



PERFORMANCE EVALUATION OF MOTOR AND HEALTH INSURANCE IN INDIA

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Abstract

The insurance sector has been made significant effect on the society. It protects individual, industry and society by covering different types of risk. Especially motor insurance covers vehicle owner (driver) and also other third party and property. Motor insurance is mandatory insurance to insured according to the regulations of the government. Health insurance made significant contribution to general insurance companies in India. Liberalization and privatization made changes in the insurance sector quiet often and also made insurance to adopt these changes. These recent trends in motor and health insurance made wider scope to insurance companies earn more premiums. These trends made changes in the last two decades, after opening up of public sector insurance companies to private sector in the year 2002. In this background, present research paper tries to focus on the trends in motor and health insurance which provides major share of the total premium earned by the insurance companies in India. Moreover, the awareness levels of the insured have increased to take the motor and health insurance at early age. IRDA had taken few steps and efforts made to enhance the quality of service in health and motor insurance in India. In addition to this, the study intend to know the performance level, different types of services, competition level etc. Suitable statistical data are made use of compare over the period of nine years to identify the trends and highlights major findings of the study based on it. Finally it offers suitable suggestions for the better performance of the same.

Key Terms: General Insurance, Health Insurance, Insurance Companies, Motor Insurance .

Introduction

Insurance plays a significant role in the development of a country. It is one of the service sector which focuses on all segments of the society. With the increased population, industrialization and the changing environment, insurance related issues and problems are being emphasized and have become a great concern for the contemporary world.

Motor Insurance

Motor insurance is the insurance of vehicles driven on the public road/or places by use of its engine/horse power run by diesel/petrol and/or LPG or CNG gas.

Types of Motor Insurance

1. Two wheeler (Motor cycle/scooter)
2. Private Cars
3. Commercial vehicles.

Types of Motor Policies

1. Form 'A' - Covers Act only Liability - It covers only liability or property of third party rather than own vehicle.
2. Form 'B' - Covers "Own damage" losses and Third party liability.

Health Insurance Policies and Products

Health insurance policies sold in the market are available with different types of coverage in various health insurance policies/products. However coverage may differ from one insurer to other insurers and from one policy to other policies. In most of the single policies all types of cover mentioned here would not be available, hence it is advisable to see the prospectus of a policy of insurer for covers being offered in that particular policy.

Type of Health Insurance Policies/Products

- Individual health insurance policy
- Family health insurance policy
(for self, spouse, children or/and parents, parents-in-law)
- Critical health insurance policy
- Family floater policy
(With one sum insured floated on all family members in one single premium)



- Family floater policy with extended family members (Hospital cash policy)
- Health insurance policy with term insurance
- Health insurance policy for senior citizens
- Health insurance policy for students
- Group Health insurance policies for members/employees of various groups

Review of Literature

Jawahar Babu G. (2012) in his research paper, “*General Insurance Claim Management with Special Reference to Motor*” discusses claim management of Indian Insurance Companies. It identifies the typical motor claim management which is more risky than any other general insurance products.

Bhatia-Kamal (2013) in their research paper, “*Third Party Claims in Public Sector Insurance Companies, Emerging Trends in Insurance*” focuses on the third party claims in motor insurance, which reference to public sector insurance companies. They have pointed that indefinite, third party claim causes huge losses to the insurance companies and precautions against from these uncertainties is necessary. It also makes an attempt to focus on the trends in third party claims in motor insurance.

Sethu P.V. (2011) in his research article, “*Motor Insurance Business: A Bleeding Portfolio Worsening after Liberalization*” covers origin and development of motor insurance, classification, risk covered under motor Act and Motor insurance business after liberalization and privatization and identified that they have made significant change in the insurance business which may result in to huge change competition in the insurance business.

Arjun Gupta and Rohit Bansal (2013) in their research paper, ‘*Health insurance portability-customers edge*’, examines the process of portability and challenges in it. And also outlines the major advantages and disadvantages of health insurance portability. The portability process should make an application to new company prior 45 days and along with proposal form and medical details of insured. And also copy of previous insurance, self declaration, previous medical history etc. The major advantages for the insurers are to attract new customer, improve claim settlement procedures, waiting period for pre-existing diseases

J Anitha(2009)in her research paper ‘*Emerging Health Insurance in India-An overview*’ attempts to review the health insurance scenario in India. And also identifies various Health insurance products available in India. The study further concentrate on comparison of Health insurance offered by Life and General insurers, Health insurance for senior citizens, need for long term care plans, Models of long term care in other countries, Health ratio, implications of privatization on health insurance. Finally, the IRDA role about Health insurance regulations and policy matters.

