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An Empirical study of Investment Pattern of Public Sector Non - Life Insurance Companies During Post Reform Period

DR. Madan Mohan Varshney
Assistant Professor-Commerce,Damyanti Raj Anand Govt.P.G. Collage Bisauli- Budaun (U.P.) India
E-mail : dr.madanmohan.varshney11@gmail.com

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Abstract: *Insurance Companies in India are among the largest institutional investors in the world. The investment operations of insurance companies are very crucial as they help to generate the reserves which are essential to settle insurance claims. Thus such operations need to be handled in a judicious manner, so that they generate the maximum yields, combined with liquidity and safety, It has been the constant endeavour of the non-life public sector insurance companies to provide security to fund provides as far as possible and to channelize the saving mobilized for the welfare of the people at large, Insurance companies in India are required to invest in four broad categories and IRDA has prescribed prudential limits for each category. The investment of non-life public sector insurance companies is governed by the Insurance Act 1938. Insurance Regulatory and Development Authority Act 1999 [IRDA], and guidelines and instructions issued by the government of India from time to time Every insurer shall invest and keep invested at all the times his total assets in the manner set by the IRDA. Therefore an attempt has been made in this paper to understand the investment pattern of non life insurance companies during post reform period, to study the investment pattern of non life insurance companies in the light of IRDA regulation and to make a comparative analysis of investment pattern of public sector non-life insurance companies.*

Key words: Investment pattern, IRDA Regulations, Liquidity and safety of fund, maximum return

Introduction – General insurance is a long duration contract which generates investible surplus which is invested keeping in view the safety and security of the funds, spread over different categories industry and regions so as to serve larger economy and social interests byoptimizing yield.One of the objectives of nationalization of general insurance industry was channelizing of its fund for the benefits of the community at large. It has been the constant endeavour of the non –life public sector insurance companies to provide securities to fund providers as for as possible and to channelize the saving mobilized for the welfare for the people at large A Major portion of fund is invested in schemes, which provide the people of the country amenities like drinking water, sewerage, electricity and shelter. As non-profit public sector insurance companies in various sectors, it is important to analyze the investment pattern in the light of IRDA regulations. Hence, present paper analyzes the investment pattern of public sector non – life insurance companies.

Review Of Literature –

Verma [2000], in her thesis, evaluated the performance of the GIC and its subsidiary companies over the years, throwing light on the profitable effects of the various insurance sector reforms on the future development of General Insurance in the country. The study found that the GIC along with its subsidiaries has emerged not only as a strong insurance institution but also as influential institutional investors in the financial market of India due to large amount of funds at its disposal. The study suggested that GIC should bring reform in pricing the General Insurance contracts and use information technology for better management, customer service, efficiency and competitiveness.

Rudolf [2001], in his paper examined the key factors and latest trends determining profitability in major non – life insurance markets. The study focused on the non- life insurance markets of the group of seven country countries [G7] mainly for the period 1996 to 2000. The study found that underwriting results and investment yields are negatively correlated. The research suggested that due to uncertain prospects for investment results, the insurers must focus on underwriting results to achieve greater profitability.

Lai and Limpaphayom [2003], in their study examined the relation between organizational structure and firm performance in the Japanese, non-life insurance industry. The results indicated that the stock companies that belong to one of the six horizontal keiretsu groups have lower expense and lower levels of free cash flow than independent stock and mutual insurance companies. Keiretsu insurers also have higher profitability and higher loss ratios than independent insurers. There was also evidence that mutual insurers have higher levels of free cash flows, higher investment incomes and lower financial leverage than their stock counterparts. Overall, empirical evidence suggested that each structure has its own comparative advantage.

Corresponding Author / Joint Authors

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Banerjee [2004], in his article, "Insurance Regulation in India and Future Directions, "concluded that the insurance industry will face greater competition from other financial service providers along all aspects of their value chain Insurers for instance, with their significant and growing asset base, shall have to develop asset management capabilities and expertise on par with professional fund managers, otherwise they will face pressure to farm out their funds for professional management.

