IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

An Evaluation Of Financial Performance Of Select Private Health Insurance Companies In India

Shweta jaiswal[1] and Dr.Tejbahadur kannaujiya[2]

[1]Research scholar, CMP degree college, University of Allahabad

[2]Assistant Professor, CMP degree college, University of Allahabad

ABSTRACT

This paper assesses the financial performance and soundness of health insurance companies in India on the basis of CARAMEL parameters during the period of 2010 -11 to 2020-21. The CARAMELS model serves as a framework that takes into account many aspects to assess the soundness of companies distributed across several industries. The main purpose to this study to understand the level of financial soundness of dominant health insurance players operating in India and provides detail summary of financial performance of each company for 2010-11 to 2020-21 under the different dimensions: Capital adequacy, Assets quality, Reinsurance and Actuarial issues, management soundness, Earnings and profitability and liquidity. For this purpose Niva Bupa health insurance companies ltd, care health insurance companies Ltd, Star health &Allied insurance company ltd and HDFC ERGO general insurance companies ltd Convenience sample is chosen for the present study. Various statistical tools mean, standard deviation and ANOVA have been utilized to analyze the data statistically. The ANOVA results shows that there is significant difference in earning and profitability ratio and liquidity ratio and no significant difference for other ratios.

Keywords: financial performance, CARAMEL parameter, insurance companies

INTRODUCTION

In an insurance contract, one party agrees to take on the other's risk in exchange the payment of a premium and to bind the other party liable in the event of an unexpected incident. The main advantage of insurance is that it spreads out the risk among a lot of people. who are exposed to similar types of risk. The Indian financial planners have recognized insurance as a rising industry. The Insurance Regulatory and Development Authority (IRDA), which was established by the IRDA Act of 1999, has had a considerable impact on the industry's landscape. In order to foster competition, boost insurance penetration, and broaden consumer choice, IRDA allowed private insurers access to the Indian insurance market in 2000. Since that time, foreign insurers have entered the Indian insurance market through partnerships with domestic private firms. In India, there is a lot of opportunity for the insurance industry for expansion, market penetration, and customer service. Protection is the main focus of insurance. An insured person must have both life and non-life protection.

A developing sector of the Indian economy is health insurance. Due to the ongoing epidemic, the insurance industry has experienced extraordinary growth and there has been a demand for insurance.

According to the *Health Insurance Association of America*, health insurance is defined as "coverage that provides for the payments of benefits as a result of sickness or injury. It includes insurance for losses from accident, medical expense, disability, or accidental death and dismemberment".

Health insurance is a type of general insurance that makes up about 29% of all general insurance premiums. The insurance firms will benefit from this study's understanding of both their own performance and the size of the losses this industry has sustained over time A plan that shares or pays for the costs of medical care is referred to as health insurance. These initiatives fall under the category of commercial health insurance, which is provided by independent, public, and private health insurance companies. In India, health insurance often only covers impatient hospitalization and medical care received in domestic hospitals. Under Indian health policies, outpatient services are not covered The first health insurance scheme in India was the Mediclaim Policy. In 2000, the Indian government liberalised the insurance industry by allowing private companies. In India, the advent of private insurers has led to the introduction of several innovative products, including as family floater plans, critical illness plans, hospital cash and top-up policies.

After becoming privatized, insurance businesses expanded quickly, which has resulted in a variety of issues with the quality of the system as a whole as well as issues with brand reputation, operational effectiveness, and profitability. Their performance in profitability determines whether they will remain in business.

In order to evaluate the health insurance industry's financial performance we are using CARAMELS criteria. The IMF Has Come up with paper (2003) and had recommended CARAMEL Model for Financial Soundness Indicators (FSI‟s) for the financial institutions including both Life and Non-Life Insurance Industry. The study has provided a framework called CARAMELS [Capital adequacy, Asset quality, Reinsurance and Actuarial

concerns, Management soundness, Earnings/Profitability, Liquidity and Sensitivity to Market Risk], which employs a number of different ratios with the use of those quantitative aspects that affect the financial position of the insurance company. The use of various ratio studies to depict the state of insurance businesses is thoroughly analysed through this model.

