# Comparative Assessments of Financial Performance of Selected Public Sector Non-Life Insurance Companies of India

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#### ABSTRACT

The insurance industry has come up with several changes after liberalization leading to the development of the economy. As this industry is risky& service oriented, it is important to analyse the performance of Public Sector Non-Life Insurance Companies of India namely New India Assurance Insurance Company, National Insurance Company Oriental Insurance Company & United India insurance company. To compare the performance of the Public Sector Non-Life Insurance Companies of India seventeen public disclosure analytical ratio have been taken. To analyse the same, secondary data of the ratios were collected from 2009-10 to 2018-19. Tools used for the study include Ratio Analysis and Statiscal tools such as ANOVA, Welch, and Jarque-Bera Levene & Bartlett test have been applied. The results concluded on two parameter, first there is no significant differences between the mean of the ratios of selected companies & second New India assurance company ltd. has been performed better in seven selected analytical ratios viz ASMRSM, CR, GPGR, NER, NNPA, NRR & RONW, While United India insurance is performing efficiently in six ratios namely EMGDPR, EMNWPR, GDPNWR, LALR, NCR & TRNP Rand Oriental insurance company ltd is at third level which is performing better in two ratios GRNW,OPR. National insurance company is a least performer amongst all the selected companies.

Keywords: Public Sector Companies; Insurance Companies; Public Disclosure Analytical Ratio; Financial Performance

## INTRODUCTION

Insurance is a tool to transfer the risk. In which it allows the one party i.e., Insured to transfer the cost of his potential risk to another party i.e., Insurer in exchange for compensation which is termed as premium. In other way, it is a method whereby the insurer agrees to reimburse the losses of the insured from specified loss causing events. Insurance serves as a risk management and wealth

preservation tool. Insurance gives protection to individuals, businesses and other entities against significant losses which may arise due to unforeseen events. Anyone who wants to protect themselves against financial hardships will take insurance. An individual or a business entity might consider insurance to protect one's family after ones' death from loss of income, to ensure repayment of debt, to cover contingent liabilities, to protect the business against business interruption and loss thereof, protection against lawsuits, etc. Insurance may cover losses arising from fire, marine, vehicle risk, etc. Most individuals own insurance in some form or another whether it's auto, medical, liability, disability or life insurance.

Due to cut throat competitions from private sector Non-life insurance companies, the growth of market share of Public sector non life insurance companies is going downward. Kramer (1996) states that it was a general belief then that insurance industry would never be same again and turbulent times are ahead for insurers. The shift in favour of market driven competition has brought about major changes to the industry.

The activities undertaken by the IRDA has increased the insurance activities manifold in terms of volume, variety of products and geographical coverage and more so competition due to entry of new players have increased service diversification to a great extent (Darzi, 2010).

Hence it is required to analyse the performance of Public Sector Non-Life insurance companies through Analytical Ratio's as mandated by IRDA for all the companies.

#### **Key Analytical Ratios**

S.NO	Particulars	Basis of Calculations
1	Gross Premium Growth Rate (GPGR)	(Gross premium current year - Gross premium previous year)/ Gross premium previous year
2	Gross Premium to Net worth ratio (GDPNWR)	Gross premium / Net worth
3	Growth rate of Net Worth (GRNW)	(Net worth current year- Net worth previous year ) / Net worth previous year
4	Net Retention Ratio (NRR)	Net Premium / Gross Premium
5	Net Commission Ratio (NCR)	Net Commission / Net Written premium
6	Expense of Management to Gross Premium ratio (EMGDPR)	Expenses of management/ Gross premium
7	Expense of Management to Net Written	Expenses of management/ Net Written