Festus [2011], in his study, "Achieving Competitive Advantage in Insurance Industry; The Impact of Marketing Innovation and Creativity," concluded that creativity and innovation in providing new and innovative services is an important factor in order to satisfy the clients need and that creativity and innovation in pricing and promotion and innovation and creativity in distribution, technological innovation are crucial in attracting new clients.

Objecteves Of The Study-

- To understand the investment pattern of public sector non life insurance companies during post reform period.
- To analyze the investment pattern of public sector non-life insurance companies in the light of IRDA regulations.
- To make a comparative analysis of investment pattern of public sector non-life insurance companies

Table 1.1 Composition of Investment as per IRDA

[i]	Government Securities	Not less than 25% of Investment Assets
[ii]	Government Securities or Other Approved Securities (including (i)above)	Not less than 50% of Investment Assets (Including) (i)above)
[iii]	Approved Investments or specified in schedule I (A) Infrastructure and Social Sector explanation: For the purpose of this requirement, Infrastructure and Social Sector shall have the meaning as given in regulation 2(h) of Insurance Regulatory and Development Authority (Registration of Indian Insurance companies) Regulations 2000 and as defined in the Insurance Regulatory and Development Authority Regulations, 2000 respectively	Not less than 15%
	(B) Others to be governed by Exposure / prudential norms specified in regulations 5	Not exceeding 20%
[iv]	Other than in Approved Investments to be governed by Exposure / prudential norms specified in regulation 5	Not exceeding 15%

Source: Insurance Regulatory and Development Authority [Investment] Regulatory

Composition of investment as per IRDA – The investment of non –life public sector insurance companies is governed by the Insurance Act 1938, Insurance Regulatory and Development Authority Act 2000 [IRDA] and guidelines and instructions issued by the government of India from time to time. Every insurer shall invest and keep invested at all the times his total assets in the manner set by the IRDA. The composition of investment as per IRDA regulation has been shown in Table 1.1

1. Investment Pattern of Selected Public Sector Non-Life Insurance Companies

The analysis of investment pattern has been done in order to see whether the investment of public sector non-life insurance companies have been as per IRDA regulations or not. To analyze the investment pattern percentage of the amount of investment in each category has been calculated for the study period. The pattern of investment for all the selected public sector non-life insurance companies has been evaluated as below.

Table 1.2 Investment pattern of New India Assurance company Ltd.

Years	Government Securities	Infrastructure and Social Sector	Investment Subject to Exposure Norms	Housing Sector	Other than Approved Investment
2012-13	22.26	6.84	66.02	3.76	1.12
2013-14	21.11	6.69	66.73	4.74	0.73
2014-15	22.41	6.42	66.47	3.78	.92
2015-16	26.01	11.56	61.23	-	1.20
2016-17	26.72	9.66	59.93	-	5.68
2017-18	33.88	9.42	51.02	-	6.36
2018-19	35.96	8.44	49.24	-	4.26
2019-20	46.51	9.99	39.24	-	-
2020-21	44.13	11.41	39.76	-	4.70
2021-22	47.16	9.70	37.70	-	5.44

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Source: Annual Reports of respective insurance companies from 2012-13 to 2021-22

2.Investment pattern of New India Assurance company Ltd. (NIACL)

The Investment Pattern of New India Assurance Company Limited has been given in Table 1.2

It is evident from Table 1.2. that the percentage share of investment in government securities and other approved securities was 22.26 in 2012-13, which increased to its highest level 47.16 in 2021-22. In 2013-14 it decreased to 21.11 but rose to 22.41 in 2014-15 in the very next years. In 2015-16 it increased to 26.01 and continuously increased in 2016-1726.72,in 2017-18, 33.88. in 2018-19 35.96, in 2019-20,46-51in2020-21 -44.13. The Percentage share of Investment in government securities and other approved securities in NIACL was between 21.11 and 47.16 during the study period. The highest percentage share of Investment has-been observed 47.16 in 2021-22 and the lowest percentage share of Investment has been observed 21.11 in 2013-14

Further it has been observed that there was less than 22% investment in government securities and other approved securities throughout study period except the year 2013-14, Hence it can be concluded that the NIACL has satisfied the investment norm of not less than 21% in all the years of the study period.