EVOLUTION OF HEALTH INSURANCE

The Indian healthcare system is distinguished by a variety of medical systems, mixed ownership arrangements, and various delivery structure types. Public sector ownership is not valid between federal, state, municipal, and panchayat local governments. 50 percent of patients seek indoor care, and 60 to 70 percent of those who need care (or outpatient care) go to private health institutions, both for profit and non-profit.

LITERATURE REVIEW

kasturi (2006) concentrated on performance management in the insurance industry. Any insurance company's financial performance is often quantified in terms of return on investment, profit made, return on equity, etc.

Naveed et al. (2011), investigated the performance of Pakistani listed life insurance businesses from the period 2001 to 2007. As per the Ordinary Least Square (OLS) regression analysis Leverage, along with size and risk, is an important factor in influencing the performance of Pakistani insurance enterprises. Several studies have been done in this study to look at how leverage affects corporate profitability.

Abate and Gashaw (2012) had said that the percentage change in insurance companies' total assets, or occasionally the percentage change in their premiums, is how firm growth is evaluated. Since insurance businesses do have internal capacity, though it depends on their capability to take advantage of external opportunities, having more assets over time increases their chances of being profitable. He had also looked at how firm-specific variables in Ethiopia, including age, size, capitalization, leverage, liquidity, growth, and tangibility of assets, affected profitability as measured by ROA.

Charumathi (2012) showed that among all Asian nations, the Indian life insurance market is the least rewarding for investors, despite having a detailed net profit of Rs. 26.57 billion in 2010–11 compared to a net loss of Rs. 9.89 billion in 2009–10.

Showket and Ishfaq (2015) had examined the financial success of Indian non-life insurance firms, including public and private. The statistical testing of the CARAMEL parameters has been done using a variety of statistical methods, including mean, standard deviation, and F-test. The shows that the overall underwriting performance demonstrates that private insurers are specifically responsible for draining every rupee of earned premium in the form of claims and costs, which testifies to their incorrect risk selection and mismanaged expenditure policies. Both public and commercial insurers were successful in significantly reducing management costs.

Shah (2017) examined that the insurance market in India following liberalisation. The relationship between premiums collected, claims paid, and demographic characteristics was shown to be highly correlated and had an impact on the respondents' policy-holding status.

Rashid & kemal.(2018). Three indicators of insurers' profitability—total profit (ROA), underwriting profit (UP), and investment income—are taken into consideration and investigate how internal and external factors affect their profitability. Pakistani life insurance companies from 2006 to 2016 are analysed using regression on panel data. The study's conclusions revealed that the profitability of insurance firms is significantly influenced by gross written premium, interest rate, expense on management, size.

Ilyas and Rajasekar (2019) examined the efficiency of the general insurance business in terms of efficiency, The DEA results indicate that there is significant room for improvement in the general insurance business, which is currently only moderately technical, scale, cost, and allocative efficient. Additionally, the findings show that public insurers are more cost-effective than private insurance.

Deyganto and Alemu(2019). Investigated that the goal of the study was to analyze the variables that affect insurance company financial performance. The findings revealed that, of the eight explanatory variables included in the model, five variables—underwriting, premium growth, solvency ratio, GDP growth rate, and inflation rate—have a substantial impact on the financial performance of the insurance businesses operating in Hawassa municipal Administration. In contrast, the insurance business's financial performance is not significantly impacted by factors such as firm size, interest rates, or reinsurance dependence.

Bassi and Kaur (2022). Had examined the profitability of Indian general insurers, several ratio-based methodologies have been used. 15 general insurance companies' data from the years 2011–12 to 2016–17 are included in the data set used for the current analysis. The results demonstrate that public sector insurers have performed admirably in terms of revenue efficiency, but cost reduction needs to be a main priority.

IMPORTANCE OF STUDY

It can be seen, the insurance industry has developed a market that is steadily growing year after year. The insurance industry may successfully grow the market to a significant extent by raising sufficient awareness in specific locations. The country's economy already benefits from the insurance industry. By assuming the risks of both individuals and companies, it helps to maintain stability in the nation.

