occurrence of the event, it cannot be insured. In the case of a human being, death is certain, but the time of death is uncertain. The person is insured, because of the uncertainty about the time of death. In the case of a person who is terminally ill. The time of death is not uncertain, though not exactly known. It would be soon. He cannot be insured

Insurance does not protect the asset. It does not prevent its loss due to the peril. The peril cannot be avoided through insurance. The risk can sometimes be avoided, through better safety and damage control measures. Insurance only tries to reduce the impact of the risk on the owner of the asset and those who depend on that asset. They are the ones who benefit from the asset and therefore, would lose, when the asset is damaged. Insurance only compensates for the losses not fully. Only economic consequences can be insured. If the loss is not financial, insurance may not be possible. Examples of non economic losses are love and affection of the parents, leadership of managers, sentimental attachments to family, innovative and creative abilities etc. ((insurance your safety.)<sup>[7]</sup>.

## The Human Asset in Insurance

The risks in case of a human being are related to

1. Early death
2. Living too long
3. Disabilities
4. Sickness
5. Unemployment

## Objectives of the Study

The present research study is an attempt to analyze the performance of insurance sector in India and in Odisha. An attempt has also been made to analyze the growth and performance of LIC in Keonjhar dist. of Odisha. The present objective of research study are as follows

1. To analyze the growth and performance of public sector and private sector insurance companies in India.
2. To investigate the risk, solvency of insurance sector in India
3. To examine the trend pattern and performance of LIC in Keonjhar District of Odisha

## Hypotheses

Hypothesis is a probable statement on the findings of a research study which may or may not be true. The

hypothesis is formulated before conducting a study which is tested on the basis of findings of the research work. The present study is based on following hypotheses.

- 1-Public sector insurance companies have better performance than private sector insurance.
- 2-There is low risk in investing in public sector insurance than private sector insurance.
- 3-The LIC have positive growth rate over time.

## Methodological Framework

Research work in any branch of social science, particularly in economics requires strong methodology. The present study is based on strong statistical methods. This chapter is an attempt to analyze the sources of data and analytical tools used in the study.

## Sources of data

In the study both primary and secondary data has been used. The collection of primary information has been done through personal investigation method. Secondary data constitutes the main source of information, suitable for the purpose of present research work. The sources of secondary data were Annual Reports of the companies and IRDA, Directors and Auditors report, IRDA Journals, Asia Insurance Post, The Insurance Times, Journal of Insurance Institute of India, Insurance Chronicle (ICFAI), Daily papers and government reports relating to the issues under study. Experts in the field were also approached for the purpose of discussion to understand the problem in right perspective. The work of academicians on the subject has also been consulted for the purpose analysis.

## Methodology on Financial Performance

The performance of insurance companies can be measured by a number of indicators. However, in present study, CAMEL parameters are used to study the financial performance of insurance companies. For measuring the performance of insurance companies on the basis of CAMEL parameters, the present study employs ratio analysis with the following methodology:

### A. The description of CAMEL acronym and ratios calculated to test each acronym are

1. Capital Adequacy: Capital Adequacy can be viewed as the key indicator of an insurer's financial soundness. Capital is seen as a cushion to protect insured and promote the stability and efficiency of financial system, it also indicates whether the insurance company has enough capital to absorb losses arising from claims. For the purpose of calculation of capital adequacy of companies under study, two ratios have been used, prescribed by IMF and World Bank (IMF, 2005). First is the ratio of Net Premium to Capital and second ratio is Capital to Total Assets.
2. Asset Quality: Asset quality is one of the most critical areas in determining the overall financial health of an insurance company. The primary factor effecting overall asset quality is the quality of the real estate investment and the credit administration program. Ratio of equities to total assets and ratio of Real Estate + Unquoted Equities + Debtors to Total Assets has been used, prescribed by IMF and World Bank.
3. Reinsurance and Actuarial Issues: Reinsurance and Actuarial issue ratios reflect the overall underwriting

strategy of the insurer and depict the proportion of risk retained and passed on to the reinsurers and indicates the risk bearing capacity of the country's insurance sector. IMF prescribes two ratios in this standard viz. ratio of Net Premium to Gross Premium and ratio of Net Technical Reserves/ Average of Net Claims paid in last three years.

