

A Study On Assessment Of Financial Performances Of Public Sector Non-Life Insurance Companies Operating In India Based On Certain Key Parameters – A Comparative Analysis Using CAMEL Framework

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Abstract:

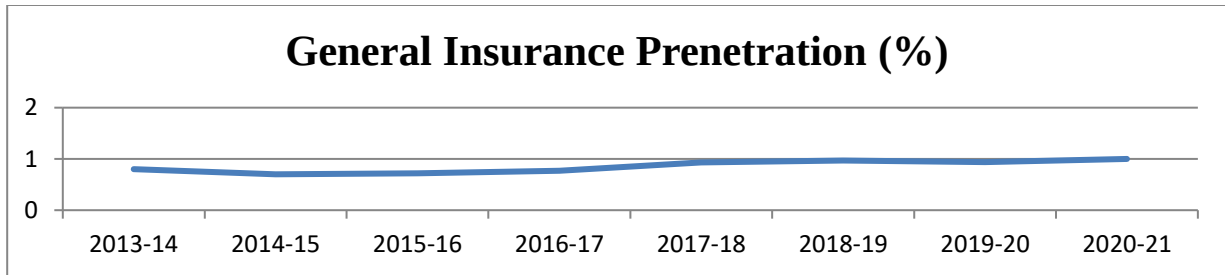
With the change in the government policies shall give raise to private players which in turn There shall be chances of decline in the market share of state-owned general insurance companies however there shall be some concern about the operational efficiency and productivity in the economy with respect to public sector general insurance companies Since general insurance shall play a vital role in Indian financial system at present it has a market share of 38.8% coming days ahead this industry shall play the predominant role in growth and development of Indian economy. The study period being 10 years from 2011-12 to 2020-21, ANOVA & hypothesis testing has been carried out in the study. findings of the study is that by using the CAMEL framework reveal that in terms of networth Ratio's , Solvency Ratio's, operational ratio's & Claim Ratio's of the public sector companies have the similar relationships where as in case of Liquidity Ratio's, Management Efficiency Ratio's & Risk Retention Ratio's vary among the public sector companies. Overall study shall try to state that among the public sector general insurance companies NIACL is performing better when compared with their peers. Regulatory should take necessary measures in order to improve the performances of public sector general insurance companies because India has come up with a slogan of "viksit Bharat 2047" with a long term vision to make India a developed nation.

Keywords: CAMEL; IRDA; General Insurance; operational efficiency; productivity; viksit Bharat 2047.

1. Introduction:-

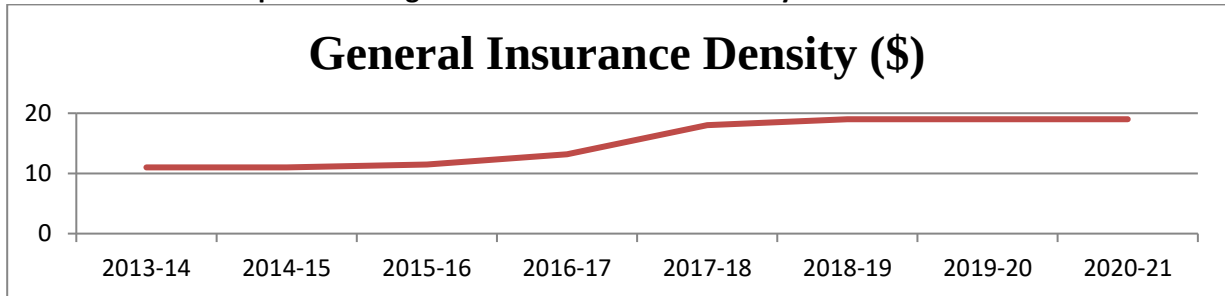
India as a regional Insurance hub where Insurance penetration in India is around 3.7 % of GDP as against the world's average of 6.31% at present general insurance industry is growing at a rate of 18% per annum, the recent bill that was passed in the Lok Sabha which has brought modification with regards to FDI which shall be enhanced from 49% to 74% since Nationalization of general insurance industry in the year 1972 and Malhotra committee recommendation in the year 1999 establishment of IRDA has given a kick start to General Insurance segment with the intention of covering risk of large number by offering varieties of products according to needs of the customers, increasing competition, joint ventures with foreign players ,boosting innovation, bringing advancement in operations, enhancing customers experience, maximizing efficiency & above all creation of economic value with the intention of creating a benchmark in terms of growth prospective. General insurance companies financial performance has been affected mainly due to deregulation in prices, offers announced by new entrants , governmental policy, affordability by customers, creating awareness in the minds of the customers, comparison of performances that has been raised among public & private players, tariffs created by regulators, challenges in branding the products, meeting compliances, commitment towards the establishing wide network of distribution channel & requirement infrastructure , strategies played by the players shall have an impact either positively or negatively shall impact on the financial performances. In this research paper we are trying to make an assessment of financial performances since general insurance shall play a vital role in which there shall be an improvement in the economic development of a country by converting Savings into investments which will be utilized for productive purposes. Basically general insurance companies shall try to provide unique Financial Services by absorbing risk against the losses arising out of happening of an uncertain event.