OBJECTIVES

- To review the concept of health insurance sector in India.
- To Evaluate the financial performance of select private health insurance companies in India.

HYPOTHESIS

H0: There is no significant difference between the financial performance of select private health insurance companies in India.

H1: There is significant difference between the financial performance of select private health insurance companies in India.

RESEARCH METHODOLOGY:

The study is based on secondary data which have been collected from, annual report of health insurance companies. The present study covers the period of 11 years from 2010-11to 2020-21. Four companies have been selected on the basis of convenience sampling. An attempt has been made to evaluate the financial performance of health insurance sector in India using caramel parameter. The information have been collected classified tabulated as per the objectives of the study. Various Statistical tools mean, standard deviation and Anova have been used to analyze the data.

Evaluation of financial performance using CARAMEL parameter

It is proposed to evaluate the financial performance of select health insurance companies during the period of study 2010-11 to 2020-21. The performance evaluation is categorized under the following parameters.

- Capital adequacy
- Assets quality
- Reinsurance and actuarial issues
- Management soundness
- Earning and profitability
- Liquidity ratio

Table 2.1

Capital adequacy analysis of insurance companies

Net premium/ capital

YEAR	NBHIC	CHICL	STAR	HDFC ERGO	mean	SD
2010-11	151.52	245.17	81.24	0.28	119.55	104.07
2011-12	125.16	281.24	272.71	13.35	173.11	128.36
2012-13	153	237.51	284	25.32	174.95	113.54
2013-14	186.69	233.21	1187.22	39.67	161.69	84.22
2014-15	194.5	182.36	183	65.26	156.28	60.93
2015-16	134.33	233.87	324	81.48	193.2	93.15
2016-17	151.52	245.17	81.24	0.28	119.55	104.076
2017-18	125.16	281.24	120.55	13.35	135.07	110.28
2018-19	131.1	237.51	300.21	25.32	173.53	120.93
2019-20	125.45	257.72	278.86	39.67	180.76	119.93
2020-21	144.26	257.72	145.34	65.26	153.14	79.16
mean	147.51	244.79	207.24	33.56		
SD	23.96	25.67	88.00	26.19		

Source: compiled from annual report of select health insurance companies

Table 2.1 represent the capital adequacy ratio of select health insurance companies during the period of 2010-11 to 2020-21.on the basis of net premium to capital ratio it shows that CHICL ranked first with 244.79 percent, the STAR is placed second with 207.24 percent, the NBHIC Ranked three with 147.51 percent and the HDFC ERGO placed in the last with 33.56.

Table 2.2

Capital adequacy ratio analysis of insurance companies

Capital / total assest

YEAR	NBHIC	CHICL	STAR	HDFC ERGO	mean	SD
2010-11	17.65	20.67	67.79	116.61	55.68	46.658
2011-12	28.57	20.5	40.82	111.48	50.3425	41.605
2012-13	24.39	20.62	27.11	144.32	54.11	60.198
2013-14	18.93	18.34	34.66	98.24	42.5425	37.893
2014-15	16.78	17.3	60.23	91.53	46.46	36.295
2015-16	15.21	18.51	68.44	81.07	45.8075	33.847
2016-17	125.16	281.24	272.71	13.35	173.115	128.36
2017-18	131.1	237.51	357.33	25.32	187.815	142.39
2018-19	186.69	184.46	284.33	39.67	173.78	100.809
2019-20	151.52	245.17	39.67	0.28	119.55	119.55
2020-2021	125.16	281.24	272.71	13.35	173.115	128.36
mean	76.46909	122.3236	142.488	66.838		
SD	66.783	115.36	125.31	49.88		

SOURCE: compiled from Annual report of select health insurance companies

It represent the capital adequacy ratio of select health insurance companies during the period of 2010-11 to 2020-21.on the basis of capital to total assets ratio it shows that how efficiently the capital of the company is utilized and invested to create asset. Based on the mean scores STAR ranked first with 142.488 percent, the CHICL is placed second with 122.32 percent, the NBHIC Ranked three with 76.46 percent and the HDFC ERGO placed in the last with 66.83.