- Management efficiency: The ratio reflects the efficiency in operations, which ultimately indicates the management efficiency and soundness. The indicator prescribed is Operating Expenses to Gross Premiums.
- Earnings and Profitability: IMF prescribes five sub dimensions to this standard to limelight the earnings and profitability of the insurance companies. The standard is two tier, covering both operational and non-operational efficiency of the insurance companies.
- Claims Analysis: The standard is an important indicator of whether their pricing policy is correct or not. It reflects the quantum of claims in the premiums earned. The ratio prescribed for this analysis is Net Claims Incurred to Net Premium.
- Expense Analysis: Expense analysis indicates the expenditure incurred by the management while carrying on insurance business, greater the expenditure, lesser will be the profit margin. The ratio prescribed for this purpose is Management Expenses to Net Premium Earned.
- Combined Ratio Analysis: Combined ratio is blend of claims and expense ratio. The ratio explains the probability of profitability in insurance operations. The ratio for this standard is Claim Ratio plus Expense Ratio to Net Premiums.
- Investment Income Analysis: Investment income ratio quantifies the income earned on investments. The ratio prescribed is Investment Income to Net Premiums.
- ROE Analysis: Return on Equity is the measure of return to shareholders and the ratio is Profits to Equity.

### Statistical methods

In addition to the ratio analysis, the CAMEL parameters have been tested statistically with the help of following statistical tools:

- Mean
- Standard Deviation and variance
- F-Test
- Regression Analysis (Growth Model).

In order to have a comprehensive view, the growth of each ratio covered by CAMEL is calculated by Annual Compound Growth Rate (ACGR) Method for the last five years. The Annual Compound Growth Rate (ACGR) is calculated by using SPSS software and statistically defined as:

$Y = abt$  Where, Y= dependent variables (Capital Adequacy, Asset quality, etc.),

a = Constant, b= Slope of trend lines (Growth Rate), t= time.

Estimate of b (slope of trend line or rate of change) has been arrived as follows:

$b^{\wedge} = \log(1+g)$ . In this equation g (growth rate) has been obtained by taking antilogarithm of  $\log(1+g)$  and

subtracting 1 from the same. The resultant value would be multiplied by 100 to express growth rate in percentage terms. The significance of the difference between the performances of the Insurers is verified with the help of F-test. The F-ratio is calculated as:

$$F = (\text{CESS} - \text{MESS}) / 2(q-1) \text{ MESS} / (n-2q)$$

Where q = number of insurers, N = total number of observations (no of insurers x no of time series observations for each ratio) CESS = Combined sum of squared errors when both the insurers and their observations are used to estimate the regression equation above (for each ratio); MESS = sum of the two insurers sums of squared errors for each insurer estimated from the regression applied to each insurer (each ratio) separately.

$$2(q - 1) = \text{Numerator degrees of freedom}$$

$$N - 2q = \text{denominator degrees of freedom}$$

### Solvency Determinants

The sensitivity of Solvency Margin has been tested with the help of multiple regression analysis by testing following hypothesis: With the help of multiple regression analysis in order to see impact of various factors on the solvency margin of insurance companies. Available Solvency Margin (ASM) has been used as dependent variable for the 12 non-life insurers in the industry for the period 2004-05 to 2008-09 to prove the expected impact given above. Multiple regression models has been employed to include various independent variables and their impact on solvency margin has been tested by using following equation.

$$\text{Solvency}(Y) = a_0 + a_1(\text{Market Share}) + a_2(\text{Operating Margin}) + a_3(\text{Firms Size}) + a_4(\text{Investment Yield}) + a_5(\text{Liquidity}) + a_6(\text{Combined ratio}) + a_7(\text{Claim Ratio}) + a_8(\text{Underwriting Performance}) + \epsilon$$

Dependent Variable = Available Solvency Ratio  
Independent Variables are:

- Market share
- Operating Margin
- Firm Size
- Investment Yield
- Liquidity
- Combined Ratio
- Claim Ratio

### Key Findings of the Study in Keonjhar district

The present research study has many findings. The key findings are outlined below.

