ISSN No:-2456-2165

A Study on Medical Insurance Claim Ratio in Kenya

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Abstract:- This article identifies and examines the claim ratio trend of insurance companies transacting medical insurance in Kenya. The article then compares the claim ratio of the companies with that of popular insurance companies in the country such as of Jubilee insurance company, Britam general insurance company, ICEA LION insurance company, CIC insurance company, and Madison insurance company. The study is based on secondary data collected from Insurance Regulatory Authority (IRA) website. The reference period for the study was of 6 years which ranged from 2013 to 2018. The study is based on 37 insurance companies and 4 reinsurance companies offering medical cover in the country as per 2018. For calculating the claim ratio, the main variables taken into consideration were Net Premium and claims paid. Stata was the statistical software utilized for the analysis. From the study, insurance companies recorded an average claim ratio of 75.33 during the six-year period, which indicates a profit margin of about 24.77%. The study revealed that Jubilee (71.483%), Britam (67.7%), and ICEA LION (73.65%) reported a lower percentage of claim ratios than the average claim ratio (75.33%) of all the insurers in the country while CIC Insurance (84.4%) and Madison Insurance (93.783%) experienced a higher average claim ratio.

Keywords:- *Non-Life Insurance, Net Premium, Claim Paid, Medical Cover, Policyholder.*

I. INTRODUCTION

According to Korir (2020), a medical insurance policy provides financial protection to the insured person in the event of unforeseen and sudden accident/illness leading to hospitalisation. The author further states that, it is the effective way people can finance their medical care needs.Young & Bacon (1957) provides that "the increase in life expectancy exposes a person to health problems and diseases with increase in age". For an average person in their retirement years, they do not have income to meet their health care costs. At present, health care costs have increased in the last 3 years. This leads to a double blow to the person who suffers from critical illness or other diseases which require hospitalization and result in huge medical bills. This underlines the importance of medical insurance.

Health insurance policies are available in three major variants;

- *Individual Policy*

This type of policy caters to the medical needs of only one individual. For instance, Ram has taken a medical insurance policy for a sum assured of KES 100,000 by paying a premium of KES 3,000. Under this policy, he will be covered against expenses for any illness that are specified in the insurance contract which requires him to be hospitalized up to a limit of KES 100,000 in a particular year.

- *Family Floater Policy*

This type of policy caters to the medical needs of the family. In this cover, insurance companies allow medical insurance coverage for two adults and two children in the family. The sum assured can be shared by family members in no fixed proportion.

- *Group Health Insurance Policy*

This policy caters to the medical needs of a group of persons brought together for a common objective or purpose. As per the General insurance company (GIC, India), the group should have a common purpose. All members of the group are to be covered. No selection will be allowed.

A customer contributes premium every year to the insurance company to cover his medical expense and expects the company to settle the claims as and when it happens to his satisfaction. Thus, every customer is concerned with the claim ratio of an insurance company as it lays down the basis for selecting a company to take a cover.

Claims Ratio is nothing but the total value of all claims paid by the health insurance company **divided** by the total amount of premium they collected in the same period (Gao, et al., 2017).

Claim Ratio=Net claims incurred/Net earned premium.

Claims Ratio indicates the company's ability to pay the claims. As an example, 80% claims ratio means that for every KES 1,000 of premium earned in a given accounting period, KES 800 is paid back in the form of benefits (Korir, 2020).

Based on the journal written by PolicyBazaar (2020), “a higher Claim Ratio is good news for the existing policyholder because it indicates that the company is successfully meeting claims made on it”. Therefore, policyholders can put a higher amount of trust on insurers having a high Claim Ratio. However, this is not the case from the perspective of the insurance company. Higher claim ratio indicates lower profits. For instance, a claim ratio of 85% ratio implies that 85% of the premiums collected by the insurer are spent to settle claims. The balance 15% is the profit margin. If this ratio increases in the next year to 90% for instance, the insurer’s profit will fall from 15% to 10%, which clearly is a bad news to the company. A ratio higher than 100% indicates that the company is incurring losses because the premium collection is insufficient to pay the claims and so the insurer is probably utilizing its reserves to settle claims which is bad news (Sudhir Chandra, 2013).