Table 3

Assets quality analysis of insurance companies

Equities / total assest

YEAR	NBHIC	CHICL	STAR	HDFC ERGO	mean	SD
2010-11	8.88	2.86	26.08	116.71	38.63	52.97
2011-12	6.,84	3.36	40.36	73.84	31.1	33.01
2012-13	5.88	2.86	26.08	67.55	25.59	29.81
2013-14	5	2.42	26.05	54.5	21.99	24.11
2014-15	3.72	1.99	40.75	50.56	24.25	25.04
2015-16	3.57	1.63	40.75	46.17	23.03	23.70
2016-17	54.12	87.27	34.77	92.43	67.14	27.45
2017-18	50.76	80.18	91.03	60.33	70.57	18.33
2018-19	47.23	72.27	79	73.38	67.97	14.13
2019-20	44.63	64.86	81.69	68.53	64.92	15.34
2020-21	52.21	88.01	40.82	50.77	57.95	20.66
mean	25.71	37.06	47.94	68.61		
SD	22.14	40.18	24.04	20.85		

Source: compiled from annual report of select health insurance companies

It can be observed from the table 3 HDFC ERGO is ranked first with 68.61 percent, the STAR is ranked with 47.94, the RHICL is ranked three with 37.06 percent and the last NHICL is placed with 25.71 percent. The declining trend signifies that the insurer gave decreased their investment in loans and advances over a certain period of time.

Table 3.1

Assest quality analysis of insurance companies

Real debtor /total assests

YEAR	NBHIC	CHICL	STAR	HDFC ERGO	mean	SD
2010-11	95.44	92.23	89.67	86.03	90.84	3.983
2011-12	95.46	92.16	86.55	86.48	90.16	4.42
2012-13	95.43	92.03	84.33	89.2	90.24	4.69
2013-14	96.45	93.16	87.62	95.68	93.22	3.99
2014-15	92.86	92.5	84.18	97.24	91.69	5.45
2015-16	93.46	91.62	82.39	95.42	90.72	5.76
2016-17	91.03	109.41	18.93	67.89	71.81	39.13
2017-18	55.89	56.77	16.78	66.88	49.08	22.10
2018-19	77.89	66.87	15.21	18.51	44.62	32.39
2019-20	61.69	78.53	88.99	281.24	127.61	103.03
2020-21	70.86	42.43	131.1	237.51	120.47	86.338
mean	84.22	82.51	71.43	111.09		
SD	15.04	19.56	37.47	77.27		

Source: compiled from annual report of select health insurance companies

Table 3.1 present the asset quality of second ratio that is real assets to debtor assets. On the basis of mean score HDFC ERGO secured first rank with 111.09 percent, followed by NBHIC, RHICL and STAR with 84.22, 82.51,71.43. It is observed that ratio gradually declined of those companies that effectively followed the strategies in reducing the assets portfolio in debtors and investment.

Table 4

Reinsurance and actuarial liabilities analysis of insurance companies

Net premium / gross premium

YEAR	NBHIC	CHICL	STAR	HDFC ERGO	mean	SD
2010-11	55.89	59.47	52.46	38.77	51.64	9.04
2011-12	58.01	72.21	59.12	44.95	58.57	11.13
2012-13	66.55	75.9	63.48	61.02	66.73	6.51
2013-14	67.17	74.9	67.73	52.62	65.60	9.344
2014-15	68.91	75.3	74.51	63.25	70.49	5.60
2015-16	65.36	73.08	59.43	71.31	67.29	6.19
2016-17	71.69	88.53	55.77	66.89	70.72	13.61
2017-18	76.86	92.43	34.66	104.16	77.02	30.37
2018-19	91.03	109.41	60.23	56.99	79.41	25.20
2019-20	78.99	73.38	68.44	81.07	75.47	5.70
2020-21	81.69	68.53	77.99	13.35	60.39	31.84
mean	71.10	78.46	61.25	59.48		
SD	10.40	13.55	11.73	23.44		

Source: compiled from annual report of select health insurance companies

Table 4 highlight the performance of reinsurance and actuarial liabilities covering the period of 2010-11 to 2020-21. On the basis of mean score has CHICL has the highest mean of 78.46 and henced ranked first followed by NBHIC, STAR and APOLLO with 71.10, 61.25 and 59.48. Although the ratio declined gradually there is the positive indication of increased financial strength of the company over the years.

