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FACTORS AFFECTING AUTO INSURANCE IN INDIA

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ABSTRACT
Auto Insurance in India deals with the insurance covers for the loss or damage caused to the automobile or its parts due to natural and man-made calamities. It provides accident cover for individual owners of the vehicle while driving and also for passengers and third party legal liability. There are certain general insurance companies who also offer online insurance service for the vehicle.

Major contribution of growth of General insurance industry in India has come from Auto insurance sector. It alone accounts for around 53% of total general insurance premium income in India. The paper provides an understanding on factors affecting growth of Auto insurance in India. Four major factors like Motor vehicle sales, Number of Road accidents, Road length and Auto claims incurred affecting growth of Auto insurance premium are being studied. Statistical tools used for the study is Multiple Regression analysis.

This industry is prone to accidental claims and its bottom line is always under tremendous pressure. In recent times Insurance Regulatory and Development Authority (IRDA) has taken bold step by increasing the premium rate of third party liability. From 1st April 2015 IRDA has almost doubled third party motor insurance premium of all categories of vehicles. This will help in profitable and meaningful growth on Auto insurance sector.

INTRODUCTION
Auto insurance had its beginnings in the United Kingdom in the early part of the last century. The first motor car was introduced in England in 1894. The first motor policy was introduced in 1895 to cover third party liabilities. By 1899, accidental damage to the car was added to the policy, thus introducing, the 'comprehensive' policy along the lines of the policy issued today.

In 1903, General Insurance Corporation Ltd. was established mainly to transact motor insurance, followed by other companies. After World War I, there was considerable increase in the number of vehicles on the road which led to the increase in the number of accidents as well. Many injured persons in road accidents were unable to recover losses since all motor vehicles were not insured. This led to the introduction of compulsory third party insurance through the passing of the Road Traffic Act 1930 and 1934. The compulsory insurance provisions of these Acts have been consolidated by the Road Traffic Act 1960.

In India, the Motor Vehicles Act was passed in 1939 introducing the law relating to compulsory third party insurance. The practice of motor insurance in India generally follows that of the U.K market. The business was governed by a tariff till March 2008, now it is non-tariff. Motor vehicles Act 1988 has replaced the earlier 1939 Act, and it became effective from 1st July 1989. Some of the important provisions of the Act are the following:

a.) Stricter procedure for grant of Driving License and period of their validity.
b.) Standards for anti-pollution control devices.
c.) Enabling provisions for updating the system of registration marks.
d.) Maintenance of state registers for Driving Licenses and Vehicle registration.
e.) Constitution of Road safety councils etc.

Auto insurance gives protection to the vehicle owner against damages to his/her vehicle and pays for any Third Party Liability determined as per law against the owner of the vehicle. Third Party Insurance is a statutory

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requirement. The owner of the vehicle is legally liable for any injury or damage to third party life or property caused by or arising out of the use of the vehicle in a public place. Driving a motor vehicle without insurance in a public place is a punishable offence in terms of the Motor Vehicles Act, 1988. Motor Vehicle Insurance is not only the major source of premium earnings for the insurance companies but is also the area which is showing the biggest loss.

LITERATURE REVIEW

An auto insurance policy is a mandatory policy issued by an insurance company as part of prevention of public liability to protect the general public from any accident that might take place on the road. The law mandates that every owner of a motor vehicle must have one motor insurance policy.

For the purpose of insurance, motor vehicles are classified into three broad categories:

a.) Private Cars
b.) Motor cycles and motor scooters
c.) Commercial Vehicles, which is further classified into:
    i.) Goods carrying vehicles
    ii.) Passenger carrying vehicles e.g. taxis, buses, rickshaw etc.
    iii.) Miscellaneous Vehicles like ambulances, mobile dispensaries etc.

There are basically two types of motor insurance policies:
a.) Liability Only Policy (third party insurance)
b.) Package Policy (third party insurance+ damage to owner's vehicle)

LIABILITY ONLY POLICY (Third party cover): This policy can only be used when any accident leads to third party damage. This policy does not cover damage to owner's vehicle. The policy form used to cover act liability (third party insurance) is Form "A". Form "A" is called "Standard form for "A" Policy for Act Liability. This form applies uniformly to all classes of vehicles, whether Private Cars, Commercial Vehicles, Motor Cycles or Motor Scooters, with suitable amendments in "Limitations as to Use".