Korir (2020) stated that a claim ratio between 50% and 100% indicates that the insurance company is settling claims moderately from the total premium it receives. In most cases such an insurance company has a bright future since it is financially stable and there is possibility that it will not reject claims in future. However, the ideal insurance for customers should have a claim ratio between 60% and 90%. Companies having claim ratio below 50% shows that the company is either charging high rates of premium or it possess low risk customers than other companies. This situation is good for the company but bad for the customers as a lot of claims are rejected, and there is likelihood that it will not change in future. Such companies should be avoided when choosing an insurance to take medical cover (korir, 2020).

➢ *Objectives of the study*

The following objectives have been kept in mind while conducting this research:

a) To analyze the trend of claim ratio of the Insurance Companies in Kenya transacting medical businesses.
b) To compare the trend of claim ratio of the Insurance Companies in Kenya with that of Jubilee insurance company, Britam general insurance company, ICEA LION insurance company, CIC insurance company, and Madison insurance company.
c) To identify companies with the highest and lowest claim ratios on average than the total average claim ratio over the period

II. MATERIALS AND METHODS

The study has taken 37 non-life insurers and 4 reinsurers in the country based on the availability of data. The study is based on secondary data. All data are taken from Insurance Regulatory Authority (IRA) website. The annual reports are recorded and the method of claim ratio is used for analysis. The data on Net Premium Income and Claim paid of each selected company offering medical cover is analyzed on the base of past 6 years i.e. 2013 to 2018. The average claim ratio is then compared with the individual claim ratio of Jubilee insurance company, Britam general insurance company, ICEA LION insurance company, CIC insurance company, and Madison insurance company. For the purpose of trend analysis, the underlying factors have been shown on line charts.

III. LITERATURE REVIEW

Korir (2020) conducted a study on health insurance in Kenya. The study is based on the secondary data from IRA website, journals, and articles. The study presented the concept, benefits, plans, and growth of the health insurance in the country since 2010. The study found out that that the premium, claims, and the expenses incurred by the insurance companies in the country have been increasing constantly from 2010 to 2018. Also, that the insurance covered both inpatient and outpatient services based on the cover. The study concluded that individuals and family should contribute a small amount as premium to the insurance company to achieve a peace of mind.

Kazungu and Barasa (2017) examined the levels associated with the health insurance coverage In Kenya. The study was based on the secondary data from the year 2009 to 2014 collected from the Kenya Demographic and Health Survey. To carry out the study, the households were ranked on an index from 1 (poor) to 5 (richest). To analyze level and distribution of the insurance coverage, concentration curve and index were applied. The authors employed logistic regression to deduce the relationship of the coverage. The study found out that the coverage of the insurance increase during the studying period from 8.7 percent to 19.59 percent. Authors concluded that the health insurance coverage is still low and not equally distributed in the country.

Otieno et al. (2018) conducted a study in Viwandani slums, Nairobi to determine the prevalence of the health insurance in the region. A cross-sectional survey was done involving a sample of 300 households randomly selected in the slums. The respondents were individuals aged over 18 years in the household. The primary outcome was to find out whether the respondents have health insurance cover or not. The findings of the study reported that only 43% of the households have health insurance. The authors concluded that the prevalence of the health insurance in the country is still low.

Korir (2020) conducted a comparative study on claim ratio of Jubilee insurance with other insurance companies in Kenya. The main objectives of the study were to confirm whether there is any direct relationship between Net Premium and Claim of the selected non-life insurance companies in Kenya, whether the claim ratio of the selected companies shows the similar tendency, and to pinpoint the company with the highest and lowest claim ratio average from 2013-2018. The study found out that the premium collected is directly related to the claims paid. The findings of the study also showed that the claim ratio of Jubilee insurance, Britam general insurance, and ICEA LION, showed an increasing trend over the study period while that of Madison and CIC Insurance portrays a decreasing trend.