## **Table 1 Analytical Ratios**

	Premium Ratio (EMNWPR)	premium
8	Net Incurred Claims to Net Earned Premium (NICNEP)	Net Incurred Claims / Net Earned Premium
9	Combined Ratio (CR)	<pre>((Net Incurred Claims / Net Earned Premium) + ((Net Commission + Operating Expenses) /Net Written premium))</pre>
10	Technical Reserves to Net Premium Ratio (TRNPR)	(Technical Reserve for Unexpired Risk + Technical Reserve for premium deficiency + Technical Reserve for outstanding claims including IBNR and IBNER) / Net Premium
11	Underwriting balance Ratio (UBR)	(Underwriting profit/loss) / Net Earned Premium
12	Operating Profit Ratio (OPR)	(Underwriting profit/loss + Investment income) / Net Earned Premium
13	Liquid Assets to liabilities Ratio (LALR)	Liquid Assets/ Policyholders liabilities
14	Net earnings Ratio (NER)	Profit after tax/ Net Earned Premium
15	Return on Net Worth Ratio (RONW)	Profit after tax/ Net Worth
16	Available Solvency margin Ratio to Required Solvency Margin Ratio (times) (ASMRSM)	Ratio of Available solvency margin (ASM) at The end of the period to the Required solvency
17	NPA Ratio	
	Gross NPA Ratio	
	Net NPA Ratio (NNPA)	

Source: IRDA circular 2010

# **REVIEWS OF LITERATURE**

**Gazali** (2020) propose to evaluate the application of financial performance to the stock prices of manufacturing companies listed on the Indonesian Stock Exchange. The research method used was descriptive method with a quantitative approach. In this study financial statements of manufacturing companies listed on the Indonesian stock exchange from 2016 to 2018, have been taken. The technique of determining the sampling uses Purposive Sampling. The analysis reveals that Price to Book Value and Net Profit Margin affect stock prices. The value of implementing Financial Performance on the price of manufacturing companies listed on the Indonesian Stock Exchange is 64.5%, while 35.4% is explained by other factors which are not included in this study.

Qiao-Ming Lim(2020)This study investigates the efficiency, productivity and competitiveness of the Malaysian insurance industry. The usefulness of regulatory policies have been studied, with particular focus on the risk-based capital framework. This study included all insurance firms operating in Malaysia between 2000 and 2017. Data envelopment analysis, Malmquist productivity index and Panzar–Rosse methodologies was employed. The findings indicate that life insurers was more efficient and competitive than general insurers. There is a deterioration in the efficiency and productivity of conventional insurers following implementation of risk-based capital requirements. Osho, A. E., &Efuntade, A. O. (2019). The objective of this study was to examine how foreign exchange affects financial performance of multinational companies in Nigeria. This Study was based on the transaction cost theory, liquidity theory, inflation theory and managerial theory of firm performance. Secondary data source was explored in presenting the facts of the situation. Findings show that exchange rate fluctuation has significant effect on performance of multinational companies in Nigeria. As a result, the study concluded that exchange rate instability affects the operations of companies in Nigeria vis-à-vis international trade with other countries of the world.

**Parkash Chandel, Naveen Kumar (2016)** analyze the growth of the Indian Insurance industry with reference to the top ten economies of the world. To understand the growth and opportunities available in the insurance sector, premium, insurance density and penetration have been considered as it gives a reflection upon the level of development in the insurance sector. The study has shown that the Indian insurance sector has shown consistent growth, however in comparison to the top economies in the world, the Indian insurance sector is at the lowest level in all parameters.

**B.** Nagaraja (2015) explained the relationship between the performance of the insurance industry and the economic development of the country. The author has stated that the growth rate in policies issues and the premium have shown a negative trend over the last three years. The paper focuses on a comparative analysis on the life and non-life insurance companies in the public and private sector. The performance of the companies has been analysed taking four parameters, i.e., Premium incomes, Market Share, New Policies Issued and Claims Settlement Ratio. Results have shown that the insurance penetration and density in India is low compared to the global scenario.

Showket Ahmad Dar, Ishfaq Ahmad Thakur (2015) has used the CARAMEL model to evaluate the financial soundness of top general insurance companies in the public and private sector in India. Three indicators have been used which are earnings and profitability, management soundness and liquidity. Ratio analysis has been employed in this study, and tools such as mean, standard deviation and F-test has been used to test the parameters under the CARAMEL model. From the paper, it is seen that the public-sector companies show significant differences in the ratios that have been calculated for liquidity. The higher F-value for the private sector companies shows insignificant

differences for private insurers. But, both the private and public-sector companies lack high degree of liquidity. In terms of variability, public companies seem to have insignificant differences as shown by higher F-Value whereas high degree of variation is seen among the public insurers.