Graph 1 showing the General Insurance penetration



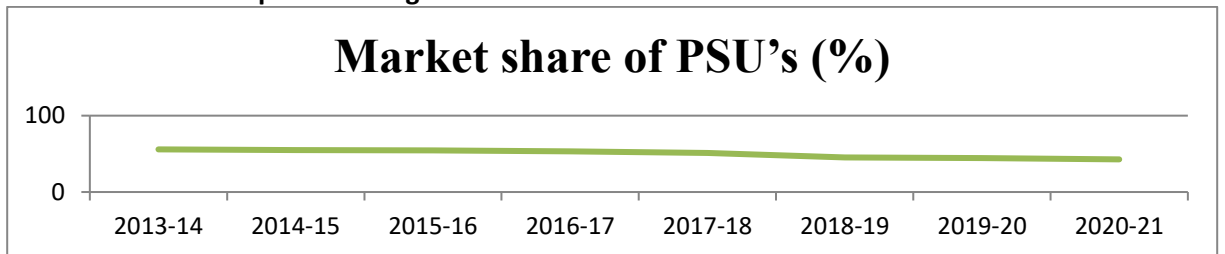
(Source: IRDAI Annual Reports)

Graph 2 showing the General Insurance Density



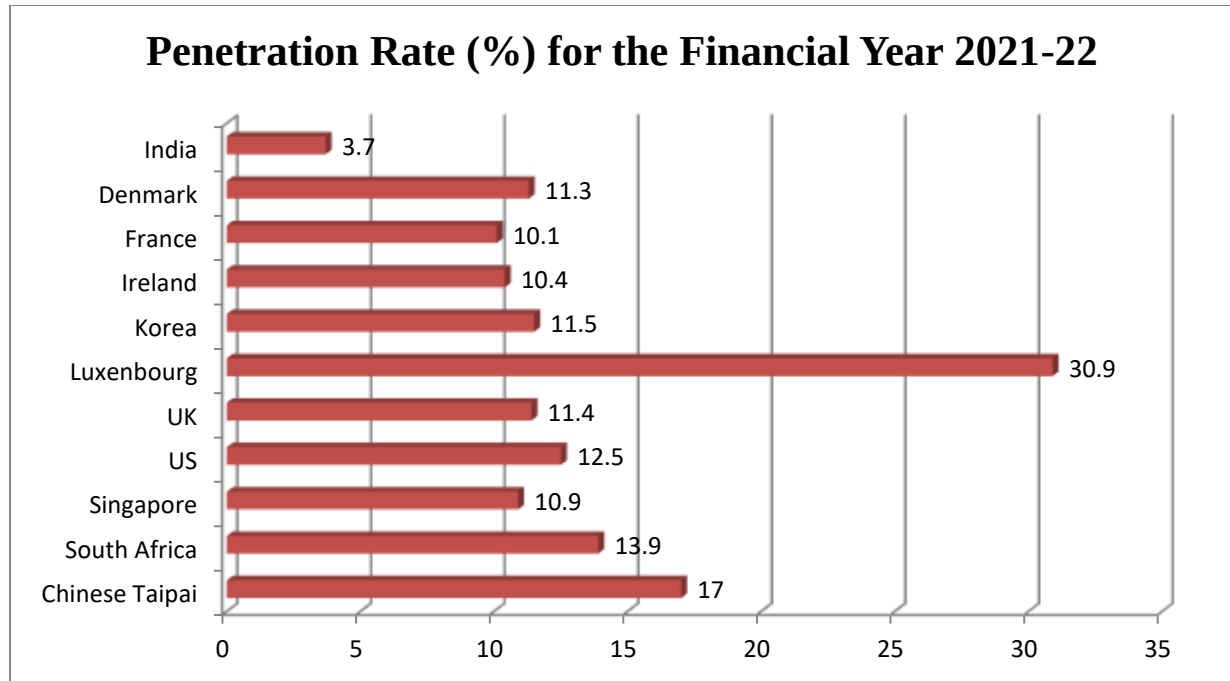
(Source: IRDAI Annual Reports)

Graph 3 showing the Market share of PSU's



(Source: IRDAI Annual Reports)

Graph 4 showing the Penetration rate of general insurance of developed nations during the financial year 2021-22