The percentage share of investment in infrastructure and social sector was 6.84 in 2012-13 and lowest in 2014-15 which was 6.42, In 2015-16, which increased its highest level 11.56. In 2016-17 it decreased to 9.66.In 2017-18 decreased to continuous 9.42, in 2018-19 8.44. in 2019-20 it increased with 9.99 and highest rate in 2015-16 with 11.56.it also decreased in 2021-22 with 9.70. The percentage share of investment in infrastructure and social sector lies between 6.42 to 11.56 during the study period, looking at the figure of percentage share of investment in infrastructure and social sector, it can be concluded that the NIACL has not satisfied the investment norm of 10% in all the years of the study period except the year 2015-16 & 2020-21.

The Percentage share of investment in other than approved investment was 1.12 in 2012-13, in 2013-14 it decreased to .73, in 2014-15 .92, whether it increased to 1.20 in 2015-16& major increased to 2016-17 5.68, 6.36 in 2017-18 , after that it decreased with 2019-20 4.26 In 2020-21 it again increase with 4.70 & 5.44 in 2021-22.

The Percentage share of investment in other than approved investment lies between .73 and 6.36 during the study period. Hence it can be concluded that NIACL has satisfied the investment norm of not exceeding 25% throughout the study period.

Table 1.3 Investment Pattern of Oriental Insurance Company Ltd.

Years	Government Securities	Infrastructure and social Sector	Investment subject to Exposure Norms	Housing Sector	Other than Approved Investment
2012-13	23.24	12.30	62.61	-	1.85
2013-14	22.09	13.45	63.09	-	1.31
2014-15	21.59	13.55	63.53	-	1.33
2015-16	21.50	12.86	63.61	-	2.03
2016-17	22.37	12.30	61.61	-	3.72
2017-18	29.25	15.94	54.81	-	-
2018-19	37.26	15.24	47.50	-	-
2019-20	54.75	13.83	31.42	-	-
2020-21	50.06	15.24	34.70	-	-
2021-22	49.87	15.84	28.40	-	5.89

Source: Annual Reports of respective insurance companies from 2012-13 to 2021-22

Investment pattern of Oriental Insurance Company Ltd. (OICL)- The Investment Pattern of Oriental Insurance Company Ltd. has been enumerated in Table 1.3

Table 1.3 reveals that the percentage share of investment in government securities and other approved securities in OICL was 23.24 in 2012-13.In2013-14 its decreased to 22.09 but thereafter showed down ward trend for next four years and reached to 21.59.In2014-15.In 2015-16. 21.50.in 2016-17. 22.37 after that it increased to 29.25 in2017-18,37.26 . in 2018-19,54.75 in 2019-20 , 50.06 in 2020-21,and finally 49.87 in 2021-22.

The percentage share of investment in government securities and other approved securities was between 21.50 and 54.75 during the period of study. It was highest 54.75 in 2019-20 and touched its lowest level 21.50in 2015-16. Hence it can be concluded OICL has not satisfied the investment norms of not less

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than 30% in government securities for all the years of study periods except the years 2018-19, 2019-20, 2020-21 and 2021-22

The percentage share of investment in other than approved investment was 1.85 in 2012-13 which decreased 1.37 in 2013-14, 1.33 in 2014-15.In 2015-16 it increased to 2.03 in 2015-16, which rose to 3.72 in 2016-17. There after it registered down ward trend means nil for the next four years and reached to its highest level 5.89 in 2021-22 The percentage share of investment in other than approved investment was recorded between nil to 5.89 during the period of study. Hence it can be concluding that OICL has satisfied norm of not exceeding 25% in all the years of study period.