**Nikolina Smajla** (2014) has thrown light upon one of the recent models used to analyse the financial soundness of insurance companies that is the CARAMELS model. The scope of the study limits to Croatian insurance companies. The author states that the actual method used by companies in Croatia to control and regulate the insurance sector is different from this model, and gives a different view in relation the soundness of the insurance sector.

**Ketan Popat (2014)** has undertaken the study to assess the financial soundness and liquidity of nonlife insurers for selected sector companies in India. Top four companies have been taken from public sector and private sector each. The data used for the purpose of the study is mainly from secondary sources such as magazines, journals, websites, etc. Seven years data ranging from 2005-06 till 2011-12 has been considered. Ratio analysis, F-test and one - way ANOVA has been used for analysing the data. The return on net worth for the public sector non-life insurers was around 10% and that of private sector companies was 20%. The standard liquidity ratio should be 200%, but in this study, it was less than 100% for companies in both sectors. This indicates that there is poor liquidity. The performance of these companies is average as compared to standard norms of general industries.

#### **OBJECTIVES**

- To analyse & compare the financial performance of the Public sector Non-life insurance companies.
- To give ranks on the basis of ratios to companies in which they are performing better.

## **RESEARCH METHODOLOGY**

The risks faced by an insurance company could affect the interests of the policyholder. With a view to ensuring reliable and timely disclosures for the safety of investors and policyholders, IRDA has laid down public disclosure requirements for all insurance companies with effect from the period ended 31st March, 2010. For measuring the performance of insurance companies on the basis of these financial indicators, the present study employs ratio analysis. The data considered for the study are the 17 analytical ratios.

There are 34 companies which are working in non-life insurance sector. Out of which 4 belongs to public sectorsnamely New India assurance insurancecompany Ltd. (NIACL), National insurance company Ltd. (NIC), Oriental insurance company Ltd. & United India insurance company Ltd. which deals in all type of insurance products have been selected for our study& rest public sector

two companies that are specialized only in single insurance product services have been excluded. The present study is of both analytical and empirical in nature and makes use of secondary data. The relevant secondary data are collected from various sources which include Annual Reports of the selected companies. The data was collected for a period of ten years i.e. 2009-10 to 2018-19.

In the first part of data analysis Jarque-Bera test, ANOVA, Leven's test&Welch test has been applied as per the requirement in this study. In the later part of the data analysis financial performance through ratio analysis of selected companies has been discussed. In this, company performance measured & ranking has been given ratio wise to each company has been assigned.

To satisfy the objectives of our study following test have been applied:

**Jarque-Bera** - Before applying any parametric test it is inevitable to check whether the selected data for the test are normally distributed or not. If the data are normally distributed then only ANOVA test can apply.To check the normality, this test was applied with the help of EVIEWS version 10.

**Analysis of variance (ANOVA):** To analyse the differences among group means of ratios in a sample. ANOVA provides a statistical test of whether two or more population means are equal, and therefore generalizes the t-test beyond two means.

Leven's test- (Test for Homogeneity) -As a basic condition to apply ANOVA test there is a need to check the homogeneity of variances. If the probability value of Leven's test is less than 5% so reject the null hypothesis and can assume that variances of the ratios are not homogeneous and thereforeANOVA testwill not apply in this case.

**Welch test**: If ANOVA is not applied then to check the significance value, Welch test is considered tocheck the mean value of the ratios of the company.

In the first part of data analysis Jarque-Bera test, ANOVA, Leven's test&Welch test has been applied as per the requirement in this study. In the later part of the data analysis financial performance through ratio analysis of selected companies has been discussed. In this, company performance measured & ranking has been given ratio wise to each company has been assigned.

#### Data Analysis, Hypothesis Testing and Interpretation

Analysis has been done by taking one company with 17 different ratios.