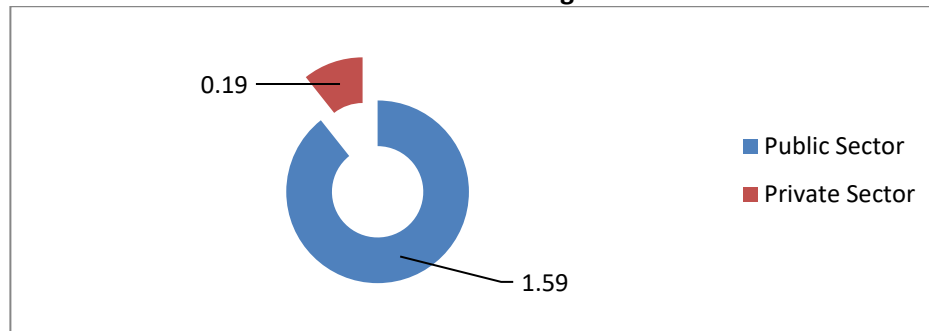
(Source: IRDAI Annual Reports) (WWW.investindia.gov.in)

2. History of Insurance in India:-

1818	Establishment of Oriental Insurance Company, Calcutta.
1850	Triton 1 st General Insurance Company started by British Government.
1870	Commencement of Bombay Mutual Life Assurance Society.
1906	Establishment of NIC
1907	Establishment of Indian Mercantile Insurance
1912	Enactment of Indian Insurance Companies Act
1928	Government stated to collect Statistical Data of life & Non-life Insurance Business
1938	Comprehensive Act to protect the interest of insuring public
1956	Formation of LIC & Passing of LIC Act 1956
1972	General Insurance Act 1972
1993	Setting up of Malhotra committee
1994	Malhotra Committee Recommendations
1995	Setting up of Mukherjee Committee
1996	Setting up of IRA
1997	Submission of Mukherjee Committee report
1998	Central Cabinet approves 40 foreign equity in public insurance companies.
1999	IRDA Act

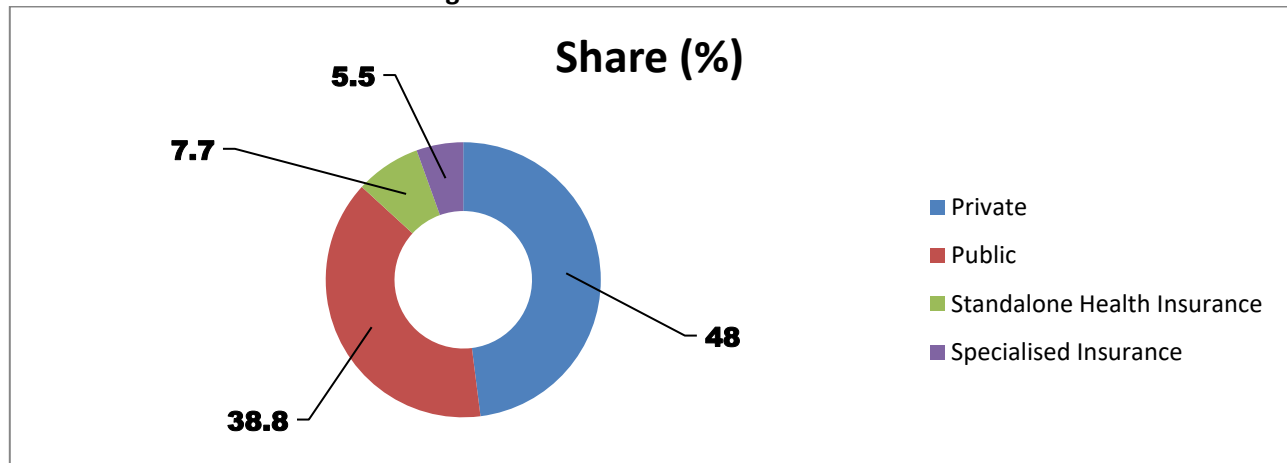
2000	Permitted foreign players into Indian Insurance market.
2001	Royal Sundaram alliance 1 st Non-life Insurance to sell a Policy.
2004	1000 Million Min capital required for Direct life & Non-life Insurance Company with a limit of 49% stake of foreign Investment.
2006	Actuaries Act 2006
2007	First online insurance portal which was setup by Indian insurance broker "Bonsai Insurance Broking Pvt Ltd".
2012	Securities & Insurance Laws (Amendment & Validation) Act 2012.

Graph 5 showing the Total value of investment contributed in Indian General Insurance sector during the FY-2021:-



(Source: IRDAI Annual Reports)

Graph 6 showing the Share of Public & Private sector in Non-Life Insurance during the FY-2020:-



(Source: IRDAI Annual Reports)

3. Objectives of the study:-

1. To measure the operational efficiency based on certain key parameters of public sector non-life insurance operating in India.
2. To study the profitability & solvency ratio of public sector non-life insurance companies.
3. To assess the financial performance of public sector non-life insurance companies in India by using **CARMEL** approach.
4. To provide suggestions in order to improve their financial performance efficiency of public sector non-life insurance companies which are operating in India.

4. Methodology of the study:

1. The study is based on the secondary sources of data which are available in journals, periodicals, online database, IRDA, published sources & annual reports.
2. To analyse the data some of the statistical tools are applied through ANOVA, tables & diagrams, important accounting ratios assessing the financial performances, one way ANOVA.
3. Hypothesis testing is carried out in the study which shall help in identifying patterns and relationships to make data driven decisions.