Objectives of the Study

- To study the motor and health insurance premium trend of selected general insurance companies in India
- To study the motor and health insurance claim trend of selected general insurance companies in India
- To analyze the premium and claim performance of motor and health insurance of selected general insurance companies in India
- To offer suggestions for the better performance of these selected general insurance companies in India

Scope of the Study

The present study focuses on motor and health premium trend and claim trend of general insurance companies in India. Further, it makes an attempt to analyze the performance of premiums and claim trend of general insurance companies in India.

Period of Study

The study covers the period of nine years from 2006-07 to 2014-15

Sources of Data Collection

The data collected for the study are mainly based on secondary sources and are collected from monthly journals of IRDA, insurance journals, published books, annual reports, books, other published documents on insurance topics and internet sources.



Sample Design

The study considers all the four public sector six private general insurance companies in India

- National Insurance Company Ltd
- New India Assurance Company Ltd
- Oriental Insurance Company Ltd
- United India Insurance Company Ltd
- Bajaj Allianz General Insurance Company Ltd
- ICICI Lombard General Insurance Company Ltd
- Royal Sundaram Allianz Insurance Company Ltd
- IFFCO Tokoyo General Insurance Co Limited
- Reliance General Insurance Co Limited
- Tata AIG General Insurance Co Limited

Statistical Tools and Techniques

As far as statistical applications are concerned trend analysis and regression analysis of motor and health of premium and claim. And also percentages and averages are used. In addition, diagrams, tables are used for the presentation.

Limitations of the Study

- The present study is confined to only to the available secondary data
- It is limited to cover only selected general insurance companies in India
- Assessment of the performance is based on only motor and health insurance premium and claim

I. Health Sector

Trend Analysis of Premium

Table - 1: Total Premium (Rs in Crores) and Y-o-Y growth with respect to Health

Year	Total Premium (Rs in crores)	Year – on- Year Growth (in %)
2006 -07	1890.86	
2007-08	3088.92	63.4
2008-09	4584.21	48.4
2009-10	5463.04	19.2
2010-11	7352.56	34.6
2011-12	8863.29	20.5
2012-13	10265.39	15.8
2013-14	11900.84	15.9
2014-15	15101.12	26.9
Annual Average Growth Rate	26.0	

Data Source: IRDA Annual reports (2006-07 to 2014-15)

Fig 1: Y-o-Y Growth in total premium of Health sector from 2006-07 to 2014-15





The total premium (public and private insurance companies) for Health Sector is depicted in Table - 1. Accordingly, it is observed that during 2006-06 and 2007-08, the total premium receipt was Rs 1890.86 crores and Rs 3088.92 crores with a yearly growth rate of 63.04 per cent. From 2007-08 onwards with Rs 3088.92 crores to Rs 4584.21 crores in 2008-09 with an annual growth of 48.4 per cent. Although a further increase was observed during 2009-10 resulting in Rs 5463.04 crores of total premiums under Health Sector, in terms of growth rate, a decline of 29.2 per cent can be observed.

A linear trend in the premium receipt can be observed. In essence, a higher percentage of growth in premium receipt is observed over the nine year time period. Likewise, a higher increase in the premium receipt under health sector was again noticed from 2012-13 onwards from Rs 10265.39 crores to Rs 11900.84 crores in the year 2013-14 with an annual growth rate of 15.9 per cent between the two years. In continuation, the total premium receipt during 2014-15 is Rs 15101.12 crores, thus injecting a Y-o-Y growth of 26.9 per cent [Fig 1]. On the whole, a linear trend is observed in the premium collection during the nine year period [2006-07 to 2014-15]. Finally, the annual average growth rate 26 per cent.