#### Normality Test by Jarque-Bera

# NIACL

H<sub>01</sub>: The ratios of the Company are normally distributed

H<sub>11</sub>: Theratios of the Company are not normally distributed

NIACL RATIOS	Mean	Jarque- Bera	Probability	Rank on the basis of Mean
CR	111.9550	1.216915	0.544190	1
NICNEP	89.47900	1.454121	0.483328	2
NRR	83.23600	0.778424	0.677591	3
TRNPR	70.72100	1.673548	0.433105	4
ASMRSM	47.07000	4.155620	0.125204	5
GDPNWR	37.19400	3.051895	0.217415	6
EMNWPR	29.07600	0.838282	0.657612	7
EMGDPR	28.06500	0.264199	0.876254	8
LALR_NIALC	27.25200	1.303713	0.521077	9
GPGR_NIAC	15.31500	0.299271	0.861022	10
GRNW	15.08800	3.660184	0.160399	11
NCR	9.031000	0.957631	0.619517	12
RONW	7.811000	0.686810	0.709351	13
NER	5.417000	2.447579	0.294114	14
NNPA	0.068000	0.623167	0.732286	15
OPR	-3.969000	0.677102	0.712803	16
UBR	-11.04400	1.407508	0.494725	17

Table 2 Descriptive Statistics and test for Normal Distribution

Source: Public Disclosure Report 2009-10 to 2019-20

As per the above table the probability value of the each Ratios of New India Assurance Company Ltd. General Insurance Company for the corresponding Jarque-Bera test is more than 5%. Hence the null hypothesis is accepted and can alsoconcluded that all the value of the ratios are normally distributed and further can go for ANOVA test. Along with the test above, table shows the different descriptive of the selected company. And as per the value of the mean of the different ratios, rank has been given. CR is the best Ratio and UBR is the Worst Ratio achieved by NIACL.

## Leven's test: For the test of homogeneity following hypothesis was formed

H<sub>02</sub>: Variances arehomogeneous of the Ratios.

 $H_{12}$ = Variances are not homogeneous of the Ratios.

Method	Df	Value	Probability
Bartlett	16	479.6384	0.0000
Levene	(16, 153)	20.57342	0.0000
<b>Brown-Forsythe</b>	(16, 153)	3.024392	0.0002

#### **Table 3 Test for Homogeneity**

The probability value of Leven's test is less than 5% so the null hypothesis is rejected and can assume that variances of the ratios are not homogeneous.

### Welch test is considered tocheck the mean value of the ratios of the company.

Following hypothesis were formed to analyze the differences of the mean value of the ratios.

 $H_{03}$ = There is no significant difference among the mean value of the ratios.

 $H_{13}$ = There is significant difference among the mean value of the ratios.

With the help of EVIEWS version 10 above hypothesis were tested and the following results were obtained.

Method	Df	Value	Probability		
df					
Anova F-test	(16, 153)	9.870818	0.0000		
(16, 153)					
Welch F-test*	(16, 54.044)	759.4166	0.0000		
(16, 54.044)					
*Test allows for unequal cell variances					

Table 4Test for Mean Variances (ANOVA)

The Probability value of the corresponding test is less than 5%. Therefore the null hypothesis will be rejected & can conclude that there is no significant difference among the mean value of the ratios of NIACL General Insurance Company rather ,accepted the alternate hypothesis that there is significant difference among the mean value of the ratios of NIACL general Insurance Company.

## NIC Normality Test by Jarque-Bera-

H<sub>04</sub>: the ratiosof theCompany are normally distributed

H<sub>14</sub>: theratiosof the Company are not normally distributed

NIC	Mean	Jarque-	Probability	Rank on the basis of Mean
NIC		Bera		
CR	121.5870	0.627036	0.730871	1
NICNEP	92.51600	0.870962	0.646953	2
NRR	81.55900	1.685249	0.430579	3
TRNPR	42.87400	1.906832	0.385422	4
EMNWPR	34.23900	0.667227	0.716331	5
GDPNWR	32.137000	1.421761	0.491212	6
EMGDPR	30.07000	0.603075	0.739680	7
GPGR	15.256000	1.638705	0.440717	8
LALR	9.021000	1.633093	0.441955	9
NCR	6.276000	0.036481	0.981925	10
GRNW	2.407000	0.145063	0.930037	11
ASMRSM	1.463000	0.011662	0.994186	12
NNPA	0.403000	1.314675	0.518229	13
NER	0.382000	2.217846	0.329914	14
OPR	0.150000	3.542976	0.170080	15
UBR	-4.408000	0.401195	0.818242	16
RONW	-111.4820	21.01582	0.000027	17