5. Period of study:

The study has been carried for a period of 10 years i.e. from **2011-12** to **2020-21**.

6. Limitation of the study:

1. The study has been confined only to public sector non-life insurance companies.
2. The study period is only for a term of 10 years i.e. from **2011-12** to **2020-21**.
3. The study has been based purely on secondary data so it has an ingrained restraint.

7. Data processing:-

Data (Quantitative) has been processed manually & electronically by using Excel data analysis & SPSS software.

8. Sample design:-

The sample shall include 5 public sector non-life insurance companies namely:

1. United India insurance company limited.
2. New India Assurance Company limited.
3. Oriental insurance company limited.

4. National insurance company limited.
5. General Insurance Company (GIC-Re)

9. Research gap:-

With the co existence of public and private sector of general insurance in india is termed to be special where earlier attempts has been focused on the performance of the sector since there was no much study conducted with assessment part of financial performances of public sector non-life insurance companies that are operating in india.

10. Review of Literature:-

1. (Parmar, 2018) in this research paper titled **“A Comparative Study on Measuring The Operating Efficiency of Public Sector Non-Life Insurance Companies of India ”** in this paper the author tries to explore about the insurance industry which was liberalised in Jan 2000 which was implemented with the objective of maximizing the coverage of insurance policy, varieties of products offered, encouraging competition , promoting the new entrants into the industry & joint ventures with foreign players which helps in bringing novelties, improvement in services offered, improving customer experience & enhancing services rendered this research paper also tries to speak about the ways of inspiring the public sector enterprises , finally generating economic activity the intension behind the study is to measure the operational efficiency of public sector non-life insurance companies that are operating in india. The study has been conducted for the period of 5 years i.e. from 2010-11 to 2014-15, the methodology of the study is that secondary sources of information has been used along with some of the key accounting ratio, F-test & one way ANOVA statistical tools has been used for better analysis. Findings of the study was that return on net worth ratio with respect to PAT & SHF norms shall tends to be the same where as in case of Liquid Asset to Liquid Liability ratio's shall tend to be not same , in case of solvency ratio & liquid asset to liquid liabilities shall not to be the same, where as in case of management efficiency norms as per operating expenses to gross premium is different during the study period , in case of risk retention norms net premium to gross premium shall tends to change & finally in case of claim management net claims to net premium is equal. Atleast the researcher could have thrown some light on highlighting how above ratios shall affect the operational efficiency & to what extent & also could have suggested way for improving the operational efficiency of selected companies.

2. (Choudhary & Upadhyaya, 2021) in this research paper titled **“Performance Analysis of Public & Private Sector Insurance**

Companies in India" in this paper the researcher tries to explain the problems that has been encountered & challenges that is been faced by the insurance companies that are operating in india the paper also tries to reveal that the efforts & challenges that has been put in to attract customers & retaining the old customers , due to liberalization policy that has made many players i.e. private & as well as foreign investors has been entering due to this there is change in the level of competition that has been posed , this paper tries to throw light on the importance of performance which affects the growth & success of the economy the study tries to examine the financial performance on various parameters. Liquidity & profitability are the key financial ratios that has been employed for the purpose of analysis henceforth LIC, SBI life insurance & HDFC standard life insurance companies has been taken as sample, the study period is from 2016-2020 findings of the research paper is that based on the selected parameters LIC is better performer where as other two are better in one ratio but overall profitability wise SBI has been the emerging one when compared with HDFC.

3. (Saha & Roy, 2018) In this research paper titled **"Evaluating Efficiency of Indian life Insurance company is using Data Envelopment Analysis"** here the researcher has made a sincere effort how insurance companies have achieved a significant progress in mobilization of savings and generation of resources in Indian financial markets over a decade Sense this particular segment which was deregulated few years back which had comprised around 23 e private and one public player in this particular segment this research paper tries to make an attempt to analyse efficiency of 24 life insurance companies which has been operating in India by employing data envelopment analysis for the purpose of research some of the variables that has been analysed such as Commission expenses operating expenses and paid up equity capital has been considered as input variable wild net premium total benefits paid and income from investment has been considered as output variables Findings of the paper is that it has tried to analyse the technical efficiency scores of all 24 life insurance companies which is been operating in India and also it has tried to find out impact of managerial performance and scale of operations which shall have an impact on the overall performance of life insurance companies.

4. (Sarangi & Kar, 2018) In this research paper titled **"A comparative assessment of indicators for public sector general insurance companies: an Indian perspective"** here the researcher in this research article has made an sincere effort to analyse the general insurance industry at large which are operating in India where major companies are studied highlighting on critical dimensions of premium collected by the general insurance

companies ,Claim management and commission shelled out to sales agents research has also observed that public sector companies are leading the Indian market by analysing the major general insurance companies by making comparative assessment across different geographical markets the researcher has conducted study with the intention to establish the linkages for company's performance across geographical markets and also to identify themes for further research to strengthen the general insurance industry in India finally e the paper she'll also help in reaching the petitioners On relevant dimensions in general insurance domain.

