

2017 Amendments to the Motor Vehicle Act and Implications to Insurers

Sai Girish Sanaka, Satya Sai Mudigonda, Phani Krishna Kandala, Dr. Pallav Kumar Baruah

Abstract— The 2017 Amendment bill to the Motor Vehicle Act has been passed by the Lok Sabha and is due for a nod from Rajya Sabha. The bill tries to bring in various measures in line with India's commitment to reduce accidental deaths by 50% by 2020 as a signatory of the Brasilia Declaration. The initiatives drafted as part of the bill, if executed as written, would have significant impact on the customer and the insurer, besides many other stakeholders. Significant changes in claims reporting speed, settlement speed, impact on the underlying burn cost and what not. Claims reporting and settlement speed can lead to major movements in IBNR and hence, the portfolio as a whole. While frequency is expected to reduce due to road safety initiatives, severity is expected to increase due to increase in minimum compensation for no plea cases. It is important to consider these factors in tandem when analysing the portfolio and establishing reserves as well as results. The paper describes the various changes and the nature of impact it can have to claims reserving and burn cost of third party insurance risk. The paper then goes on to make an attempt to quantify this impact through building a framework approach.

Index Terms— Accident Information Report (AIR), Claims Settlement, Claims Reporting, Claim Compensation, Impact Distribution, Incurred But Not Reported (IBNR), Motor Vehicle (Amendment) Bill, Motor Vehicle Accident (MVA) Fund, Pricing Uncertainty, Reserving Uncertainty, Solatium Fund, Third Party Liability.

1. INTRODUCTION

Motor Third Party Insurance is a type of insurance that does not cover for a person's own vehicle damage but instead it covers for the legal liability for the damage caused to a third party by a person like death, bodily injury, and any damage to the third party property. The insurance provider to the owner of the vehicle will compensate the aggrieved third person in case of any damage caused. Also the significantly growing number of accidents and lack of financial support leading to fatal deaths has made the government realize what is the value of motor insurance in last 2 decades.

Motor Insurance in India is compulsory by law for all the registered vehicles and this has led to a growing importance of Motor insurance in General Insurance Sector. Gross Premiums Written in India in FY18 sum up to Rs 5.53 trillion (US\$ 94.48 billion), out of which Rs 4.58 trillion (US\$ 71.1 billion) come from life insurance and Rs 1.51 trillion (US\$ 23.38 billion) come from non-life (general) insurance. In India, with an Overall Insurance penetration (premiums as % of GDP) in 2001 as 2.71 % it reached 3.69 per cent in 2017.

While Motor Insurance is growing at a huge pace, the accidental deaths due to road accidents are not far behind. Motor Third party compensation is governed by the erstwhile Motor Vehicle act. Besides insurance, this Act contains various sections around licensing, safety measures and penalties for violation.

This research work is organised in 11 sections. Section 2 provides key objectives of The Motor Vehicle (Amendment) Bill, 2017. Section 3 elaborates on the insertions and amendments made in the Act. Where as in section 4 we discuss all the Higher Penalties. Section 5 deals with e-governance and Licensing and also the central database of information. Moving on to section 6, we discuss about the Motor Vehicle Accident Fund which is an upgradation of Solatium Fund. Section 7 deals with the Accident relief with emphasis on the Hit and Run Compensation. In section 8, we focus on third party liability

and compensation for the victims. Then in section 9 we draw the Implications to the Insurers based on the Motor Vehicle Bill, 2017 in regard of reasons for higher and lower costs. In section 10 we provide a Framework for Assessing the Impact for General Insurance Companies. Section 11 we make conclusion about our work and in section 12 we describe how we brief about our future work and next steps. Finally, in section 13 we mention all the references used in this work.

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2. KEY OBJECTIVES OF THE MOTOR VEHICLE (AMENDMENT)BILL, 2017

The main reasons for the road fatalities and damages caused are speeding, overtaking, alcohol abuse, fractured licensing, poor safety standards for the vehicles, weak penalty system, poor usage of technology, no standard protocols for the support and care after an accident happens, and weak enforcement of traffic laws. Thus these reasons have made the government realize that a new Act shall be proposed to provide a good framework for the road transport and development.

Figure 1 depicts the Industry Statistics for Registered Vehicles by year, Causes for Accidental Deaths, Deaths and Injuries per Vehicle.