B. Motor Vehicle Sector
Trend Analysis of Premium

Table - 2: Total Premium (Rs in Crores) and Y-o-Y growth with respect to Motor Vehicle

Year	Total Premium (Rs in crores)	Year – on- Year Growth (in %)
2006 -07	7767.25	-
2007-08	9490.73	22.2
2008-09	10939.76	15.3
2009-10	11873.18	8.5
2010-11	13548.53	14.1
2011-12	16973.90	25.3
2012-13	20662.08	21.7
2013-14	23839.52	15.4
2014-15	27083.17	13.6
Annual Average Growth Rate	14.9	

Data Source: IRDA Annual Reports (2006-07 to 2014-15)

From 2007-08, the total premium receipt was Rs 7767.25 crores and Rs 9490.73 crores with a yearly growth rate of 22.2 per cent. Furthermore, an increase in premium receipts under motor vehicle sector was observed from 2007-08 onwards with Rs 10939.76 crores to Rs 10939.76 crores in 2008-09 with an annual growth of 15.3 per cent. Although a slight decline was observed during 2009-10 resulting in Rs 11873.18 crores of total premium under motor vehicle sector, yet in terms of growth rate, it was about seven per cent point change decline [from 15.3 to 8.5, see fig 2]. Nonetheless, in the year 2010-11, the total premium collection observed is Rs 13548.53 crores indicating an annual growth of about six percentage points [from 8.5 per cent to 14.1 per cent in the year 2010-11]. This shows that a substantial increase in the revenue to the insurance sector is observed in the form of premium collection under Motor Vehicles sector.

Fig 2: Y-o-Y Growth in total premium of Motor Vehicle Sector from 2006-07 to 2014-15





On similar lines, a further jump or increase in total premium receipt was again observed during 2011-12, where it increased from Rs 16973.90 crores in 2010-11 to Rs 20662.08 crores in 2011-12 with a year on year increase of 21.7 percent. A linear trend in the premium receipt is observed. In essence, a higher percentage of growth in premium receipt can be observed over the nine year time period. Likewise, a higher increase in the premium receipt under motor vehicle sector was again noticed from 2012-13 onwards from Rs 20662.08 crores to Rs 23839.52 in the year 2013-14 with an annual growth rate of 15.4 per cent between the two years. In continuation, the total premium receipt during 2014-15 is Rs 27083.17 crores thus injecting a Y-o-Y growth of 13.6 per cent [Fig 2]. In total, a linear trend is observed in the premium collection during the ten year period [2006-07 to 2014-15]. Finally, in terms of the annual average growth rate, a growth of 14.9 per cent is observed in total premium receipts of the Motor vehicle sector in one decade lag period.

II. Trend Analysis of Health Sector Claims:

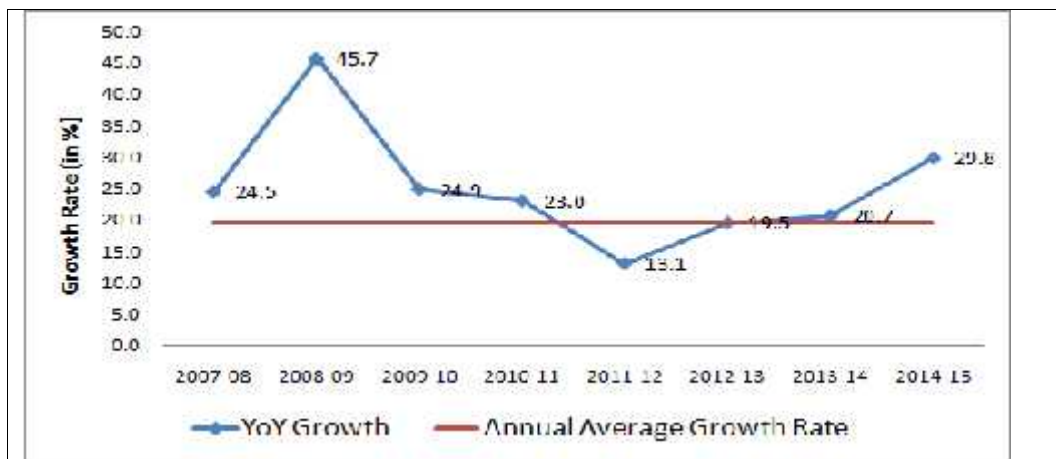
Table - 3: Total Claims (Rs in Crores) and Y-o-Y in claims with Health Sector