5. (T.Kapoor & Pandey, 2020) In this research paper titled **“A study of profitability and trend analysis of National Insurance Company Limited”**, in this article the author has made study on one of the oldest Insurance Company which is been operating in India under public sector non Life Insurance which is National Insurance Company the study is based upon Universal health coverage Which is been the flagship programme of Central Government where public sector general insurance companies such as National Insurance Company United India Insurance Company Limited and Oriental Insurance Company Limited has been proposed by Ministry of Finance in the year 2017-18 to cover Universal health coverage schemes in India research paper shell highlights the probable ways of growth possibilities in the coming days Ahead and also it stresses upon declining profitability and growth of Companies in general insurance segment This study has been conducted from 2010-11 to 2018-19 by analysing various key ratios such as solvency ratio, net retention ratio ,operating profit ratio, return on net worth ratio and liquid asset to liquid liabilities ratio. Finding of this study is that it revealed National Insurance Company Limited is facing severe losses and also decline in profit after tax and finally the author tries to conclude by giving certain suggestions and Recommendation on ways of improving and things related to growth which is to be concentrated more by general insurance companies especially public sector has been stressed more in this research article.

11. Data analysis & interpretation:-

1. Return on Networth:

Profits that are earned on investment made by the owners shall be termed as return on networth. Earning decent return on investment made by the business shall be the only intension of every enterprise established which shall be termed as return on owners fund/ SHF.

Table 11.1 Showing Ratio of Net Premium and Shareholder's Fund of Selected Public Sector Non-Life Insurance Companies during the Period from 2010-11 to 2020-21:-

Year	National	New India	Oriental	United	GIC
2011-12	3.51	1.13	2.40	1.49	1.63
2012-13	3.19	1.21	2.14	1.51	1.43
2013-14	3.04	1.25	2.18	1.55	1.20
2014-15	2.74	1.43	2.03	1.67	1.07
2015-16	3.12	1.62	2.26	1.87	1.10
2016-17	2.79	1.69	5.60	3.50	1.68
2017-18	6.51	1.36	3.18	2.57	1.75
2018-19	61.65	1.40	37.88	4.68	1.75
2019-20	-4.31	1.57	54.84	9.10	2.27
2020-21	22.02	1.52	20.31	3.41	1.88

(Source: Computed)

*Ratio = **Net Premium / Shareholder's Fund*100**

Hypothesis:

H₀: Selected public sector Non-life insurance company has equal Return on Network.

H₁: Selected public sector Non-life insurance company does not have equal Return on Network.

Anova: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
National	10	104.26	10.426	368.4786933
New India	10	14.18	1.418	0.034062222
Oriental	10	132.82	13.282	350.7215289
United	10	31.35	3.135	5.56685
GIC	10	15.76	1.576	0.143737778

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	1213.864112	4	303.466028	2.093028309	0.097443	2.578739
Within Groups	6524.50385	45	144.9889744			
Total	7738.367962	49				

Analysis:

From the above table it is evident At 5% level of significance where the p value is 0.097443 which is more than 0.05 hence H₀ is

accepted and H_1 is rejected stating that the public sector non-life insurance companies do not have same return on Networth.

2. Liquidity Analysis:

Maintaining sufficient money shall help the business to run smoothly its day to day operations which shall be known as working capital. Premiums & other revenue generated by the business shall highlight the financial soundness of the business, if the company lacks with working capital, then there shall be misappropriation of funds which shall result in failure of the businesses.

Table 11.2 Showing Liquidity Analysis of Selected Public Sector Non-Life Insurance Companies during the Period from 2010-11 to 2020-21:-

Year	National	New India	Oriental	United	GIC
2011-12	0.19	0.86	0.29	0.46	0.33
2012-13	0.20	0.78	0.27	0.42	0.36
2013-14	0.23	0.83	0.30	0.18	0.35
2014-15	0.21	0.45	0.30	0.21	0.34
2015-16	0.20	0.38	0.28	0.15	0.41
2016-17	0.16	0.39	0.24	0.18	0.39
2017-18	0.15	0.36	0.27	0.16	0.35
2018-19	0.13	0.36	0.30	0.16	0.32
2019-20	0.24	0.40	0.27	0.17	0.30
2020-21	0.15	0.34	0.27	0.24	0.31

(Source: Computed)

*Ratio = **Liquid Assets / Liquid Liabilities*100**

Hypothesis:

H_0 : Selected public sector Non-life insurance company has equal Liquid Ratio.

H_1 : Selected public sector Non-life insurance company does not have equal Liquid Ratio.

Anova: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
National	10	1.86	0.186	0.00136
New India	10	5.15	0.515	0.046494
Oriental	10	2.79	0.279	0.000366
United	10	2.33	0.233	0.01269
GIC	10	3.46	0.346	0.001182

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.655708	4	0.163927	13.20028	3.41493E-07	2.578739
Within Groups	0.55883	45	0.012418			
Total	1.214538	49				

Analysis:

From the above table it is evident that at 5% level of significance where the p value is 3.41 E where it is less than 0.05 hence H_0 is rejected and H_1 is accepted stating that selected public sector non-life insurance companies do have same Liquid Ratio.