Table 5 Descriptive Statistics and test for Normal Distribution

Source: Public Disclosure Report 2009-10 to 2019-20

As per the above table the probability value of the each Ratios of NIC for the corresponding Jarque-Bera test is more than 5%. Hencethe null hypothesis is accepted and can infer that all the value of the ratios are normally distributed and further can go for ANOVA test. Along with the test, above table shows the different descriptive of the ratios. And as per the value of the mean of the different ratios, rank has been given. According to the rank, CR is the best ratio and RONW is the worst.

## Leven's test: For the test of homogeneity following hypothesis was formed-

H<sub>05</sub>: Variances are homogeneous of the ratios.

 $H_{15}$ = Variances are not homogeneous of the ratios.

#### **Table 6 Test for Homogeneity**

Method	Df	Value	Probability
Bartlett	16	639.5760	0.0000
Levene	(16, 153)	4.785679	0.0000
Brown-Forsythe	(16, 153)	1.318271	0.1925

The probability value of Leven's test is less than 5% so the null hypothesis is rejected and can assume that variances of the ratios are not homogeneous.

## Welch test is considered to check the mean value of the ratios of the company-

Following hypothesis were formed to analyze the differences of the mean value of the ratios.

 $H_{06}$ = There is no significant difference among the mean value of the ratios.

 $H_{16}$ = There is significant difference among the mean value of the ratios.

Method	Df	Value	Probability				
df							
Anova F-test	(16, 153)	3.341761	0.0000				
(16, 153)							
Welch F-test*	(16, 55.2845)	143.5945	0.0000				
(16, 55.2845)							
*Test allows for unequa	*Test allows for unequal cell variances						

Table 7 Test for Mean Variances (ANOVA)

The Probability value of the corresponding test is less than 5%. Therefore the null hypothesis is rejected & conclude that there is no significant difference among the mean value of the ratios of NIC general Insurance Company rather accepted the alternate hypothesis that there is significant difference among the mean value of the ratios of NIC general Insurance Company.

## OICL

## Normality Test by Jarque-Bera-

H<sub>07</sub>: the ratios of the Company are normally distributed.

H<sub>17</sub>: theratios of the Company are not normally distributed.

OICL Ratio's	Mean	Jarque-	Probability	Rank on the basis of Mean
		Bera		
CR	120.4360	0.309891	0.856462	1
NICNEP	88.98500	3.169746	0.204974	2
NRR	81.77100	0.713771	0.699853	3
TRNPR	48.51700	1.908280	0.385143	4
EMNWPR	34.21000	0.346705	0.840841	5
EMGDPR	31.55500	0.173894	0.916726	6
GDPNWR	19.25100	1.856927	0.395160	7
GRNW	17.16200	3.066272	0.215858	8
GPGR	12.91400	1.495623	0.473401	9

Table 8

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LALR	8.965000	1.908496	0.385102	10
NCR	5.893000	1.276055	0.528334	11
OPR	3.111000	3.411670	0.181621	12
NER	2.594000	2.633713	0.267976	13
ASMRSM	1.350000	10.87382	0.004353	14
NNPA	0.093000	22.73663	0.000012	15
RONW	-2.601000	12.24772	0.002190	16
UBR	-8.736000	1.946076	0.377933	17

Source: Public Disclosure Report 2009-10 to 2019-20

As per the above table the probability value of the each Ratios of National Insurance Company Ltd a General Insurance Company for the corresponding Jarque-Bera test is more than 5%. Hence the null hypothesis is accepted and can infer that all the value of the ratios are normally distributed and further can go for ANOVA test. Along with the test, the above table shows the different descriptive of the ratios. As per the value of the mean of the different ratios, rank has been given. According to the rank, CR is the best ratio of NIC and UBR is the worst.