Table 1.4 : Investment Pattern of United India Insurance Company Ltd.

Years	Government Security	Infrastructure and Social Sector	Investment Subject to Exposure Norm	Housing Sector	Other than approved Investment
2012-13	26.00	22.85	47.96	-	3.19
2013-14	27.17	24.24	44.79	-	3.80
2014-15	25.31	22.68	48.07	-	3.94
2015-16	30.81	25.83	43.36	-	-
2016-17	30.82	26.80	42.38	-	-
2017-18	34.21	21.48	39.86	-	4.45
2018-19	39.14	18.21	36.07	-	6.58
2019-20	44.31	17.95	31.33		6.41
2020-21	47.46	15.87	30.87	-	5.80
2021-22	49.03	15.88	28.97	-	6.12

Source: Annual Reports of respective insurance companies from 2012-13 to 2021-22.

Investment pattern of United India Insurance Company Ltd.-The investment pattern of United India Insurance Company Limited has been shown in Table 1.4

It is clear from Table 1.4 that the percentage share of investment in government securities and other approved securities in UIICL was 26.00 in 2012-13 in 2013-14 which increased to 27.17.There after it showed downward and reached to 25.31 in 2014-15. In 2015-16 it increased to 30.81.There after it recorded upward trend for next six years. It increased to 30.82 in 2016-17 , 34.21 in 2017-18, 39.14 in 2018-19. It further increased to 44.31 in 2019-20, 47.46 in 2020-21, and it was highest in 49.03 in 2021-22.The percentage share of investment in government securities and other approved securities was between 26.00 and 49.03 during the study period. It was highest 49.03 2021-22 and touched its lowest level 26.00 in 2012-13. Hence it can be concluded that the UIICL has satisfied the investment norm of not less than 30% only during first three year of the study period.

UIICL has not made any investment in housing sector throughout the study period. Hence it can be concluded that UIICL was not satisfied the investment norms of not less that 5% in housing sector in all the years of the study period.

Percentage share of investment in other than approved investment was 3.19 in 2012-13, which increased to 3.80 in 2013-14, 3.94 in 2014-15 . There after it recorded nil trend for next two years. In 2017-18 it increased 4.45, 6.58 in 2018-19, 6.41 in 2019-20.5.80 in 2020-21, and 6.12 in 2021-22. Percentage share of Investment in other than approved investment was less than 25% in all the years of the study period. Hence it can be concluded that the UIICL has satisfied the investment norm of not exceeding 25% in all the years of study period.

Table 1.5 Investment Pattern of National Insurance Company Ltd.

Years	Government sector	Infrastructure and social sector	Investment subject to exposure norms	Housing sector	Other than approved Investment
2012-13	20.75	9.71	69.48	-	.06
2013-14	26.10	9.10	64.77	-	.03
2014-15	28.13	8.21	63.36	-	.03
2015-16	29.12	7.96	62.90	-	.02
2016-17	33.90	8.13	57.51		.46
2017-18	32.15	6.68	60.49	-	.68
2018-19	34.23	7.37	58.40	-	-
2019-20	33.55	7.23	59.11		.11
2020-21	38.98	10.00	51.02	-	-
2021-22	41.82	8.19	49.99	-	-

Source: Annual Reports of respective insurance companies from 2012-13 to 2021-22.

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Investment pattern of National Insurance Company Ltd. (NICL)

The investment pattern of National Insurance Company Limited has been depicted in Table 1.5

It is evident from Table 1.5 that the percentage share of investment in government securities and other approved securities was 20.75 in 2012-13, which increased to 26.10 in 2013-14. In 2014-15 it increased to 28.13,in 2015-16 29.12, in 2016-17 33.90 but there after decreased to 32.15 in 2017-18. In 2018-19 it increased again 34.33,2019-2033.55,and in 2020-21 38-98. There after it showed increased trend and finally to 41.82 in 2021-22. As per IRDA guideline investment in government securities and other approved securities should not less than 30%. But in NICL it was between 20.75% and 41.82% during the study period. 2021-22 touched It was highest, 41.82% in 2021-22 and it touched its lowest level 20.75% in 2012-13. Hence it can be concluded that the NICL has not satisfied the investment norm of not less 30% in all the years of the study period.