Year	Total Claims (Rs in crores)	Year – on- Year Growth (in %)
2006 -07	2674.60	--
2007-08	3329.59	24.5
2008-09	4851.44	45.7
2009-10	6057.50	24.9
2010-11	7452.00	23.0
2011-12	8425.52	13.1
2012-13	10071.40	19.5
2013-14	12152.07	20.7
2014-15	15779.31	29.8
Annual Average disbursement Rate	19.4	

Data Source: IRDA Annual Reports (2006-07 to 2014-15)

After looking at the trend in total premium receipts, an analysis of the trend in *Claim* disbursement during the period of 2006-07 to 2014-15 under Health Sector. The data is depicted in Table 3. Accordingly, it is observed that during 2006-07 and 2007-08, the total Claim disbursement was Rs 2674.60 crores and Rs 3329.59 crores in 2007-08 with a yearly rate of disbursement of 24.5 per cent. Furthermore, an increase in claim disbursement was seen from 2007-08 onwards with Rs 3329.59 crores to Rs 4851.44 crores in 2008-09 with an annual disbursement rate of 45.7 percent [Fig 3]. Although a further increase was observed during 2009-10 resulting in Rs 6057.50 crores of total claims disbursement, in terms of disbursement rate, a decline of about 22 per cent was observed [from 45.7 to 24.9]. Nonetheless, in the year 2010-11, a marginal increase in the claim disbursement under health sector was observed in which a total of Rs 7452.00 crores indicating at an Y-O-Y disbursement.

Fig 3: Y-o-Y disbursement rate of total Claims from 2006-07 to 2014-15 Health Sector





rate of about 23 per cent. This shows that a substantial increase in the claims disbursement is carried out under health sector. On similar lines, a further jump or increase in the claim disbursement was observed during 2011-12, where it increased from Rs 7452.00 crores in 2010-11 to Rs 8425.52 crores in 2011-12 with a year on year increase disbursement rate of 13.1 per cent [Fig 3]. Interesting to note from the data, a linear trend is observed even in claim disbursement as seen in the health claim disbursement. In essence, a higher percentage of disbursement is observed over the ten year time period. In continuation, a higher increase in the disbursement was again noticed from 2012-13 onwards from Rs 10071.40 crores to Rs 12152.07 in the year 2013-14 with an annual disbursement rate standing at 20.7 percent between the two years. Likewise, the total claim disbursement during 2014-15 is Rs 15779.31 crores. In total, a linear trend is observed in the premium collection during the nine year period [2006-07 to 2014-15]. Finally, in terms of the annual average disbursement rate, a growth of 19.4 per cent is observed in total claims disbursement of the insurance sector in one decade lag period.

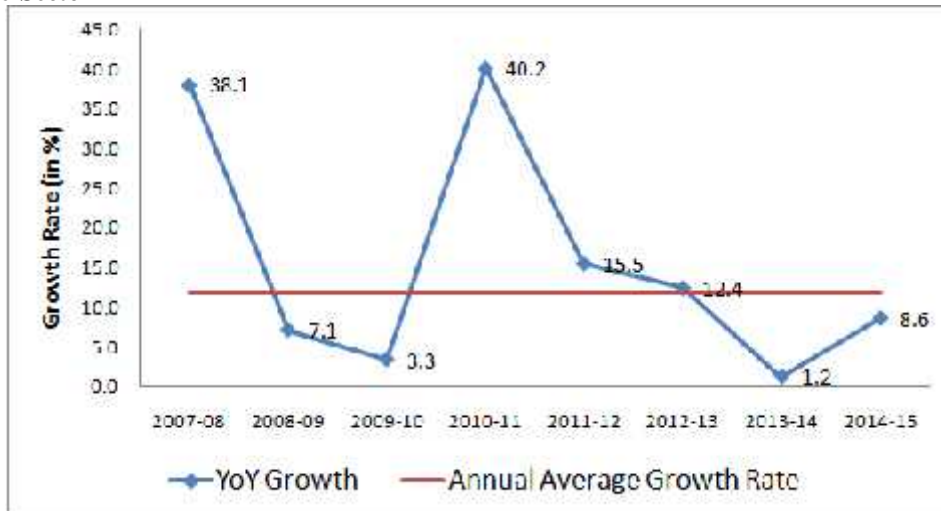
**B. Motor Vehicle Sector
 Trend Analysis of Claims**