## Leven's test: For the test of homogeneity following hypothesis was formed-

H<sub>08</sub>: Variances are homogeneous of the ratios

 $H_{18}$ = Variances are not homogeneous of the ratios

Method	Df	Value	Probability
Bartlett	16	393.8146	0.0000
Levene	(16, 153)	11.48072	0.0000
<b>Brown-Forsythe</b>	(16, 153)	2.697992	0.0009

#### Table 9

The probability value of Leven's test is less than 5% so rejected the null hypothesis and can assume that variances of the ratios are not homogeneous

#### Welch test is considered tocheck the mean value of the ratios of the company.

Following hypothesis were formed to analyze the differences of the mean value of the ratios.

 $H_{09}$ = There is no significant difference among the mean value of the ratios

H<sub>19</sub>= There is significant difference among the mean value of the ratios

To test the above hypothesis Welch test was applied on the above table with the help of EVIEWS version 10 and the following results were shown.

Method	Df	Value	Probability			
df						
Anova F-test	(16, 153)	19.16330	0.0000			
(16, 153)						
Welch F-test*	(16, 56.2317)	826.3589	0.0000			
(16, 56.2317)						
*Test allows for unequal cell	*Test allows for unequal cell variances					

Table 10 Test for Mean Variances (ANOVA)

The Probability value of the corresponding test is less than 5%. Therefore the null hypothesis is rejected & conclude there is no significant difference among the mean value of the ratios of OICL general Insurance Company rather alternate hypothesis is accepted & can conclude that there is significant difference among the mean value of the ratios of OICL general Insurance Company.

# UII

Before applying any parametric test it is inevitable to check whether the selected data for the test are normally distributed or not. To check the normality Jarque-Bera test were applied with the help of EVIEWS version 10 and following hypothesis were formed.

H0<sub>10</sub>: the ratios of the Company are normally distributed

H1<sub>10</sub>: theratios of the Company are not normally distributed

UII Ratio's	Mean	Jarque- Bera	Probability	Rank on the basis of Mean
GDPNWR	260.4560	2.379456	0.304304	1
TRNPR	151.9660	3.528580	0.171308	2
CR	116.5250	0.303578	0.859169	3
NICNEP	86.26200	1.359632	0.506710	4
NRR	80.87100	4.073919	0.130425	5
LALR	27.92300	1.867743	0.393029	6
EMNWPR	25.68100	0.601653	0.740206	7
EMGDPR	25.14200	0.633820	0.728396	8
GPGR	14.90600	0.286200	0.866667	9
NCR	5.141000	1.815594	0.403412	10
ASMRSM	2.553000	9.772594	0.007549	11
NER	2.396000	0.866468	0.648409	12
GRNW	0.217000	1.775543	0.411572	13
NNPA	0.151000	17.82493	0.000135	14
OPR	-4.846000	1.009629	0.603618	15
RONW	-5.621000	3.554169	0.169131	16
UBR	-24.31800	1.506440	0.470848	17

#### Table 11

Source: Public Disclosure Report 2009-10 to 2019-20

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As per the above table the probability value of the each Ratios of National Insurance Company Ltd a General Insurance Company for the corresponding Jarque-Bera test is more than 5%. Hence the null hypothesis is accepted and can infer that all the value of the ratios are normally distributed and further can go for ANOVA test. Along with the test, the above table shows the different descriptive of the ratios. As per the value of the mean of the different ratios, rank has been given. According to the rank, TRNPR is the best ratio of UII and UBR is the worst.

As a basic condition to apply ANOVA test there is a need to check the homogeneity of variances. Following hypothesis was formed and Leven's test was applied with the help of EVIEWS version 10.

H<sub>011</sub>: Variances are homogeneous of the ratios

 $H_{111}$ = Variances are not homogeneous of the ratios

Method	Df	Value	Probability
Bartlett	16	480.9990	0.0000
Levene	(16, 153)	18.71353	0.0000
<b>Brown-Forsythe</b>	(16, 153)	4.151429	0.0000

Table 12

The probability value of Leven's test is less than 5% sothe null hypothesis is accepted and can assume that variances of the ratios are not homogeneous and thus ANOVA test can't applied. To check the significance value, Welch test is considered tocheck the mean value of the ratios of the company.

Following hypothesis were formed to analyze the differences of the mean value of the ratios.