3. Solvency Test:

Is the firm able to meet its long term debt shall be highlighted by solvency ratio, higher solvency ratio firm is in better position to meet its long term obligation, where as weak in solvency ratio shall be treated as debt ridden company.

Table 11.3 Showing Solvency Test of Selected Public Sector Non-Life Insurance Companies during the Period from 2010-11 to 2020-21:-

Year	National	New India	Oriental	United	GIC
2011-12	1.37	2.00	1.33	2.71	1.59
2012-13	1.50	2.50	1.51	2.52	2.39
2013-14	1.55	2.61	1.64	2.54	2.73
2014-15	1.52	2.44	1.68	2.36	3.04
2015-16	1.26	2.30	1.59	1.91	3.48
2016-17	1.90	2.19	1.11	1.15	2.40
2017-18	1.55	2.58	1.66	1.54	1.72
2018-19	1.04	2.13	1.57	1.52	2.06
2019-20	0.02	2.11	0.92	0.30	1.53
2020-21	1.21	2.13	0.69	1.00	1.74

(Source: Readily available data from Annual Reports)

Hypothesis:

H_0 : Selected public sector Non-life insurance company has equal Solvency Ratio.

H_1 : Selected public sector Non-life insurance company does not have equal Solvency Ratio.

Anova: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance		
National	10	12.92	1.292	0.254817778		
New India	10	22.99	2.299	0.047787778		
Oriental	10	13.7	1.37	0.121688889		
United	10	17.55	1.755	0.628672222		
GIC	10	22.68	2.268	0.437484444		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	9.129628	4	2.282407	7.656765737	8.54827E-05	2.578739184
Within Groups	13.41406	45	0.298090222			
Total	22.543688	49				

Analysis:

From the above table it is evident that at 5% level of significance where the p value is less than 0.05 hence H_0 is rejected and H_1 is accepted stating that the selected public sector non-life insurance companies shall have same solvency Ratio.

4. Operational analysis:

Parameter & indicator of the firm's financial performance shall be evaluated by its operational activity, since general insurance is purely service oriented industry shall incur expenses only related to service creation expenses which incur cost only pertaining to service to clients.

Table 11.4 Showing Ratio of Net Operating Expenses and Operating Income of Selected Public Sector Non-Life Insurance Companies during the Period from 2011-12 to 2020-21:-

Year	National	New India	Oriental	United	GIC
2011-12	0.257	0.262	0.259	0.231	0.008
2012-13	0.240	0.251	0.315	0.267	0.008
2013-14	0.205	0.235	0.278	0.255	0.013
2014-15	0.260	0.230	0.363	0.284	0.012
2015-16	0.315	0.235	0.342	0.273	0.011
2016-17	0.285	0.212	0.306	0.222	0.008
2017-18	0.254	0.178	0.269	0.210	0.006
2018-19	0.270	0.187	0.227	0.222	0.007
2019-20	0.464	0.162	0.313	0.250	0.008
2020-21	0.272	0.204	0.276	0.277	0.007

(Source: Computed)

***Ratio = Total Operating Expenses / Total Operating Income**

Hypothesis:

H₀: Selected public sector Non-life insurance company has equal Operational Ratio.

H₁: Selected public sector Non-life insurance company does not have equal Operational Ratio.

Anova: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
National	10	2.822	0.2822	0.004894622
New India	10	2.156	0.2156	0.001068711
Oriental	10	2.948	0.2948	0.001658178
United	10	2.491	0.2491	0.000694322
GIC	10	0.088	0.0088	5.51111E-06

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.5444544	4	0.1361136	81.78582254	4.7199E-20	2.578739184
Within Groups	0.0748921	45	0.001664269			
Total	0.6193465	49				

Analysis:

At 5% level of significance the p value is less than 0.05 hence H₀ is accepted and H₁ is rejected stating that the selected public sector non-life insurance companies shall have same operational Ratio.

5. Management soundness analysis:

Management efficiency shall try to reveal the financial health of the concern, operating expenses, gross premium, factors affecting the firms efficiency shall try to highlight how efficient & sound the management is all about , hence soundness in management shall play a significant role in managing the financial stability.

Table 11.5 Showing Ratio of Operating Expenses and Gross Premium of Selected Public Sector Non-Life Insurance Companies during the Period from 2011-12 to 2020-21:-

Year	National	New India	Oriental	United	GIC
2011-12	0.228	0.205	0.219	0.191	0.008
2012-13	0.208	0.200	0.260	0.216	0.007
2013-14	0.188	0.192	0.244	0.217	0.012
2014-15	0.239	0.198	0.311	0.248	0.011
2015-16	0.292	0.198	0.300	0.239	0.010
2016-17	0.211	0.175	0.254	0.185	0.007

2017-18	0.179	0.139	0.229	0.149	0.005
2018-19	0.172	0.150	0.183	0.186	0.006
2019-20	0.287	0.128	0.246	0.196	0.007
2020-21	0.242	0.169	0.239	0.234	0.006

(Source: Computed)

*Ratio = Operating Expenses / Gross Premium

Hypothesis:

H₀: Selected public sector Non-life insurance company has same Management Efficiency.