NICL has not made any investment in the housing sector during the period of study. Hence it can be concluded that the NICL has not satisfied investment norm of not less than 5% in housing sector for all the years of the study period.

In 2012-13, the percentage share of investment in other than approved investment was .06 which dropped to next three years. In 2013-14 it was .03 in 2014-15 it was also same as .03 . In 2015-16 it was slightly decreased with .02. In 2016-17 it was increased with .46 & .68 in 2017-18 and reached to its highest level. During 2018-19 it was nil & 2019-20 it was registered with .11. In the Year 2020-21 & 2021-22 it was zero reached to its lowest level. As per IRDA guidelines the percentage share of investment in other than approved investment should not be exceeding 25%.Hence it can be concluded that the NICL has satisfied the investment norms of not exceeding 25%in all the years of the study period.

Table 1.6 Investments in Government Securities and Other Approved Securities Public Sector Non-Life Insurance Companies. (Percentage)

Years	NIACL	OICL	UIICL	NICL
2012-13	22.26	23.24	26.00	20.75
2013-14	21.11	22.09	27.17	26.10
2014-15	22.41	21.59	25.13	28.13
2015-16	26.01	21.50	30.81	29.12
2016-17	26.72	22.37	30.82	33.90
2017-18	33.88	29.25	34.21	32.15
2018-19	35.96	37.26	39.14	34.23
2019-20	46.51	54.75	44.31	33.55
2020-21	44.13	50.06	47.46	38.98
2021-22	47.16	49.87	49.03	41.82
Mean	32.61	33.20	35.41	31.87

Source: Annual Reports of respective insurance companies from 2012-13 to 2021-22.

1.2. Comparative Analysis of Investment Pattern of Public sector Non-Life Insurance Companies

Here, an attempt has been made to present comparative analysis of all the four selected public sector Non-Life Insurance Companies on different aspects of investment patterns in the light of IRDA regulations.

1.2.1 Investment In Government Securities And Other Approved Securities As per IRDA guidelines, general insurance companies are required to satisfy the investment norm of not less than 30% investment in government securities and other approved securities The percentage share of investment in government securities and other approved securities has been calculated and shown in Table 1.6. It is evident from Table 1.6 that average investment in government securities and other approved securities was highest in UIICL followed by OICL, NIACL and NICL respectively. Further, it can be concluded that the average investment in government securities and other approved securities is less than the IRDA guidelines of not less than 30% in all the companies under study. **Table 1.7 ANOVA- Percentage Share of Investment in Government Securities and other Approved Securities.**

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	'F' Ratio	Table Value
Between Company	97.03	3	32.34	1.27	2.96
Between Years	3048.83	9	338.76	13.32	2.25
Residual	686.9	27	25.44	-	-
Total	3832.76	39	-	-	-

ANALYSIS OF VARIANCE (ANOVA)- The statement of null hypothesis and alternative hypothesis are given as under:

H_0=the percentage share of investment in government securities and other approved securities did not differ significantly between the companies and between the years.

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H_1= the percentage share of investment in government securities and other approved securities significantly between the companies and between the years.

It is evident from the Table 1.7 that there was significant difference in the percentage share investment in government securities and other approved securities between the companies as the calculated value of 'F' (1.27) was significantly lesser than the table value 2.96 for $\bar{\imath}_1$=03 and $\bar{\imath}_2$=27 at 5 % level significance . As 1.27<2.96, the null hypothesis cannot be rejected.