PACKAGE POLICY (Comprehensive cover): This policy covers not only third party insurance but also includes damage to owner's vehicle. The policy form used for package policy is Form "B". This varies with the class of vehicles covered. There are therefore Form "B" Policies for Private Cars, Commercial Vehicles, Motor Cycles/Scooters, etc. Policy Form "B" has three sections:

Section I: "Loss or damage" (or own damage). The risk covered under this are:
a.) Fire, explosion, self-ignition or lightning.
b.) Burglary or theft.
c.) Riot or strike.
d.) Earthquake.
e.) Flood, hurricane, storm.
f.) By accidental external means.
g.) Malicious act.
h.) Terrorist activity.
i.) Whilst in transit by road, rail, waterways etc.
j.) Landslide/rockslide.

Section II: Liability to Third Parties. Death or bodily injury to any person including occupants, carried in the vehicle and damage to property other than that belongs to the insured.

Section III: Personal accident cover for owner-driver.

Contextual Review of Research Papers

After liberalization growth of Indian Motor Insurance industry has become significant both from economic and social point of view and researchers have explored and probed these aspects.

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Grace, M.F., Klein, R.W. and Tennyson S. (2013) in their paper have analyzed the effects of regulatory reforms in the South Carolina Auto Insurance market. As a result of these reforms, almost every economic indicator of the health of the insurance market showed improvement.

Kelly, M., Kleffner, A. and Li, S. (2013), have examined the impact of Regulation on the availability and profitability of Auto insurance in Canada. It was found that rate reduction orders, product reforms and pricing have significant effect on the increase in premium.

Weiss, M.A., Tennyson, S. and Regan, L. (2010) have examined, the effects of Regulated premium subsidies on insurance costs. Results suggest that rate regulation that systematically suppresses driver's insurance premiums is associated with significantly higher average loss costs and higher insurance claim frequency.

Hoyt, R.E. and Lankau, C.A. (2006) have examined insurance coverage disclosure laws and their impact on Automobile Insurance costs. It was found that insurance consumers paid additional premium costs in those states of America where these laws prevail.

Dhar, S.K. (2013) analyzed the performance of Indian insurance sector. It was revealed that Health and Automobile sectors are the major drivers in the segment of General Insurance.

Mridula, V.K. (2012) has made a comparative study of customer expectations and perceptions in public and private motor insurance companies in Coimbatore city in India. Findings indicate that there was no significant gap in private sector but gaps do exists as far as customer satisfaction is concerned in Public sector companies.
There has been substantial work on various aspects of Automobile insurance done abroad but studies in India on Automobile Insurance are scanty.

10 THINGS SHOULD KNOW FOR BUYING AUTO INSURANCE

Determined Insurance Rate

Two factors determine what you pay for auto insurance. The first factor is underwriting and the second factor is rating. Insurance companies underwrite to assess the risk associated with an applicant, group the applicant with other similar risks and decide if the company will accept the application. Based on the results of the underwriting process, the rating assigns a price based on what the insurer believes it will cost to assume the financial responsibility for the applicant's potential claim.

Each company adopts its own rating system, although there are general guidelines that all companies follow

The single greatest influence on the rating process is claim frequency. This does not mean how many times you specifically have made an insurance claim, although that will have an additional effect. Claim frequency measures how often an insured event occurs within a group relative to the number of policies contained in that group. Persons sharing characteristics with high claims groups will be charged more for insurance coverage.

Specific Factors that Affect Your Rate

Your driving record – drivers with previous violations or accidents are considered to be higher risk
Your geographic territory – urban areas have more claims than rural areas
Your gender and age – males have more accidents; certain age groups have more claims
Your marital status – married people show lower rates of claims
Prior insurance coverage – if you have been cancelled for non-payment of premiums
Vehicle use – higher annual mileage results in higher exposure to risk
Make and model of your vehicle – luxury and sports cars average a higher number of claims

Agent About Discounts

Discounts are awarded because the insurance company sees you as a "better risk." Here are some discounts you should look for: multiple vehicles, driver education courses, good student, safety devices, anti-theft devices, low mileage, good driver/renewal, auto/home package and dividends. Not all states offer all discounts, so check with your agent to see if you qualify.