Table 5

Management efficiency analysis of insurance companies

YEAR	NBHIC	CHICL	STAR	HDFC ERGO	mean	SD
2010-11	18.67	21.81	20.67	79.7	35.21	29.68
2011-12	19.95	22.86	23.67	83.78	37.56	30.85
2012-13	16.85	22.1	15.67	85.73	35.08	33.87
2013-14	15.99	22.51	16.77	47.14	25.60	14.64
2014-15	16.95	20.45	18.69	36.64	23.18	9.08
2015-16	16.6	45.98	37.04	30.51	32.53	12.37
2016-17	98.83	98.11	76.56	58.95	83.11	19.13
2017-18	99.12	98.75	78.34	58.94	83.78	19.20
2018-19	99.21	99.08	54.88	48.99	75.54	27.36
2019-20	99.27	99.01	54.88	48.99	74.54	27.65
2020-21	99.33	99.05	43.91	55.87	75.19	28.87
mean	54.61	59.06	39.78	57.93		
SD	42.65	38.67	23.25	18.35		

Source compiled from annual report of select health insurance companies

For the purpose of evaluation of the ratio of financial performance of management efficiency the ratio of operational expenses is taken .It shows that on the basis of mean of RHICL is ranked first with 59.06 followed by HDFC ERGO ,NBHIC and STAR with 57.93,54.61 and 39.78.

Table 6

Earning and profitability analysis of select health insurance companies

Loss ratio

YEAR	NBHIC	CHICL	STAR	HDFC ERGO	mean	SD
2010-11	78.38	66.81	76.21	89.29	77.67	9.23
2011-12	85.35	71.91	85.35	71.91	78.63	7.75
2012-13	88.85	73.59	87.11	85.39	83.73	6.90
2013-14	95.61	79.14	91.19	61.95	81.97	15.05
2014-15	101.46	77.1	95.76	58.2	83.13	19.60
2015-16	84.32	72.43	63.18	59.25	69.79	11.14
2016-17	98.83	98.11	55.5	66.92	79.84	22.01
2017-18	99.12	98.75	48.99	51.04	74.46	28.25
2018-19	99.21	99.08	51.04	51.25	75.14	27.71
2019-20	99.27	99.01	59.98	51.95	77.55	25.14
2020-21	99.05	86.03	87.85	93.07	91.5	5.85
mean	93.58	83.81	72.92	67.29		
SD						

Source: compiled from annual report of select health insurance companies

For the purpose of calculating the earning and profitability performance of insurance companies loss ratio has been calculated. The lower the ratio, the better the financial position of the company. As it is evident from the table 6 ranking of the companies performance based on the mean scores reflects that NBHIC is ranked first with 93.58 percent followed by CHICl, STAR and HDFC ERGO with 83.81, 72.92and 67.29.

Table 6.1

Expense ratio analysis of select insurance companies

YEAR	NBHIC	CHICL	STAR	HDFC ERGO	mean	SD
2010-11	35.81	36.67	39.41	314.29	106.54	138.50
2011-12	34.38	31.66	20.8	334.47	105.32	152.87
2012-13	25.32	29.11	15.25	140.51	52.54	58.93
2013-14	23.8	30.06	10.92	89.59	38.59	34.91
2014-15	24.6	27.16	25.08	57.93	33.69	16.19
2015-16	25.39	26.29	62.33	23.27	39.2	17.37
2016-17	23.27	1.68	19.47	3.71	12.03	10.92
2017-18	25.34	2.43	19.25	4.61	12.90	11.15
2018-19	19.82	0.95	18.7	2.48	10.48	10.15
2019-20	20.79	1.14	17.9	1.85	10.42	10.37
2020-21	51.25	0.29	158.04	18.37	56.98	70.59
mean	91.79	97.74	73.77	128.50		
SD	21.06	27.04	33.86	53.98		