Similarly there was significant difference in the percentage share of investment in government securities and other approved securities between the years as the calculated value of 'F' (13.32) is significantly higher than the table value (2.25) for $\bar{\imath}_1$ =03 and $\bar{\imath}_2$=27 at 5 % level of significance. Hence null hypothesis has been rejected and alternative hypothesis has been accepted.

Table 1.8: Investment in Infrastructure and Social Sector Public Sector Non-Life Insurance Companies (Percentage)

Years	NIACL	OICL	UIICL	NICL
2012-13	6.84	12.30	22.85	9.71
2013-14	6.69	13.45	24.24	9.11
2014-15	6.42	13.55	22.68	8.21
2015-16	11.56	12.86	25.83	7.96
2016-17	9.66	12.30	26.80	8.13
2017-18	9.42	15.94	21.48	6.68
2018-19	8.44	15.24	18.21	7.37
2019-20	9.99	13.83	17.95	7.23
2020-21	11.41	15.24	15.87	10.00
2021-22	9.70	15.84	15.88	8.19
Mean	**9.01**	**14.05**	**21.18**	**8.26**

Source: Annual Reports of respective insurance companies from 2012-13 to 2021-22.

1.2.2 Investment in Infrastructure and Social Sector.

As per IRDA guidelines general insurance companies are required to invest in infrastructure and social sector not less than 10 % of their total investment. The percentage share of investment in infrastructure and social sector has been calculated and shown in Table 1.8.

It is evident from the Table 1.8 that the average percentage share of investment in infrastructure and social sector was highest in UIICL followed by OICL, NIACL and NICL respectively. UIICL was the only company where the average percentage shares of investment in infrastructure and social sector was greater than the investment norm of not less than 10%.

Table 1.9: ANOVA = Percentage Share of Investment in Infrastructure and Social Sector

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	'F' Ratio	Table Value
Between Companies	1113.27	3	371.09	56.14	2.96
Between Years	27.83	9	3.09	.47	2.25
Residual	178.51	27	6.61	-	-
Total	**1319.61**	**39**	-	-	-

ANALYSIS OF VARIANCE (ANOVA) -

The statement of null hypothesis and alternative hypothesis are given as under –

H_0= the percentage shape of investment in infrastructure and social sector did not differ significantly between the companies and between the years.

H_1=the percentage shape of investment in infrastructure and social sector differ significantly between companies and between the years.

It is evident from the Table 1.9 that there was significant difference in the percentage share investment in infrastructure and social sector between the companies as the calculated value of 'F' (56.47) was significantly more higher than the table value(2.96) for $\bar{\imath}_1$ =03 and $\bar{\imath}_2$=27 at 5% level of significance. Hence null hypothesis has been accepted.

Similarly there was significant difference in the percentage share of investment in infrastructure and social sector between the years as the calculated value of 'F' (.47) was lesser than the table value (2.25) for $\bar{\imath}_1$ =03 and $\bar{\imath}_2$=27 at 5% level of significance. Hence null hypothesis cannot be rejected.

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Table 1.10: Investment Subject to Prudential/ Exposure Norms Public Sector Non-Life Insurance Company (Percentage)

Years	NIACL	OICL	UIICL	NICL
2012-13	66.02	62.61	47.96	69.48
2013-14	66.73	63.09	44.79	64.77
2014-15	66.47	63.53	48.07	63.63
2015-16	61.23	63.61	43.36	62.90
2016-17	59.93	61.61	42.38	57.51
2017-18	51.02	54.81	39.86	60.49
2018-19	49.24	47.50	36.07	58.4
2019-20	39.24	31.42	31.33	59.11
2020-21	39.76	34.70	30.87	51.02
2021-22	37.70	28.40	28.97	49.99
Mean	**53.73**	**51.13**	**39.37**	**59.73**

1.2.3 Investment Subject to Prudential/Exposure Norms.

As per IRDA guidelines investment subject to prudential/ exposure norms should not be exceeding 55% in general insurance companies. Percentage share of investment subject to prudential/exposure norm has been calculated and shown in the Table 1.10.