 $H_{012}$ = There is no significant difference among the mean value of the ratios

H<sub>112</sub>= There is significant difference among the mean value of the ratios

To test the above hypothesis Welch test was applied on the above table with the help of EVIEWS version 10 and the following results were shown.

Method	Df	Value	Probability
df			
Anova F-test	(16, 153)	43.03967	0.0000
(16, 153)			
Welch F-test*	(16, 55.3136)	411.8703	0.0000
(16, 55.3136)			
*Test allows for unequa	al cell variances	·	

Table 13 Test for Mean Variances (ANOVA)

The Probability value of the corresponding test is less than 5%. Therefore the null hypothesis is rejected & concludes that there is no significant difference among the mean value of the ratios of UII general Insurance Company rather accepted the alternate hypothesis that there is significant difference among the mean value of the ratios of UII general Insurance Company.

Analytical Ratios	Max Mean Value	Company	Min Mean Value	Company Name
	of Ratio	Name	of Ratio	
ASMRSM	47.07	NIACL	1.35	OICL
CR	121.587	NIC	111.955	NIACL
EMGDPR	31.555	OICL	25.142	UII
EMNWPR	34.239	NIC	25.681	UII
GDPNWR	260.456	UII	19.251	OICL
GPGR	15.315	NIACL	12.914	OICL
GRNW	17.162	OICL	0.217	UII
LALR	27.923	UII	8.965	OICL
NCR	9.031	NIACL	5.141	UII
NER	5.417	NIACL	0.382	NIC
NICNEP	92.516	NIC	86.262	UII
NNPA	0.403	NIC	0.068	NIACL
NRR	83.236	NIACL	80.871	UII
OPR	3.111	OICL	-4.846	UII
RONW	7.811	NIACL	-111.482	NIC
TRNPR	151.966	UII	42.874	NIC
UBR	-4.408	NIC	-24.318	UII

Consolidated Ratio-wise performance of Company on the basis of maximum & minimum value of the Ratio

Source: Public Disclosure Report 2009-10 to 2019-20

#### FINDINGS OF THE STUDY

#### Above mentioned table stated that

**Available solvency margin to required solvency margin (ASMRSM)** which states that the company should maintain some amount for solvency in the longer term. The higher the ratio the better the solvency would be. Out of four selected public sector non-life insurance company NIACL is having maximum & better ratio among all the companies followed by UII, NIC&OICL.

**Combined Ratio** (**CR**) which states that the company should have minimum losses and expenses with respect to premium earned. The lower the ratio the better the combined ratios would be. Out of four selected public sector non-life insurance company NIACL is having minimum ratio among all the companies followed by UII, OICL&NIC.

**Expense of Management to Gross Direct Premium Ratio** (**EMGDPR**)which states that the company should have minimum management expenses with respect to Gross Direct Premium. The lower the ratio the better the Expense of Management to Gross Direct Premium Ratio would be. Out of four selected public sector non-life insurance company UII is having maximum & better ratio among all the companies followed by NIACL, NIC&OICL.

**Expense of Management to Net Written Premium Ratio** (**EMNWPR**) which states that the company should have minimum management expenses with respect to Net Written Premium. The lower the ratio the better the Expense of Management to Net Written Premium would be. Out of four selected public sector non-life insurance company UII is having minimum ratio among all the companies followed by NIACL, OICL&NIC.

**Gross Direct Premium to Net worth Ratio (GDPNWR)** which states that the company should have earned maximum Gross Direct Premium with respect to shareholder fund. The higher the ratio the better the Gross Direct Premium to Net worth Ratio would be. Out of four selected public sector non-life insurance company UII is having maximum ratio among all the companies followed by NIACL, NIC&OICL.

**Gross Premium Growth Rate (GPGR)** which states that the company should have incremental growth rate in terms of premium collected year by year. Public sector Non-life insurance company is facing cut throat competition from private players thereby premium collection is getting lower. So this ratio, play a significant role during this competitive scenario. If the Growth rate of the Gross Premium is higher, then it is better for company to survive. Out of four selected public sector non-life insurance company NIACL, is achieving better growth rate in premium among all the companies followed by NICUII, &OICL.