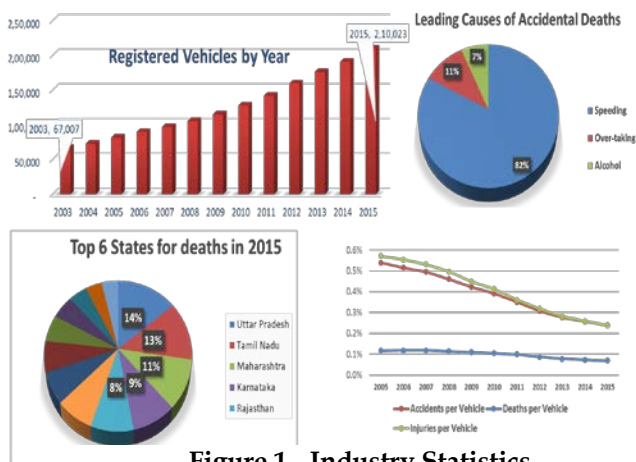


Figure 1 - Industry Statistics

Some of the key objectives to of The Motor Vehicles (Amendment) Bill, 2017 are - To provide the compensations provision to the victims of road accidents as fast as possible and in an efficient way. To reduce the road accidents by 50% by 2022 which are growing at a very fast rate due to some loose ends in the 1989 Act. To concentrate on the digitalisation of licensing process, and introduce electronic surveillance to reduce the traffic violations. By keeping in mind of the increasing fatalities, to give provisions for the road safety measures. To enhance the insurance services for the accident victims.

Figure 2 depicts the Motor Vehicle Act, 2017 Amendments with respect both citizens and the insurers.

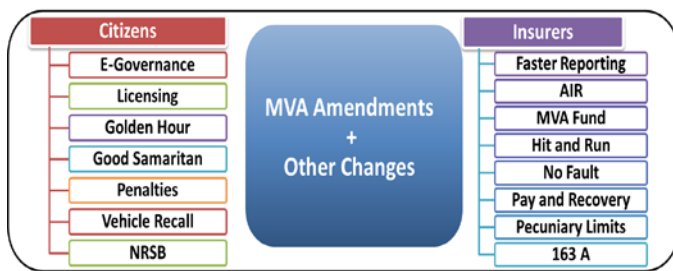


Figure 2 Motor Vehicle Act Amendments in regard of citizens and insurers

3. INSERTIONS AND AMENDMENTS IN THE BILL

In Figure 3 We can see below the Insertions and Amendments in the Bill that have an impact on Insurer.

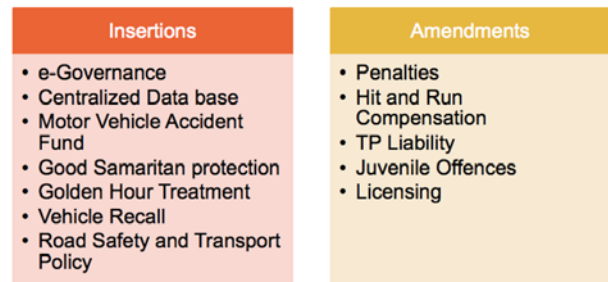


Figure 3 Insertions and Amendments of the Bill which have impact on Insurer

3.1 Insertions

3.1.1 Central Database

Under the 1989 Act, due to the lack of the centralized database of all the motor vehicles and the license there came a situation where many people started having multiple licenses which is not allowed legally. So, to overcome this problem the licensing has been digitized and the applicants' identification is linked to the UID mechanism. Under the section of 25A, "no driving license will be considered to be valid unless it has been issued with a Unique Driving License Number by the National Register of Driving Licenses". Under the Section 62B, any document of registration is considered to be justifiable if it has been granted with a "Unique Registration Number under the National Register of Motor Vehicles".

3.1.2 Vehicle Recall

Regulation over the motor vehicles in regard of the defective parts of the vehicle is done by the Central Government under the Insertion of section 110A and 110B. A manufacturer whose vehicles are recalled under this subsection shall - reimburse the customers who bought the motor vehicles for the full cost of the vehicle, or leasehold or to substitute the faulty motor vehicle with some other vehicle that has appropriate specifications which follow the standards mentioned according to this Act.

The manufacturer should report the Central Government regarding the flaws and defects and instigate the recall proceedings if he notices the faults in a motor vehicle and in this view the manufacturer is considered not liable for the fines. And also the motor vehicles should be recalled that cause harm to the environment, passengers and road users as specified in the Act.

3.1.3 Good Samaritan

Under section 134A, Good Samaritan is not considered to be accountable for any criminal or civil exertion for a death or a hurt of the victim who is involved in a motor vehicle accident, where such death or injury is due to the Good Samaritan's lack of care in showing or acting while providing his emergency medical or non-medical support or care.

3.1.4 E- Governance

Under section - 136A, the Central government has the power to make rules with respect to the enforcement of road safety including speed cameras and electronic monitoring, body wearable technology, speed guns, closed-circuit television cameras and such other technologies.