Tort System vs. No-Fault System

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Each state must implement either a tort system or a no-fault system. The system your state has implemented will determine what kind of insurance is available to you. The three basic coverage sold under the tort system are bodily injury liability insurance, property damage liability insurance and uninsured motorists coverage. In a no-fault state, coverage will vary, but under a no-fault system your insurance company pays you directly for your losses as a result of injuries sustained in an accident, regardless of who is at fault. Check with your state insurance department for questions concerning tort or no-fault state systems.

Check into Optional Coverage

The most commonly recognized coverage, in addition to the basic liability package, are collision and comprehensive coverage. Collision coverage pays for physical damage to your car as a result of your auto colliding with an object such as a tree or another car. This is relatively expensive coverage and is not required by law. Comprehensive coverage pays for damage to your auto from almost all other causes, including fire, severe weather, vandalism, floods and theft. This coverage will also cover broken glass and windshield damage. Comprehensive coverage is less expensive than collision, but is also optional. Other optional coverage includes medical payments coverage, rental reimbursement coverage and towing and labour coverage.

Where to Go for More Information

Information is available to consumers from a number of unbiased sources. These sources include public libraries, state insurance departments, online resources, consumer groups and consumer publications. Every state insurance department has personnel available to answer questions regarding auto insurance coverage and many departments publish premium comparisons to make shopping around easier.

Shop Around Before You Buy

When shopping for auto insurance, premium quotations are a useful tool for comparison of different companies' products. When asking for price quotations, it is crucial that you provide the same information to each agent or company. The agent will usually request the following information: description of your vehicle, its use, your driver's license number, the number of drivers in your household, the coverage and limits you want.

Where to Shop

Check the newspaper and yellow pages of the telephone directory for companies and agents in your area. In addition, ask your neighbours, relatives and friends for recommendations on insurance companies and agents. In particular, ask them what kind of claim service they have received from the companies they recommend. Remember to shop around to get the best price and service.

For Your Protection

Once you have selected the insurance coverage you need and an insurance agent or company, there are steps you can take to make certain you get your money's worth. Before signing an application for any insurance coverage, call you state insurance department and verify that the company and the agent are licensed to do business in your state. It is illegal for unlicensed insurers to sell insurance, and if you buy from an unlicensed insurer, you have no guarantee that the coverage you pay for will ever be honoured.

Read Your Policy Carefully

You should be aware that an auto insurance policy is a legal contract. It is written so your rights and responsibilities, as well as those of the insurance company, are clearly stated. When you purchase auto insurance, you will receive a policy. You should read that policy and make certain you understand its contents. If you have questions about your insurance policy, contact your insurance agent for clarification. If you still have questions, turn to your state insurance department.

Overview of the Consumer Journey in auto insurance

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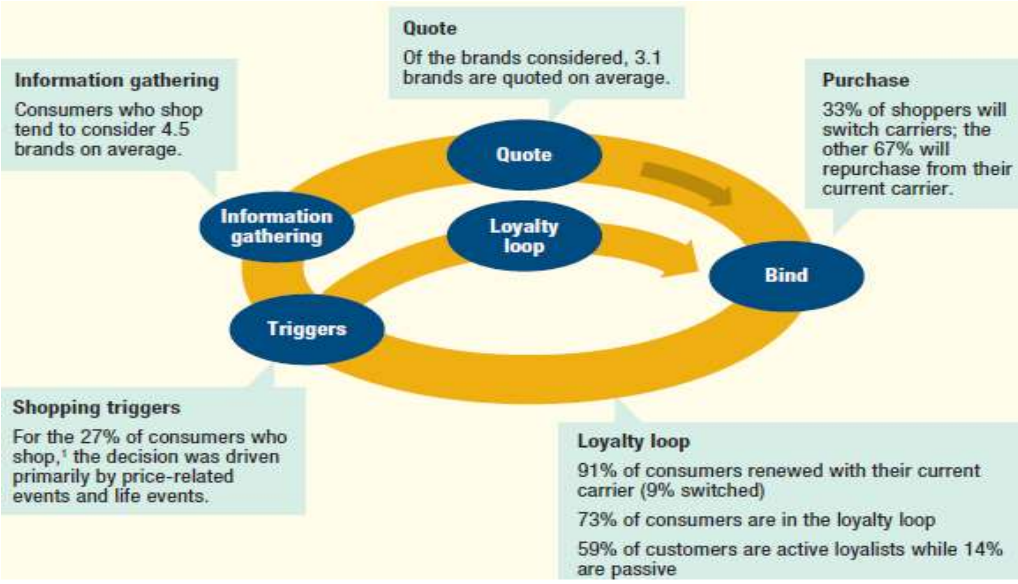