**Growth rate of net worth (GRNW)** which means that the company should maintain the growth in shareholder's fund. Wealth maximisation is the prime objective from the view point of Shareholder's. So this ratio is an indicator of growth in shareholder investment. Growth rate in shareholder's fund should be maximum for attracting & retaining investor's .Out of four selected public sector non-life insurance company, OICL, is achieving better growth rate among all the companies followed by NIACL, NIC&UII.

Liquid assets to liabilities (LALR).Company liquid assets should cover the liabilities in whether in short run as well as in long run. This ratio indicates short term solvency to cover liabilities of the company. The higher the ratio the better the solvency ratio. Out of four selected public sector non-life insurance company, UII is achieving better liquid ratio among all the companies followed by

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**Net Commission Ratio** (NCR). Insurance company is work upon the principal of consideration. An insurance agent take commission from the premium they collect through insurance business. It is treated as operating expenses which reduce the profitability of the company. If the company is paying lower commission in terms of the premium collected then it is better. Out of four selected public sector non-life insurance company, UII is achieving minimum net commission ratio among all the companies followed by OICL, NIC&NIACL.

**Net Earnings Ratio** (**NER**). Net Earnings after taxation of the company should be higher with respect to Premium earned during the period. Out of four selected public sector non-life insurance company, OICL is achieving maximum Net Earnings Ratio (NER) among all the companies followed by, NIACL, NIC&UII.

**Net Incurred Claims to Net Earned Premium (NICNEP)**. Claim settlement ratio should be higher in insurance company to attract more customers but NICNEP states that company claims should be minimum out of the premium collected. Out of four selected public sector non-life insurance company, UII is achieving minimum Ratioamong all the companies followed by, NICOICL &NIACL Company

**Net Non-performing assets ratio** (**NNPA**). Non-performing assets ratio should be minimum to maintain the asset class of the company. Out of four selected public sector non-life insurance company, NIACL Company is achieving minimum Ratioamong all the companies followed byOICL, UII&NIC.

**Net Retention ratio** (NRR), which states that how much existing policy holders are renewing their policy from the same company. If NRR is lower, it means that policy holders are switching their policy from one company to another. If this ratio is lower, then existing policy holders are satisfied with the services of insurance company. Out of four selected public sector non-life insurance company, NIACL Company is achieving maximum Ratioamong all the companies followed byOICL, NIC&UII.

**Operating Profit ratio** (**NRR**). It should be maximum as far as Profitability Growth & Survivability is concerned .Out of four selected public sector non-life insurance company, OICLis achieving maximum Ratioamong all the companies followed by NIC, NIACL Company, &UII.

**Return on net worth (RNoW)** which means that the company should maximise the return on shareholder's fund. Wealth maximisation is the prime objective from the Shareholder'spointofview.Return on net worth (RNoW) should be maximum for attracting & retaining investor's .Out of four selected public sector non-life insurance company, only, NIACL Company is giving the positive return on net worth other companies are on negative side.

**Technical Reserves to Net Premium Ratio (TRNPR)** .Technical reserves are amounts of money set aside to pay for underwriting liabilities. Insurance companies must maintain sufficient assets as technical reserves to cover all underwriting liabilities. In this way, if TRNPR is higher, then it is better position to cover underwriting liabilities. Out of four selected public sector non-life insurance company, UII is achieving maximum ratioamong all the companies followed by, NIACL,OICL &NIC.

**Underwriting balance Ratio** (**UBR**). This ratio should be maximum as this suggest out of net premium earned, how much balance should be maintain for underwriting. Out of four selected public sector non-life insurance company, NIC. is achieving maximum ratio& UII is a least performer.

### CONCLUSION

The Indian general insurance market is relatively underdeveloped. Compared to the other countries it is still at a budding stage, which indicates the potential opportunities available for the players. Higher disposable incomes, rising aspiration of the people and growing awareness about need for insurance are some of the factors that would continue to drive the growth of the insurance sector in India in the coming decade.

Among all,NIACL was found to be ahead of its peers during the period under review. NIC is worst performer during the study period. As per the trend data of UII, this company can beat the performance of NIACL.

Apart from this, the results obtained from the present study were also indicative of the continued decline in market share of the public-sector general insurance firms, since the entry of the private players in the country's general insurance sector during the post-reform period.

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