- During the period from 2010-2011, the total number of policies was 26396. Among them 9078 Jeevan Saral policies was sold which was highest in this year where as Children's Endowment Assurance, Jeevan Pramukha, Jeevan Amrit, Amulya Jeevan were very least sold in Keonjhar district. In the year from 2010-2011, the total number of premium was Rs.141498323 and the sum assured was Rs.2826156000 collected.
- During the period from 2011-2012, the total number of policies was 21614. Among them 5800 Jeevan Saral policies was sold which was highest in this year where as Children's Endowment Assurance, Jeevan Pramukha, Jeevan Amrit, Amulya Jeevan, Whole life limited Payment were very least sold in Keonjhar

- district. In the year from 2011-2012, the total number of premium was Rs.102006917.00 and the sum assured was Rs.2445030000.00 collected.
- c. During the period from 2012-2013, the total number of policies was 22975. Among them 4530 Endowment Plan policies was sold which was highest in this year where as Children's Endowment Assurance, Jeevan Pramukha, LIC Endowment Plus, Amulya Jeevan were very least sold in Keonjhar district. In the year from 2012-2013, the total number of premium was Rs.115087898.00 and the sum assured was Rs.2622590000.00 collected.
  - d. In the year from 2010-11 to 2012-13, the total number of Ordinary Policies was 64003 whereas the total number of Salary Saving Scheme policies were 10397 sold. The total number of Ordinary policies and Salary Saving Scheme policies were 74400 sold in the above financial year. The percentage of Ordinary Policies was 84.59% in the year 2010 which was increased to 88.98% in 2011 and further it declined to 84.93% in 2012. But the percentage of Salary Saving Policies was 15.40% in the year 2010 which was decreased to 11.01% in 2011 and further it increased to 15.06% in 2012.
  - e. It is understood that LIC of Keonjhar District has registered significant growth in terms of Ordinary Policies and Salary Saving Scheme except in the year 2011-12. LIC of Keonjhar District met negative decline in collection of Ordinary Policies which was - 20.16% and the Salary Saving Scheme policies which was - 9.50% in the financial year 2011-12.
  - f. In All Single Premium Policies in comparison to the number of policies, the first premium was high in the year 2012-13 was 0.49%. In the year 2010-11, in comparison to the number of policies, the sum assured was high to 4.60%.
  - g. The growth rate of first premium was -161.06% which was negative in 2011-12, then it was increased to 15.63% which was positive in the year 2012-13. It has registered significant growth in terms of Sum Assured except in the year 2011-12. In the year 2011-12, LIC met heavy decline in the collection of Sum Assured which was - 1136.62%. Then, it was increased to 44.30% which was positive in the financial year 2012-13.
  - h. In Individual Pension Plan policies in comparison to the number of policies, the first premium was high in the year 2011-12 was 1.07%. In the year 2011-12, in comparison to the number of policies, the sum assured was high to 4.17%.
  - i. There was negative trend of First Premium of IPP policies during the year from 2010-11 to 2012-13. In the year 2011-12, it was -951.49% which was - 2337.96% in 2012-13. During the same period, there was also negative trend of Sum Assured of IPP policies. In the year 2011-12, the growth of Sum Assured was - 614.07% which was -763.40% in the financial year from 2012-13.
  - j. In comparison to the Non-single premium, the Single premium was 2.32% which was high in the year 2013 and it was very least in 2012 was 0.45%.
  - k. LIC showed a negative growth for the year 2013-14 at - 180.97 per cent as against its previous year negative growth to be -636.60 per cent. Similarly, the growth

rate of Non- single Premium collected by LIC was 78.06% in 2012-13. There was a negative growth for the year 2013-14 at -1331.50 per cent as against its previous year negative growth to be -388.47 per cent.