ISSN No:-2456-2165

The study revealed that Britam Insurance Company has the lowest average claim ratio while Madison Company has the highest average claim ratio during the 6 year's study period.

Salunkhe and Ahirrao (2013) conducted a study on LIC and other insurers in India to determine and compare their claim settlement ratios. The study was based on the secondary data collected from IRDA. A survey was also carried out to get responses from policyholders regarding their perception on the claim settlement by the insurance companies. The study concluded that LIC was better in the provision of services for claim settlement and that the use of D-mat was helpful in the process of settling claims effectively.

Das and Agrawal (2013) examined the claim ratio of general insurance companies in India. The study utilized secondary data from the IRDA website. To identify the relationship that might exist between the premium received and the claims paid by the insurers, trend analysis was applied. An independent t-test was also used to find out if the claim ratios of private and public insurers differ. The study found out that there is a close relationship between premium received and the claims paid. As the premium received increases, the claims incurred increases as well. The study also revealed that the claim ratios between the private and public insurers show no significant differences.

Saakshi and Sudakshina (2019) made a study on claim ratio and the number of policies available in the insurance companies from 2013 to 2018. The study utilized secondary data from the IRDA website. The study found out that private insurers reported a claim ratio from 50% to 75% during the study period. According to the authors, the private insurers made high profit margin which they utilized in the research and development of new products. The study revealed that public insurers maintained a high claim ratio from 95% to 130% throughout the study period. It concluded that the number of new products in the public insurers have been reducing every year.

IV. RESULTS

No.	Company	Net Premium	Net Claims Paid	Claim Ratio
1	AAR INSURANCE KENYA	4,230,045	3,284,905	77.7
2	AFRICAN MERCHANT ASSURANCE	(28,516)	-	0.0
3	AIG INSURANCE COMPANY	-	-	0.0
4	ALLIANZ INSURANCE COMPANY	3,193	98	3.1
5	APA INSURANCE COMPANY	2,210,782	1,703,250	77.0
6	BRITAM GENERAL INSURANCE	2,222,738	1,612,434	72.5
7	CIC GENERAL INSURANCE COMPANY	2,743,735	2,073,813	75.6
8	CORPORATE INSURANCE COMPANY	-	-	0.0
9	DIRECTLINE ASSURANCE COMPANY	-	-	0.0
10	FIDELITY SHIELD INSURANCE	-	-	0.0
11	FIRST ASSURANCE COMPANY	562,806	451,125	80.2
12	GA INSURANCE COMPANY	360,062	234,690	65.2
13	GEMINIA INSURANCE COMPANY	-	-	0.0
14	HERITAGE INSURANCE COMPANY	482,447	327,957	68.0
15	ICEA LION GENERAL INSURANCE	187,380	200,842	107.2
16	INTRA-AFRICA ASSURANCE	-	-	0.0
17	INVESCO ASSURANCE COMPANY	-	-	0.0