H₁: Selected public sector Non-life insurance company does not have same Management Efficiency.

Anova: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
National	10	2.246	0.2246	0.001733822
New India	10	1.754	0.1754	0.000781822
Oriental	10	2.485	0.2485	0.001375389
United	10	2.061	0.2061	0.000919211
GIC	10	0.079	0.0079	5.43333E-06

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.367209	4	0.091802	95.31612603	2.26095E-21	2.578739184
Within Groups	0.043341	45	0.000963			
Total	0.410551	49				

Analysis:

From the above table it is evident that at 5% level of significance the p value is less than 0.05 hence H₀ is rejected and H₁ is accepted stating that the selected public sector non-life insurance companies shall have same Management Efficiency.

6. Re-insurance & Actuarial issues:

Risk retention ratio shall be treated as re-insurance ratio basically this ratio shall try to speak about the risk bearing capacity of country's insurance sector.

Table 11.6 Showing the Ratio of Net Premium and Gross Premium of Selected Public Sector Non-Life Insurance Companies during the Period from 2011-12 to 2020-21:-

Year	National	New India	Oriental	United	GIC
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2011-12	1.12	1.28	1.18	1.21	1.08
2012-13	1.16	1.26	1.22	1.24	1.10
2013-14	1.09	1.23	1.14	1.17	1.11
2014-15	1.09	1.16	1.17	1.15	1.10
2015-16	1.08	1.19	1.14	1.14	1.13
2016-17	1.35	1.21	1.21	1.20	1.11
2017-18	1.42	1.28	1.17	1.41	1.11
2018-19	1.57	1.24	1.24	1.19	1.13
2019-20	1.62	1.27	1.27	1.27	1.09
2020-21	1.12	1.21	1.16	1.19	1.11

(Source: Computed)

*Ratio = Net Premium / Gross Premium

Hypothesis:

H₀: Selected public sector Non-life insurance company has equal Risk Retention.

H₁: Selected public sector Non-life insurance company does not have equal Risk Retention.

Anova: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
National	10	12.62	1.262	0.044306667
New India	10	12.33	1.233	0.001645556
Oriental	10	11.9	1.19	0.001888889
United	10	12.17	1.217	0.006112222
GIC	10	11.07	1.107	0.000245556

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.139548	4	0.034887	3.218423912	0.020891402	2.578739184
Within Groups	0.48779	45	0.01084			
Total	0.627338	49				

Analysis:

From the above table it is evident that at 5% level of significance the p value is less than 0.05 hence H₀ is rejected and H₁ is accepted stating that the selected public sector non-life insurance companies shall have same Risk Retention.

7. Claim analysis:

Right pricing policy has been adapted or not by the firm shall be an indicator which shall try to reflect the claims in retention with the premium earned.

Table 11.7 Showing the Ratio of Net Claim and Net Premium of Selected Public Sector Non-Life Insurance Companies during the Period from 2010-11 to 2020-21:-

Year	National	New India	Oriental	United	GIC
2011-12	0.76	0.90	0.85	0.79	1.11
2012-13	0.80	0.86	0.79	0.82	0.79
2013-14	0.75	0.84	0.80	0.76	0.92
2014-15	0.74	0.84	0.81	0.80	0.86
2015-16	0.92	0.88	0.78	0.82	0.79
2016-17	1.00	0.91	1.02	0.97	0.72
2017-18	1.12	0.85	0.82	1.04	0.88
2018-19	1.18	0.95	1.04	1.04	0.87
2019-20	1.08	0.91	1.02	1.01	0.92
2020-21	0.77	0.84	0.96	0.87	0.87

(Source: Computed)

*Ratio = Net Claim / Net Premium

Hypothesis:

H₀: Selected public sector Non-life insurance company has same Claim Ratio.

H₁: Selected public sector Non-life insurance company does not have same Claim Ratio.

Anova: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
National	10	9.12	0.912	0.029196
New India	10	8.78	0.878	0.001462
Oriental	10	8.89	0.889	0.011588
United	10	8.92	0.892	0.012329
GIC	10	8.73	0.873	0.01089

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.009148	4	0.002287	0.174675	0.95027	2.578739
Within Groups	0.58918	45	0.013093			
Total	0.598328	49				

Analysis:

From the above table it is evident that at 5% level of significance the p value is more than 0.05 hence H_0 is accepted and H_1 is rejected stating that the selected public sector non-life insurance companies do not have same Claim Ratio they vary from each other.