Source compiled from annual report of select health insurance companies

It present the second ratio of earning and profitability for evaluating the performance of companies that is expense ratio, ratio of expenses to`net premium. It is observed that the expense ratio is gradually declining during the study period which is the increasing factor results in increasing the financial strength of the company. On the basis of mean score HDFC ERGO is placed first with 128.50 percent followed by CHICL ,NBHIC and STAR with 97.74 , 91.79 and 73.77.

TABLE 6.2

Combined ratio analysis of select health insurance companies

YEAR	NBHIC	CHICL	STAR	HDFC ERGO	mean	SD
2010-11	78.99	103.48	89.77	235.8	127.01	73.21
2011-12	123.77	103.57	102.7	164.78	114.63	11.13
2012-13	114.17	102.7	102.36	164.77	121	29.69
2013-14	87.98	164.78	95.77	87.89	128.60	42.53
2014-15	98.66	104.26	87.89	116.14	101.73	11.76
2015-16	109.71	98.72	125.5	102.04	108.99	11.92
2016-17	88.98	51.04	23.7	189.3	88.25	72.48
2017-18	43.91	84.88	35.91	89.77	63.61	27.64
2018-19	89.67	86.03	47.21	72.27	73.79	19.24
2019-20	89.56	86.48	44.63	64.86	64.86	71.38
2020-21	84.33	89.2	52.21	88.01	78.43	17.60
mean	91.79	97.74	73.77	128.50		
SD	21.06	27.04	33.86	53.98		

Source: compiled from annual report of select health insurance companies

It shows the third analysis of earning and profitability ratio that is combined ratio. It is the sum total of loss ratio and the expense ratio used by the insurance companies how efficiently it carry day to day activities. Based on the mean score HDFC ERGO has the highest mean with 128.50 percent followed by RHICL, NBHIC and STAR WITH 97.74, 91.79 and 73.77.

Table 7

Liquidity ratio analysis of select health insurance companies in India

YEAR	NBHIC	CHICL	STAR	HDFC ERGO	mean	SD
2010-11	46.24	27.34	45.78	156.89	69.06	59.20
2011-12	56.55	33.25	125.78	167.78	95.84	62
2012-13	556.34	34.35	66.87	72.22	57.44	16.75
2013-14	49.77	26.01	88.89	75.12	59.94	27.82
2014-15	45.09	28.68	87.56	89.67	62.75	30.62
2015-16	39.42	28.39	56.98	79.78	51.14	22.42
2016-17	7.39	47.14	47.14	69.56	42.80	25.86
2017-18	18.69	36.64	36.64	106.5	49.61	38.85
2018-19	37.04	30.51	30.51	84.18	45.56	25.93
2019-20	96.56	58.95	67.89	81.69	76.27	16.44
2020-21	78.34	55.5	15.99	22.51	43.08	29.18
Mean	48.31182	36.978	60.91182	91.44545		
SD	24.77269	11.60884	31.22569	40.6091		

Source; compiled from annual report of select health insurance companies

This table depicts the information of liquidity ratio of all the companies during the study period. On the basis of mean score HDFC ERGO has the highest mean with 91.445 percent and hence ranked 1 followed by STAR ,NBHIC and CHICL with 60.91182, 48.31182 and 36.978.