Table - 4: Total Claims (Rs in Crores) and Y-o-Y growth with respect to Motor Vehicle Sector

Year	Total Claims (Rs in crores)	Year – on- Year Growth (in %)
2006 -07	6613.64	-
2007-08	9130.32	38.1
2008-09	9780.91	7.1
2009-10	10108.14	3.3
2010-11	14167.59	40.2
2011-12	16361.71	15.5
2012-13	18389.75	12.4
2013-14	18607.76	1.2
2014-15	20207.89	8.6
Annual Average Growth Rate	11.8	

Data Source: IRDA Annual Reports (2006-07 to 2014-15)

Fig - 4: Year on Year Growth in total Claims of Insurance sector from 2006-07 to 2014-15 with respect to Motor Vehicle Sector





After looking at the trend in total premium receipts, an analysis of the trend in Claims disbursement during the period of 2006-07 to 2015-16 under Motor Vehicle Sector. The data is depicted in Table 4. Accordingly, it is observed that during 2006-07 and 2007-08, the total Claim disbursement was Rs 6613.64 crores and Rs 9130.32 crores in 2007-08 with a yearly rate of disbursement of 38.1 per cent. Furthermore, an increase in claim disbursement was seen from 2007-08 onwards with Rs 9130.32 crores to Rs 9780.91 crores in 2008-09 with an annual disbursement rate of 7.1 per cent. Although a further increase was observed during 2009-10 resulting in Rs 10108.14 crores of total claims disbursement, in terms of disbursement rate, a decline of about 4.0 per cent was observed [from 7.1 to 3.3]. Nonetheless, in the year 2010-11, a considerable increase in the claim disbursement under health sector was

It is observed in which a total of Rs 14167.59 crores indicating at a Y-O-Y disbursement rate of about 40.2 per cent. This shows that a substantial increase in the claims disbursement is carried out under health sector. On similar lines, a further jump or increase in the claim disbursement was observed during 2011-12, where it increased from Rs 14167.59 crores in 2010-11 to Rs 16361.71 crores in 2011-12 with a year on year increase disbursement rate of 15.5 per cent [Fig 8]. Interesting to note from the data, a linear trend is observed even in claim disbursement as seen in the health claim disbursement. In essence, a higher percentage of disbursement is observed over the ten year time period. In continuation, a higher increase in the disbursement was again noticed from 2012-13 onwards from Rs 18389.75 crores to Rs 18607.76 crores in the year 2013-14 with an annual disbursement rate standing at 1.2 per cent between the two years. Likewise, the total claim disbursement during 2014-15 is Rs 20207.89 crores with a YoY disbursement growth rate of 8.6 per cent. In total, a linear trend is observed in the premium collection during the nine year period [2006-07 to 2014-15]. Finally, in terms of the annual average disbursement rate, a growth of 11.8 per cent is observed in total claims disbursement of the Motor Vehicle sector in one decade period.

III. Regression Result for Health Sector

The OLS regression equation is given by

$$Y_i = \alpha + \beta X_i + \epsilon_i$$

Where Y_i = CLAIMS disbursed over the period from 2006-07 to 2014-15

X_i = PREMIUM received over the period from 2006-07 to 2015-16

ϵ_i = Error Term

Table 5: Total Premium and Total Claims (Rs in Crores)

Year	Total Premium (Rs in crores)	Total Claims (Rs in crores)
2006 -07	1890.86	2674.60
2007-08	3088.92	3329.59
2008-09	4584.21	4851.44
2009-10	5463.04	6057.50
2010-11	7352.56	7452.00
2011-12	8863.29	8425.52
2012-13	10265.39	10071.40
2013-14	11900.84	12152.07
2014-15	15101.12	15779.31

Data Source: IRDA Annual Reports (2006-07 to 2014-15)

Table 5a: SPSS Regression output for Health Sector

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	385.08	296.17		1.300	
premium	0.983	0.034	0.996	28.665	0.000*



Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	385.08	296.17		1.300	
premium	0.983	0.034	0.996	28.665	0.000*

a. Dependent Variable: claims, * Significant at 5 % level.