12. Findings of the study:-

Summary of findings

Key parameters	Results
Return on Network	H_0 is Accepted
Liquidity Ratio	H_1 is Accepted
Solvency Ratio	H_1 is Accepted
Operational Efficiency	H_0 is Accepted
Management Efficiency	H_1 is Accepted
Risk Retention	H_1 is Accepted

1. Return on a net worth of NICL is found to be decent except during 2019-20, huge upward movement has been witnessed during 2018-19 whereas in case of NIACL the net worth ratio is in a steady rate, in case of OICL there has been a tremendous growth during 2018-19 to 2020-21, in case of UIICL it has been on the verge of growth but has failed to register as expected finally in case of GIC return on net worth ratio is not up to the mark.
2. In the case of liquidity ratio, NICL ranges from 0.13 to 0.24, in the case of NIACL it is between 0.36 to 0.86, in the case of OICL ranges between 0.24 to 0.30, in the case of UIICL it is 0.15 to 0.46 & finally in case of GIC it is ranging between 0.30 to 0.41 during the study period.
3. Solvency ratio shall try to measure the company's ability to meet its long-term obligation/commitment NICL, OICL has been maintaining a good solvency ratio whereas, in the case of NIACL, UIICL & GIC solvency ratios are too high.
4. Operational efficiency in the case of NICL is stable, in case of NIACL is on a declining trend, OICL has shown some positive vibes, UIICL is stable enough in its operational efficiency & finally in case of GIC has registered a downtrend.
5. Management efficiency in case of public sector non-life insurance companies such as NIACL, NICL, OICL, UIICL & GIC has been fluctuating during the study period but has witnessed a positive sign during the financial year 2019-20 & 2020-21 in case of NICL, NIACL & OICL.
6. Net premium to gross premium of all the above selected public sector non-life insurance companies is maintaining its ratios very well during the study period.

7. In terms of claim analysis NICL, OICL & UIICL has been better in handling the claims whereas the case of NIACL & GIC has been performing below 1 which indicated that its performance is below standards.

13. Suggestion:-

1. As per the Rule of thumb in the case of Return on net worth is 20% which is been treated as an excellent return, 15% is considered as best & 10% tends to be normal but the selected public sector non-life insurance companies except for few financial years tends to be satisfactory but rest of the financial years failed to mark standard benchmark, management of these selected companies should need to intervene to find better business models to maximize the wealth of shareholders.
2. As per the rule of thumb standard to be maintained is 1:1 but all the selected public sector non-life insurance companies have failed to maintain it. i.e. liquid assets are less than the liquid liabilities, if the companies need to meet up their short-term obligation it has to improve the liquid assets by maintaining sufficient cash & cash equivalents balances.
3. As per the IRDAI's mandate, the minimum solvency ratio that insurance companies need to maintain is 1.5 to lower their risk, companies such as NIACL, UIICL & GIC should try to bring down their long term commitment.
4. Companies efficiently using their resources only can maximize operational efficiency if the company fails to utilize its resources to the max then shall cannot perform as expected, the only way of improving the efficiency is through providing high-quality services is the best way of maximizing its efficiency.
5. Top-level management should mainly focus on increasing its top line & bottom line figures to end up in green so that cost/expenses shall put efforts to minimize & maximizing its profits where ever possible need to cut down or avoid incurring expenses, create value-added services which shall stand unique in minds of the customers.
6. Facultative & treaty reinsurance are both forms of reinsurance where the management can consider these two methods in mitigating the risk that might arise shortly the management can also find other better alternatives to address these issues in bringing down the risk in the Insurance business.
7. Rule of thumb in case of claim analysis anything above 1 shall define that the firm can handle better its claim management to be very efficient & effective the company

should try to maximize its net premium to improve its net premium company should sell its products to customers by improving its customer base by introducing attractive products according to the needs and wants of the customer by understanding their needs & preferences.

14. Conclusion:-

With the changing taste and preferences of the customers, change in the business model ,change in governmental policies ,market condition ,competition faced & economic policy all these have resulted in affecting the overall performance in terms of productivity and profitability of public sector non life insurance companies we shall always believe that in today's modern world companies should focus more on customer-centric ,ascertain the level of risk associated, implement better business model, utilization of funds and various other resources available to the fullest extent possible Should be mainly addressed by the top Level management where they are solely responsible for decisions that are taken in the interest of the organization ,private players and as well as the foreign players are grabbing the markets it's been done only because of their constant efforts where the public sector seems to be failed to do so if the same continues in the long run if the public players need to enjoy should incorporate necessary changes need it and develop their own strategic plans to pose competition To the private players if this is not done surely they shall be lacking in the performance of public sector non Life Insurance and in turn they shall might still more share the market share, finally the path for the road map that has been set by the public sector should not forget the path of success The shirt still continue as a market leader leading from the front. For Indian economy still long road ahead where india has made a long term vision slogan which is “viksit Bharat 2047” where the objective is so clear that to make India a developed nation with economically strong, environmentally sustainable, socially progressive and most important is having good governance.

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