Source: 2012 McKinsey Auto Insurance Insight Research

Personal accident coverage for owner-driver

The company undertakes to pay compensation as per the following scale for body injury/death sustained by the owner-driver of the vehicle.

In direct connection with the vehicle insured:

Driving, Mounting into/Dismounting from the vehicle insured whilst traveling in it as a co-driver caused by violent, accidental, External and visible means, which is independent of any other case shall within calendar months of such injury result in:

Scale of compensation

	Nature Of Injury	Compensation
1	Death	100%
2	Loss of two limbs or sight of both eyes or one limb & sight of one eye	100%
3	Loss of one limb or sight of one eye	50%
4	Permanent total disablement	100%

DATA ANALYSIS

As per Table-1, the growth of Motor insurance in India has been from Rs.6762crores for the financial year 2005-06 to Rs.29553crores for the financial year 2013-14. The growth percentage is 337% i.e., growing at an average rate of 42.12% per annum (Dependent variable).

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From the same table growth of other Independent variables works out as:
Motor Sales growth percentage is 110% growing at an average rate of 13.7% per annum.
Number of Road Accidents growth percentage is 8.7% growing at an average rate of 1%. But no trend on the growth of number of road accident in India could be found. It has increased in some years and decreased in some other years.

Road length has shown growth percentage of 57% growing at an average rate of 7% per annum.
Auto claims incurred has grown by 254% with average rate of growth being 32%.
It can further be proved through statistical analysis by Multiple Regression of the following data.

Table-1

Year	Auto Insurance Premium (Rs. Crores)	Automobile Sales (Rs. Crores)	No. of Road Accidents	Road Length in (Kms)	Auto claims incurred (Rs. Crores)
2005-06	6762	70384	460920	2980651	6643
2006-07	7938	87311	479216	3116401	6722
2007-08	9752	84873	484704	3209592	9001
2008-09	11372	92891	486384	3571510	10103
2009-10	12758	126479	499628	3682439	10782
2010-11	15271	165353	497686	3790342	15682
2011-12	19659	158187	490383	3965394	18656
2012-13	24809	157215	486476	4245429	21597
2013-14	29553	147475	501045	4689842	23496

(Source: Handbook on Indian Insurance Statistics and Center for monitoring Indian Economy.)

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.996776
R Square	0.993562394
Adjusted R Square	0.987124788
Standard Error	890.1488414
Observations	9

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	4	489165728.2	122291432	154.337254	0.000123795

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Residual	4	3169459.839	792364.9598
Total	8	492335188	

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Up 95.*
Intercept	-13552.35223	21905.77679	-0.618665677	0.569627975	-74372.53898	47267.83452	-74372.53898	47
X Variable 1	-0.047937352	0.025475604	-1.881696337	0.133020217	-0.118668969	0.022794266	-0.118668969	0.0
X Variable 2	0.000209806	0.062509388	0.003356395	0.997482709	-0.173344078	0.17376369	-0.173344078	0.1
X Variable 3	0.005818833	0.00355877	1.635068726	0.177374272	-0.004061896	0.015699562	-0.004061896	0.0
X Variable 4	0.959383836	0.334787043	2.865654022	0.045668241	0.02986599	1.888901682	0.02986599	1.8

HYPOTHESIS

Null Hypothesis:

H_0^1: $\beta = 0$ (No influence of Automobile Sales on Auto Insurance Premium earned)
H_0^2: $\beta = 0$ (No influence of Road Accidents on Auto Insurance Premium earned)
H_0^3: $\beta = 0$ (No influence of Road Length on Auto Insurance Premium earned)
H_0^4: $\beta = 0$ (No influence of Claims Incurred on Auto Insurance Premium earned)