ISSN No:-2456-2165

18	JUBILEE INSURANCE COMPANY	4,635,016	3,119,817	67.3
19	KENINDIA ASSURANCE COMPANY	134,369	126,390	94.1
20	KENYA ORIENT INSURANCE	-	-	0.0
21	MADISON GENERAL INSURANCE COMPANY	2,044,176		84.1
22	MAYFAIR INSURANCE COMPANY	-	-	0.0
23	METROPOLITAN CANNON GENERAL	-	-	0.0
24	MUA INSURANCE COMPANY	-	-	0.0
25	OCCIDENTAL INSURANCE COMPANY	-	-	0.0
26	PACIS INSURANCE COMPANY	174,298	100,078	57.4
27	PIONEER GENERAL INSURANCE COMPANY	-	-	0.0
28	RESOLUTION INSURANCE COMPANY	1,683,386	1,342,146	79.7
29	SAHAM INSURANCE COMPANY	196,543	159,380	81.1
30	SANLAM INSURANE COMPANY	360,819	295,913	82.0
31	TAKAFUL INSURANCE OF AFRICA	10,346	46,926	453.6
32	TAUSI ASSURANCE COMPANY	8,379	3,164	37.8
33	THE KENYAN ALLIANCE INSURANCE	13,118	959	7.3
34	THE MONARCH INSURANCE	-	-	0.0
35	TRIDENT INSURANCE COMPANY	159,828	103,128	64.5
36	UAP INSURANCE COMPANY	4,738,702	3,612,574	76.2
37	XPLICO INSURANCE COMPANY	-	(2,845)	0.0
	TOTAL	**27,133,652**	**20,515,402**	**75.6**
1	CONTINENTAL REINSURANCE	**REINSURERS**	**REINSURERS**	76.3
2	EAST AFRICAN REINSURANCE	408,208	311,597	86.4
3	GHANA REINSURANCE COMPANY	509,364	440,191	82.3
4	KENYA REINSURANCE CORPORATION	55,421	45,623	89.8
	TOTAL	3,039,185 **4,012,178**	2,728,435 **3,525,846**	**87.9**

Table 1:- Shows Medical Insurance Claims Ratio 2018/Latest IRA Data
Source: https://www.ira.go.ke/

The overall Claims Ratio of general insurer for medical insurance is 75.6% in 2018. This clearly means that the medical insurance company has given lesser amount as claims than what it has collected. It means that they are making profits margin of 24.4% on average. The overall Claims Ratio of reinsurance companies is 87.9% in 2018, which means they are making a profit margin of 12.1%. Most insurance companies have a reasonable claim ratio i.e. close to total average CR *(average CR of all insurance companies is 75.6%)*. Policyholders may prefer buying medical insurance policies from these companies. *ICEA LION GENERAL INSURANCE* (107.2%) and T*AKAFUL INSURANCE OF AFRICA* (453.6%) have a higher Claim Ratio which indicates that the company is successfully meeting claims made on it. Therefore, policyholders can put a higher amount of trust on these two insurers. However, this is not good for the companies.

YEAR	AVERAGE CLAIM RATIO
2013	74.5
2014	77.5
2015	75.6
2016	76.2
2017	72.6
2018	75.6
MEAN	75.33

Table 2:- shows the Total average claim ratio of all non-life insurance companies

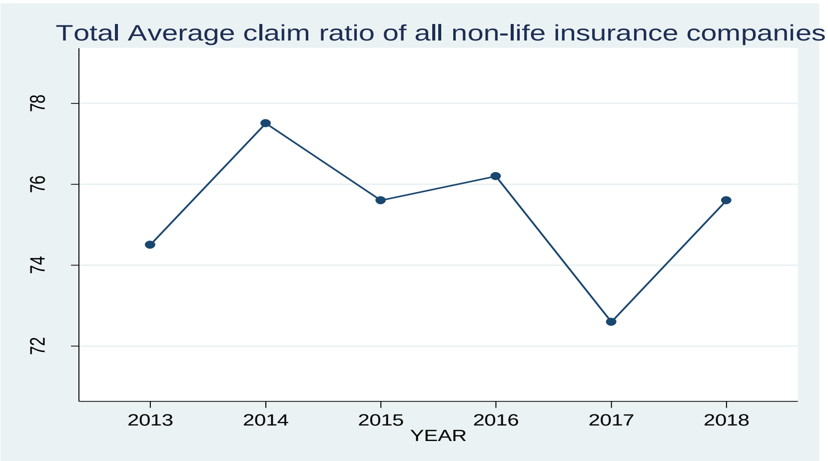

Fig 1:- shows the graphical representation of Total average claim ratio from 2013-2018.

The graph shows that all the non-life insurance companies reported on average a claim ratio of 75.33% for the 6 years. During the period, a lowest (72.6%) and highest claim ratio (77.5%) was witnessed in the years 2017 and 2014 respectively. This shows that most general insurance companies offering medical cover are making profits on average. The figure confirms that the claim ratio is stable and consistent over the study period.