Application of Anova test

Table 8

Caramel parameter	Source Of variation	Sum of square	df	Mean square	f	P value	F critical value
Capital adequacy	Between group	281064.8	3	93688.27	35.44526	2.4	2.838745
Net premium /capital	Within group	105727.3	40	2643.182			
	Total	386792.1	43				
Capital/total assest	*Between Groups*	*43345.72*	*3*	*14448.57*	*1.549748*	*0.216591*	*2.838745*
	Within Groups	*372927.1*	*40*	*9323.179*			
	Total	*416272.9*	*43*				
Assest quality	Between Groups	281064.8	3	93688.27	35.44526	2.4E-11	2.838745
	Within Groups	105727.3	40	2643.182			
	Total	386792.1	43				
	Between Groups	9355.197	3	3118.399	1.562176	0.213541	2.838745
	Within Groups	79847.55	40	1996.189			
	Total	89202.74	43				
Reinsurance issues	Between Groups	2600.469	3	866.8231	3.541128	0.022956	2.838745
	Within Groups	9791.492	40	244.7873			
	Total	12391.96	43				

Management soundness	Between Groups	2620.575	3	873.525	0.83329	0.483532	2.838745
	Within Groups	41931.37	40	1048.284			
	Total	44551.94	43				
Earning and profitablity	Between Groups	4501.974	3	1500.658	7.749405	0.000339	2.838745
Loss ratio	Within Groups	7745.927	40	193.6482			
	Total	12247.9	43				
Expense ratio	Between group	36491.52	3	12163.84	2.820674	0.051024	2.838745
	Within Groups	172495.5	40	4312.387			
	Total	208987	43				
Combined ratio	Between Groups	17115.37	3	5705.123	4.358621	0.009524	2.838745
	Within Groups	52357.13	40	1308.928			
	Total	69472.5	43				
liquidity	Between Groups	18203.7	3	6067.8	7.196716	0.000565	2.838745
	Within Groups	33725.94	40	843.1485			
	Total						

Source compiled from table

Table 8 highlights the summarized result of Anova test in tabular form. This table shows the overall performance of companies at a glance.

- It can be clearly seen that in capital adequacy ratio that the null hypothesis is accepted since the capital to assets ratio and net premium to capital ratio both have p values greater than 0.05 and there is not a significant distinction between them. select health insurance companies in India though it reflects both the general financial health of a business and the management's capacity to meet future capital needs.
- It is evident that asset he null hypothesis is accepted because the quality p value is larger than 0.05 and there is no statistically significant difference between several Indian health insurance providers.. It is clear that the private sector insurance companies' asset quality has been consistent and safe in the sense that, considering the inherent risk of equities, their share of the total assets has been insignificant.
- In reinsurance and actuarial issue p value is less than then critical value hence null hypothesis is not accepted and alternate is accepted. It is inferred from the table there is significant difference between select health insurance companies in India. A higher retention ratio shows the company's inner strength, and vice versa; a lower retention ratio suggests that the risks are being quantitatively transferred well.
- In management soundness the p value is greater than the critical value, which is 0.05, as can be seen from the table, hence the null hypothesis is accepted and it is evident that all businesses have made major efforts to keep operational expenses under control.
- In earning and profitability p value is less than the critical value hence the null hypothesis is rejected. it is inferred from the table there is significant difference in loss ratio of select
- Insurance companies. In expense ratio p value is less than critical value hence the null hypothesis is rejected. Due to the company's improved underwriting standards and procedures, the low loss ratio is also a consequence of this.
- It is evident from the table that in liquidity ratio p value is less than critical value hence the alternate hypothesis is accepted. It can be seen from the that certain Indian health insurance companies' liquidity ratios varied significantly from one another. A combined ratio of 100 reveals that the company is incurring larger costs for claims and other expenses than it is making from premiums. Hence, the combined ratio shows how the company spends each rupee it receives as a premium.

CONCLUSION FINDINGS AND SUGGESTION

The purpose of the present study is to evaluate the financial performance of Indian health insurance companies through analyzing the caramel parameter. Measuring the performance of insurance businesses has become more important because they not only serve a method of reducing expenses and transfer risk, but also promote the economy's investment activities by helping to direct money in the right way from surplus economic units to deficit economic units. For measuring the financial performance six Indicators have been used. Anova analysis of the result shows that there is significant relationship in earning profitability and liquidity ratio. on the other hand there is no significant relationship in capital adequacy, assets quality, mgt soundness and reinsurance and actuarial issues. Hence, the private Health insurance companies may implement new strategies among the health insurance policyholders that lead to increase their growth in the upcoming years. The study will significantly add to the amount of knowledge on literature and assist insurance companies in understanding how they are performing and taking the appropriate corrective action.