It is clear from Table 1.10 that the average percentage share of investment subject to prudential/exposure norm was highest in NICL followed by NIACL, OICL and UIICL respectively. All the companies have higher average percentage share of investment subject to prudential/ exposure norm than the IRDA norm of not exceeding 55% except UIICL where it was 39.37 during the period of study.

Table 1.11: ANOVA= Percentage Share of Investment Subject to Prudential / Exposure Norm

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	'F' Ration	Table Value
Between Companies	2190.17	3	730.06	30.87	2.96
Between Years	3308.57	9	367.62	15.54	2.25
Residual	638.56	27	23.65	-	-
Total	**6137.30**	**39**	-	-	-

ANALYSIS OF VARIANCE (ANOVA)- The statement of null hypothesis and alternative hypothesis are given as under:

H_O= the percentage share of investment subject to prudential/exposure norm did not differ significantly between the companies and between the years.

H_1= the percentage share of investment subject to prudential/exposure norm differ significantly between the companies and between the years.

It is evident from the table 1.11 that there was significant difference in the percentage share of investment subject to prudential/exposure norm between the companies as the calculated value 'F'(30.87) was significantly higher than the table value (2.96) for $\check{\imath}_1$ =03 and $\check{\imath}_2$=27 5% level of significance. Hence null hypothesis has been rejected and alternative hypothesis has been accepted.

Table 1.12: ANOVA- Other Than Approved Investment

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	'F' Ration	Table Value
Between Companies	68.41	3	22.82	5.28	2.96
Between Years	47.97	9	5.33	1.23	2.25
Residual	117.97	27	4.37	-	-
Total	**234.41**	**39**	-	-	-

ANALYSIS OF VARIANCE (ANOVA) -The statement of null hypothesis and alternative hypothesis and alternative hypothesis are given as under:

H_0 = the percentage share of investment in other than approved investment did not significantly between the companies and between the years.

H_1= the percentage, share of investment in other than approved investment differ significantly between the companies and between the years. It is evident from the Table 1.13 that there was significant difference in the percentage share of investment in other than approved investment between the companies as the calculated value of 'F' (5.28) was significantly higher than the table value (2.96) for $\check{\imath}_1$ =03 and $\check{\imath}_2$=27

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at 5% level of significance. Hence, null hypothesis has been rejected and alternative hypothesis has been accepted.

Similarly there was significant difference in the percentage share of investment between the years as the calculated value of 'F' (1.23) was lesser than the table value (2.25) for $\check{\imath}_1$ =03 and $\check{\imath}_2$=27 at 5%level of significance Hence, null hypothesis cannot be rejected.

CONCLUSION - In this chapter an attempt has been made to see whether the investment of public sector non-life insurance companies have been as per IRDA regulations on not. To analyze the investment pattern, percentage of the amount of investment on each category has been calculated for the study period. On the basis of above analysis it has been concluded that average percentage share of investment in government securities and other approved securities was highest in UIICL followed by OICL, NIACL and NICL respectively. Further it can be concluded that, the average investment in government securities and other approved securities was less than the IRDA guidelines of not less than 30% in all the four companies during the study period. Average percentage share of investment in infrastructure and social sector was highest in UIICL followed by OICL, NIACL and NICL respectively. UIICL was the only company where the average percentage share of investment in infrastructure and social sector was greater than the investment norm of not less than 10% Average percentage share of investment subject to prudential exposure norm was highest in NICL followed by NIACL; OICL and UIICL respectively. All the companies have satisfied the investments norm of not exceeding 25% in all the years of the study period. Further it can be concluded that NIACL is the only company which has made investment in housing sector but it has also not satisfied the investment norm of IRDA of not less than 5% investment in housing sector during all the years of the study period. So we can conclude that none of the public sector company has strict compliance with the IRDA regulation regarding the investment pattern during the study period

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