The estimated regression equation is given by

$$Y_i = 385.08 + 0.983X_i + \epsilon_i$$

The interpretation is that for one unit (one crore) increase in Premium collection under health sector, one would expect about on an average of 0.983 times increase in the CLAIM disbursement. In essence, for every one crore of premium accumulated, the insurance company is expected to spend about 94 lakh worth of CLAIM disbursements under health sector.

III. Regression Result for Motor Vehicle Sector:

The OLS regression equation is given by

$$Y_i = \alpha + \beta X_i + \epsilon_i$$

Where Y_i = CLAIMS disbursed over the period from 2006-07 to 2014-15

X_i = PREMIUM received over the period from 2006-07 to 2014-15

ϵ_i = Error Term

Table - 6: Total Premium and Total Claims (Rs in Crores)

Year	Total Premium (Rs in crores)	Total Claims (Rs in crores)
2006 -07	7767.25	6613.64
2007-08	9490.73	9130.32
2008-09	10939.76	9780.91
2009-10	11873.18	10108.14
2010-11	13548.53	14167.59
2011-12	16973.90	16361.71
2012-13	20662.08	18389.75
2013-14	23839.52	18607.76
2014-15	27083.17	20207.89

Data Source: IRDA Annual Reports (2006-07 to 2014-15)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2611.05	1296.08		2.015	
premium	0.702	0.076	0.961	9.232	0.000*

a. Dependent Variable: claims, * Significant at 5 % level.

The estimated regression equation is given by

$$Y_i = 2611.05 + 0.702X_i + \epsilon_i$$



The interpretation is that for one unit (one crore) increase in Premium collection, one would expect about on an average of 0.702 times increase in the Claim disbursement. In essence, for every one crore of premium accumulated, the insurance company is expected to spend about 70 lakh worth of Claim disbursements under Motor Vehicle Sector.

Major Findings of the Study

- ❖ The average growth of health insurance premium of four public sector and six private sector insurance companies are 26%
- ❖ The trend shows highest health premium growth percentage of 63.4 during the year 2007-08
- ❖ The trends also shows lowest health premium growth percentage of 15.8 during the year 2012-13
- ❖ The average growth of health claim of four public sector and six private sector insurance companies are 19.4%
- ❖ The trend shows highest health claim growth percentage of 45.7 during the year 2008-09
- ❖ The trends also shows lowest health claim growth percentage of 13.1 during the year 2011-12
- ❖ The average growth of motor insurance premium of four public sector and six private sector insurance companies are 14.9%
- ❖ The trend shows highest motor premium growth percentage of 25.3 during the year 2011-12
- ❖ The trends also shows lowest motor premium growth percentage of 8.5 during the year 2009-10
- ❖ The average growth of motor claim of four public sector and six private sector insurance companies are 11.8
- ❖ The trend shows highest motor claim growth percentage of 40.2 during the year 2010-11
- ❖ The trends also shows lowest motor claim growth percentage of 1.2 during the year 2013-14

Suggestions

Motor and health insurance is difficult classes of business to manage but, with the appropriate strategies and operations in place, the rewards are there. But, with current business models and approaches, the opportunity is slipping away.

While only some insurer's offer, discounts in premium and No claim bonus for attracting the new customer. Health insurance portability made a significant impact to grab the opportunity and give potential service to the customer. According to the senior official with a large general insurer, the sector is working towards a goal where all players with loaded discounts at medical institutions and gym membership incentives.

Conclusion

The present paper discusses the trends in motor and health insurance sector mainly focusing on premium and claims of selected general insurance companies in India. The key factors in this study is growth in premium constitute a profit for general insurance companies. On the other hand, growth of claim constitutes a decrease in profit. The study reveals the fact that there is a positive trend for insurance companies to increase the premium growth but in contra need to reduce the claim growth. In addition, the paper identifies that even though there are limitations, there is still more scope to promote products with recent requirements of the customers within the industry, specially the products like motor and health provide more opportunity for the insurance industry.

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