For better performances in the upcoming years, the companies needs to raise its premium payment and keep costs under control. For the efficient functioning of the management, the companies should raise its net earned premium. If the company keeps a much amount of working capital, it has a greater chance of obtaining loans. It is concluded that the comprehensive research unit for defining performance indicators yields limited results when compared to the general industries' accepted standards for financial instruments. The researchers then examine the financial and operational efficiency of health insurance companies in India using a range of other models, including Data Envelopment Analysis (DEA), Economic Value Added, Market Value Added, and Balanced Scorecard.

REFERENCES

Ayele, A. G. (2012). Factors affecting profitability of insurance companies in Ethiopia: Panel evidence. *Addis Ababa University, Ethiopia*.

Ahmed, N., Ahmed, Z., & Usman, A. (2011). Determinants of performance: A case of life insurance sector of Pakistan. *International Research Journal of Finance and Economics*, *61*(1), 123-128.

Bassi, P., & Kaur, J. (2022). Comparative Predictive Performance of BPNN and SVM for Indian Insurance Companies. In *Big Data Analytics in the Insurance Market* (pp. 21-30). Emerald Publishing Limited.

Charumathi, B. (2012, July). On the determinants of profitability of Indian life insurers–an empirical study. In *Proceedings of the world congress on Engineering* (Vol. 1, No. 2, pp. 4-6). London.

Dar, S. A., & Thaku, I. A. (2015). A comparative analysis of financial performance of public and private Non-life insurers in India. *International Journal of Management (IJM)*, *6*(1), 507-526.

Dutta, M.M. (2020), "Health insurance sector in India: an analysis of its performance", *Vilakshan - XIMB Journal of Management*, Vol. 17 No. 1/2, pp. 97-109. https://doi.org/10.1108/XJM-07-2020-0021

Deyganto, K. O., & Alemu, A. A. (2019). Factors affecting financial performance of insurance companies operating in Hawassa city administration, Ethiopia. *Universal Journal of Accounting and Finance*, *7*(1), 1-10.

Hand book on India Insurance Statistics revisited (2021), "*Insurance regulatory and development authority website*", available at: www.irda.gov.in

Ilyas, A. M., & Rajasekaran, S. (2019). An empirical investigation of efficiency and productivity in the Indian non-life insurance market. *Benchmarking: An International Journal*.

IMF &World bank (2005).financial sector assessment: A Handbook published by World Bank & IMF, Washington DC.

Kasturi, R. (2006) "Performance Management In Insurance Corporation" Spring Vol. 5, No. 1.

Malik, H. (2011). Determinants of insurance companies profitability: an analysis of insurance sector of Pakistan. *Academic research international*, *1*(3), 315.

Naveed, M., Bilal, A. R., Rehman, A. U., Talib, N. B. A., & Anuar, M. A. (2008). Evidence of capital structure discipline in financial markets: A study of leasing and insurance companies of Pakistan. *Research Journal of Management Sciences ISSN*, *2319*, 1171.

RASHID, A., & KEMAL, M. U. (2018). Impact of internal (micro) and external (macro) factors on profitability of insurance companies. *Journal of Economic Policy Researches*, *5*(1), 35-57.

Shah, A.Y.C. (2017), "*Analysis of health insurance sector post liberalisation in India*", UGC Thesis, Shodgganga.inflibnet.ac.in.

Tomar, P., Sainy, M., & Gupta, R. (2019). Profitability analysis of Insurance companies: A case of Private Non-life Insurers. *UNNAYAN: International Bulletin of Management and Economics*, *10*, 318-330.

uvvari, A., & Goyari, P. (2019). Financial performance assessment using Grey relational analysis (GRA): An application to life insurance companies in India. *Grey Systems: Theory and Application*.

http://www.nivabupa.com

www.starhealth.in

http://www.hdfcergo.com

http://www.careinsurance.com

https://irdai.gov.in

https://irdai.gov.in/handbook-of-indian-insurance