YEAR	Jubilee Insurance	Britam Insurance	ICEA LION insurance	CIC Insurance	Madison Insurance	Total Average Claim Ratio
2013	71.9	59.1	50.3	89.5	124.3	74.5
2014	66.7	66.3	66.5	98.0	100.9	77.5
2015	70.7	67.7	77.2	97.7	90.9	75.6
2016	75.5	72.6	62.0	83.3	92.6	76.2
2017	66.4	69.6	60.4	64.7	71.3	72.6
2018	77.7	70.9	125.5	73.2	82.7	75.6
Average	71.48	67.7	73.65	84.4	93.78	75.33

Table 3:- shows the comparison of claim ratio of five non-life insurance companies with total average claim ratio

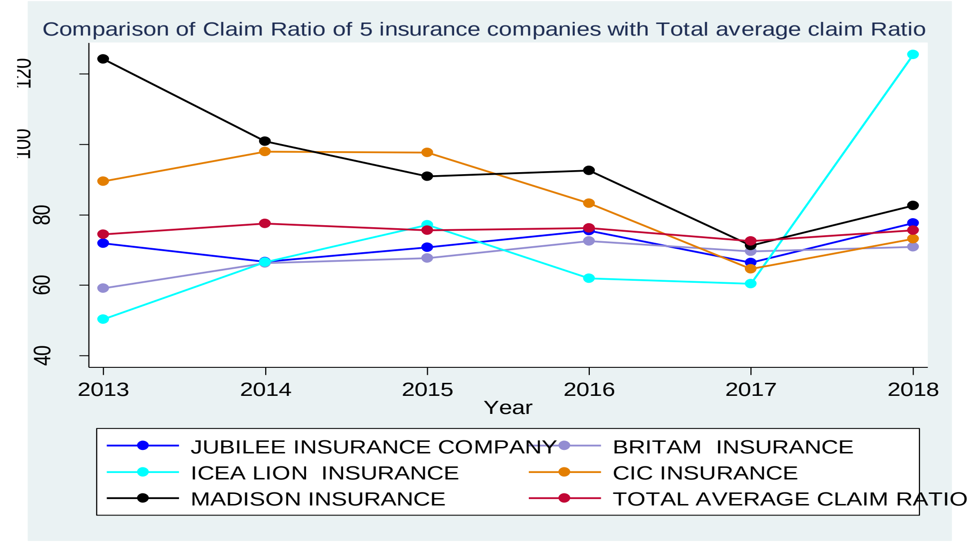

Fig 2:- shows the graphical comparison of claim ratio of five non-life insurance companies with Total average claim ratio from 2013-2018.

The graph shows that, in 2013, Madison and CIC Insurance had a higher claim ratio than the total average claim ratio of insurance companies in general business, while Jubilee, ICEA LION, and Britam Insurance companies had a lower claim ratio. However, in 2018, ICEA LION, Madison, and Jubilee Insurance reported a higher claim ratio than total average claim ratio. CIC and Britam reported lower claim ratios. On average during the period, Jubilee (71.48%), Britam (67.7%), and ICEA LION (73.65%) reported a lower percentage of claim ratio than the total average ratio of the insurance companies (75.33%). CIC Insurance (84.4%) and Madison Insurance (93.783%) experienced a higher average claim ratio than the total average claim ratio. The claim ratio of Jubilee insurance, ICEA LION, and Britam shows an increasing trend over the period while that of Madison and CIC Insurance portrays a decreasing trend over the period (see figure 2).