Alternative Hypothesis:

H_1^1: $\beta \neq 0$ (Automobile Sales influences Auto Insurance Premium earned)
H_1^2: $\beta \neq 0$ (Road Accidents influences Auto Insurance Premium earned)
H_1^3: $\beta \neq 0$ (Road Length influences Auto Insurance Premium earned)
H_1^4: $\beta \neq 0$ (Claims incurred influences Auto Insurance Premium earned)

The R^2 value from the regression table is 0.993562394 which explains the 99.35% of relationship between Auto Insurance Premium earned (Dependent variable) and other Independent variables.
The computed P-value at 95% confidence level is 0.045668241 for 4th variable (Auto claims incurred) which is less than 0.05. This is the confidence with which the alternate hypothesis is accepted and the null hypothesis is rejected. This regression equation shows that there is influence of Auto claims incurred on the Premium earned through Auto Insurance.
The regression equation can be written as
$Y= \alpha + \beta X$
(Here Y is Dependent variable-Auto Insurance Premium, X is Independent variable-Auto Claims Incurred)
$Y= -13552.35223+0.959383836$ X
The computed P-value at 95% confidence level for 1st variable is 0.133020217, 2nd variable is 0.997482709 and 3rd variable is 0.177374272 which are more than 0.05. This is the confidence with which the alternate hypothesis is rejected and the null hypothesis is accepted. This regression equations shows that there is no influence of Automobile sales, Number of Road Accidents and Road Length on Auto Insurance Premium earned.
The regression equations can be written as
$Y= \alpha + \beta X$
(Here Y is Dependent variable-Auto Insurance Premium, X is Independent variable-Automobile sales, No. of Road Accidents and Road Length)
Y= -13552.35223- 0.047937352 X
Y= -13552.35223+ 0.000209806 X
Y= -13552.35223+ 0.005818833 X

RESULTS

Findings

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The finding from the analysis is listed below:

- The growth of net premium for the Auto insurance has been 42.12% per annum and that of Automobile sales has been 13.7% per annum during the period 2005-06 to 2013-14.
- No trend could be observed towards Growth of Number of Road Accident in India during the period 2005-06 to 2013-14. It is seen that during 2010-11, 2011-12 and 2012-13, number of Road accident has declined compared to the previous years. It is mainly due to improvement in quality of Roads like National highways built through Golden quadrilateral, State highways and Flyovers built in major cities. Other reasons could be due to increase in awareness about Road safety, stricter enforcement of punishment on drunk driving, over speeding and dangerous driving applied by traffic cops throughout India.
- Road length has shown growth percentage of 57% growing at an average rate of 7% per annum.
- Auto claims incurred has grown by 254% with average rate of growth being 32%. It has increased keeping pace with growth of Auto insurance premium in India.

Recommendations

- Policies needs to be priced correctly as per the risk involved.
- Actuarial pricing and sound underwriting methods to be brought into practice.
- Innovative customized products to be introduced which in turn will improve growth.
- Distribution network should be expanded.
- IRDA should regularly monitor and review the health of the insurance companies in order to protect the policy holder's money.

LIMITATIONS OF THE STUDY

Auto Insurance Provided always that-

- Compensation shall be payable under only one of the items(1) to (4) in respect of the owner-driver arising out of one occurrence and the total liability of the insurer shall not in the aggregate exceed the sum of Rs. 2 lack during.

This cover is subject to-

- The owner –driver is the registered owner of the vehicle insured.
- The owner –driver is the insured named in this policy.
- The owner –driver holds an effective driving license.

In account with the provisions of rule 3 of the central motor vehicles rules 1989,at the time of the accident.

CONCLUSION

The paper has been prepared from the secondary data collected through various books, references, journals and articles published on the subject.

This industry is prone to accidental claims and its bottom line is always under tremendous pressure. In recent times Insurance Regulatory and Development Authority (IRDA) has taken bold step by increasing the premium rate of third party liability. From 1st April 2015 IRDA has almost doubled third party motor insurance premium of all categories of vehicles. This will help in profitable and meaningful growth on Auto insurance sector.

With better technological expertise coming in from the foreign partners and involvement by the IRDA the Motor insurance market in India should turnaround and grow at a faster and profitable way.

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