### Suggestions

The following suggestions are put forwarded to improve the performance of life Insurance Corporation.

1. LIC should continue increasing offices in rural areas as majority of the population of India lives in villages.
2. Operating cost as compared to premium underwritten should be controlled.
3. LIC should extensively popularize its insurance schemes among the general public
4. The Corporation should strive to increase its business by issuing more and more policies in order to retain its market share in the competitive scenario. In the recent period, insurance will have an important role to play in reducing the risk burden individuals. In the emerging scenario, the life insurance industry must pay attention to Product innovation, appropriate pricing, and speedy settlement of claims.
5. The approach to insurance must be in tune with the changing times. The mission of the life insurance sector in India should be to extend the insurance coverage over a larger section of the population.
6. The role of customer-contact personnel in the attainment of their goals is of Paramount importance therefore, in their efforts to deliver high quality services to their customers so as to attain satisfaction for their customers, insurance should not ignore the specific needs of their customer.
7. It is suggested that in order to maintain edge over competitors the product differentiation should not only be cosmetic in nature but also should be genuine
8. Quality of the service experience is heavily dependent on staff customer interpersonal relationship companies need to treat their employee well if customers have to be served well by their employees.
9. The results also suggested that the dimensions corresponding to the products convenience, responsiveness, reliability, empathy, assurance are significant in determining the overall customer satisfaction and inducing positive behavioral outcomes by reducing negative ones across public sector and private sector insurance company.
10. There is greater need to educate perspective plans continuous and regular basis. It is heartening to note that knowledgeable investors and clients are emerging. This shows that there is need for specific investors training program.
11. Innovative products, smart marketing and aggressive distribution. That's the triple whammy combination that has enabled fledgling private insurance companies to sign up Indian customers faster than anyone ever expected.
12. Quality data management is essential. The data collected from the customers should be comprehensive

and leveraged both past and real time data, for more purposeful applications and meeting customer needs. Critical information such as customer life cycle should also drive the suit. Finally, the relationship between the people and the business environment is to be optimized and aligned based on customer interaction.

13. Awareness about the Life Insurance Policies in Keonjhar District should be created among the people through electronically like TV, radio etc. and physically like van, banner etc.
14. Awareness about the Life Insurance Policies in Keonjhar District should be created among the people of slum village area through road shows like ‘Pala’ and ‘Ramkathi’.
15. LIC of Keonjhar district should activate their marketing force.

### Conclusion

The mission of LIC is to explore and enhance the quality of life of people through financial security by providing products and services of aspired attributes with competitive returns and by rendering resources for economic development. From the above analysis we can conclude that the insurance industries have grown rapidly after the liberalization. Every year LIC of India has been increasing the numbers of policies sold and the total amount of premium collected. Both the total numbers of policies sold and the total amount of premium collected by the insurance industries have increased significantly. But the growth rate of LIC of India is more in terms of number of Policies and total Premiums collected. Indian insurance industry has modified itself with the passage of time by introducing customized products based on customers’ need, through innovative distribution channels, Indian life insurance industry searched its path to grow. Changing government policy and guideline of the regulatory authority, IRDA have also played a very vital role in the growth of the sector. Again move from unit-linked to non-linked insurance policies is one of the major positive changes in Indian life insurance sector. Similarly, opening on the sector for private insurer broke the monopoly of LIC and bring in a tough competition among the players. This completion resulted into innovations in products, pricing, distribution channels, and marketing in the industry. Though the sector is growing fast, the industry has not yet insured even 50% of insurable population of India. Thus the sector has a great potential to grow. To achieve this objective, this sector requires more improvement in the insurance density and insurance penetration. Development of products including special group policies to cater to different categories should be a priority, especially in rural areas. The target of LIC of Keonjhar district is that, in the year 2014, there have been 27000 policies sold and 25crores premium have collected. The people have paid 3.45% service tax for per premium.

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