V. DISCUSSION

Claim ratio simply relates the claim paid to the net premium received in a given financial year. This ratio is an important financial indicator in the insurance sector. Every year, Insurance Regulatory Authority (IRA) updates the annual report and reports the claim ratio. In 2018, a claim ratio of 75.6 was reported for insurance companies transacting medical care. This means that the companies are at the profit as not all the premium received from the policyholders is paid back in form of claims. Among the insurance companies, *ICEA LION GENERAL INSURANCE* (107.2%) and T*AKAFUL INSURANCE OF AFRICA* (453.6%) have a higher Claim Ratio more than 100 percent. This implies that the two companies were at loss in 2018. ALLIANZ INSURANCE COMPANY, THE KENYAN ALLIANCE INSURANCE, and the TAUSI ASSURANCE COMPANY reported a claim ratio of 3.1%, 7.3%, and 37.8% respectively. This indicates that the companies derived a profit margin of 96.9%, 92.7%, and 62.2% respectively from their medical policy. Such companies are either charging high rates of premium or possess low risk customers than their peers. This situation is good for the company but bad for the customers as a lot of claims are rejected, and there is likelihood that it will not change in future. However, the other insurance companies reported a claim ratio between 57.4% and 94.1%. This shows that most insurance companies are doing well and making reasonable profit margins.

To gauge the claim settlement procedure of the insurance company, an individual should consider certain factors such as history of the company, number of policyholders, claim settlement ratio, and claim ratio. A claim ratio of between 60% and 90% is ideal for the insured as the insurer is financially stable and there is possibility that it will not reject claims in future. The claim ratio of the Insurance Companies in Kenya transacting medical businesses during the study period reported a claim ratio of 74.5% in 2013 and 75.6% in 2018. This gave an average claim ratio of 75.33% during the study period. It can be inferred that the trend of the claim ratio was neither increasing nor decreasing but rather stable and consistent over the study period. It can be predicted that the claim ratio in future will not vary much from the average. However, the claim ratio of specific companies under study fluctuated over the study period. For instance, the claim ratio of Jubilee insurance, Britam general insurance, and ICEA LION, showed an increasing trend while that of Madison and CIC Insurance portrayed a decreasing trend. Fluctuations of claim ratios occurred since the companies keeps on adjusting profits and improving their efficiency in settling claims swiftly. Notably, most companies recorded an average claim ratio of less than 100% which indicates that the companies made a profit margin on average during the study period as the entire Net premium is not used to pay claims.

As far as claim ratio is concerned, customers should buy medical insurance from the insurance companies having claim ratio close to total average claim ratio (75.33%). Based on the five companies considered for study, the study revealed that the average claim ratio of Jubilee (71.48%), Britam (67.7%), and ICEA LION (73.65%) was lower than the claim total average claim ratio (75.33%). The customer can buy medical cover from any of these insurers as the claim ratio is ideal and favorable. This gives the customers confidence that the companies will honor claims in future as and when it arises. However, the average claim ratios of CIC Insurance (84.4%) and Madison Insurance (93.78%) were higher than the total average claim ratio. The two companies made lesser profit margins than its peers during the study period since they are not rejecting a lot of claims. This is good news for the customers who bought medical policy from the two companies. Thus, CIC Insurance and Madison Insurance might be the most ideal companies for the insured based on the claim ratio. However, there is likelihood that the two companies might reject more claims in future to retain good profits and maintain a claim ratio close to the total average claim ratio.

VI. SUMMARY AND CONCLUSION

This study is a generalized analysis of claim ratio trend of non-life insurance companies in Kenya transacting medical businesses. Claim ratio is the total value of all claims paid by the total amount of premium collected in the same period. This ratio signifies profitability of the insurance company. The ratio can be used to compare companies and analyze their performance over a certain period. A high claim ratio over 100% indicates that the company is making loss.

For the purpose of this study, the trend analysis of the average claim ratio of all non-life insurance companies over a period of six years was examined and compared with the average claim ratio of the individual selected general insurance companies. The trend analysis was represented using a line graph. Average claim ratio was calculated to determine the average profit margin of all companies over the period (75.33%). During the period, companies having an average claim ratio less than 75.33% made more profit margins on average than most insurance companies in medical business. Jubilee (71.48%), Britam (67.7%), and ICEA LION (73.65%) reported a lower percentage of claim ratios than the total average ratio of the insurance companies (75.333%). However, CIC Insurance (84.4%) and Madison Insurance (93.78%) experienced a higher average claim ratio than the total average claim ratio.

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