3.1.5 Golden Hour Treatment

The Central Government has the power to make a schema which provides the victims of motor vehicle accidents with cashless treatment during the golden hour and provisions for creating a fund for such treatment may be constituted in that scheme.

3.1.6 Motor Vehicle Accident Fund

This particular fund is used for the treatment of injured persons under section 162 and for providing the compensation amount to the representatives of the victim died in the hit and run accident. Also, the maximum liability under this scheme is generally prescribed by the Central government including its records and statements.

3.1.7 Penalties

Under section 192B, Penalties are increased to great extent regarding the people who break the regulations. And also for an offence committed by a juvenile under the section 199A, either the caretaker of that juvenile or the vehicle's owner is considered to be the liable person for the punishment and the offences might be in respect of licensing, registration of the vehicle, or accidents.

3.2 Amendments

3.2.1 Hit and Run Compensation

Central Government shall provide the required compensation in respect a person's death, or very severe hurt to the person arising from the hit and run motor vehicle accident cases. In case of the death of a person a fixed lump sum of Rs. 2 lakhs or any such higher amount of money as specified by the Central Government is provided and in the case of very severe hurt of the victim a fixed amount of Rs. 50,000 or any such higher amount is entitled to the victim.

3.2.2 Third Party Liability

According to the present Motor Vehicle Act, there is no maximum limitation set on the liability of the insurer. This limitation of liability has faced with so much of confrontation and defiance from several sections including the Standing Committee on Transport. However, the clause is slightly modified; it is no longer mentioned about the amount but instead Centre has the authority to set the limit for the insurers' in consultation with the Insurance Regulatory and Development Authority (IRDA).

Under the current Act, "the insurer does not have to pay any amount if there has been a breach of policy conditions such as if the person driving the vehicle (when the accident took place) does not have a valid licence". And this Bill also adds 2 more such constraints: "(i) if the person was driving

under the influence of alcohol or drugs; (ii) if there is non-receipt of premium as required under section 164-B of the Insurance Act 1938".

3.2.3 Juvenile Offences

This Bill says that, "The provisions under this Act shall not apply to such guardian or owner if the juvenile committing the offence had been granted a learner's licence under section 8 or a driving licence and was operating a motor vehicle which such juvenile was licensed to operate. Where an offence under this Act has been committed by a juvenile, the registration of the motor vehicle used in the commission of the offence shall be cancelled for a period of twelve months. Where an offence under this Act has been committed by a juvenile, then such juvenile shall be eligible to be punished by fines as provided in the Act while any custodial sentence may be modified as per the provisions of the Juvenile Justice Act, 2000".

4. HIGHER PENALTIES

4.1 Some Statistics of 2016 regarding Road Accidents

- 84 % of the road crashes were due to the fault of the driver, which killed 1,21,126 people and injured 4,14,785.
- 1.4% of the crashes were caused by defects in the vehicle, which killed 2,823 people and injured 6,956.
- Overloading of vehicles caused 61,325 crashes, which killed 21,302 people and injured 61,857.
- Road crashes due to non-use of helmets resulted in 10,135 deaths and non-use of seat belts led to 5,638 deaths.

4.2 Increasing Penalties

In order to achieve increased compliance with the prevailing road rules, the new bill proposes a steep increase in penalties for violations. Complying with the terms set by Central Government, a State Government, can provide a multiplier which is not more than 10 and not less than 1, which is to be pertinent to each fine mentioned under this Act. Different multipliers may be applied to different classes of motor vehicles, specified by the State Governments for these purposes. Under section - 199B, the fines mentioned in this Act shall be increased to some amount which is not more than 10% of the prevailing fines, on an annual basis of every year as notified by the central government.

4.3 Rules regarding the Manufacturer of Motor Vehicles and its Components

The new Motor Vehicle act says that, "A manufacturer, or a dealer of motor vehicles, who sells or delivers or alters or offers to, a motor vehicle that is in breach of the rules mentioned in Chapter VII or the tenets made in it, shall be imprisoned for a specific term which even may get extended to 1 year, or may be penalised with a fine of Rs. 1,00,000 per such motor vehicle or with both".

Any producer or maker of the motor vehicles who neglects or fails to act in accordance with the terms mentioned in Chapter VII or canons made thereunder, will be imprisoned

for a specified term and later that term may even get extended to 1 year, or may be with a penalty which may get extended to Rs. 100 crore or with both.

Any motor vehicle owner who alters the motor vehicle, also by the means of retrofitting of the parts of the vehicle, in a way which is not acceptable under this Act or the tenets made thereunder will be imprisoned for a specified term and that term may even get extended up to 6 months, or a penalty of 5,000 rupees per such alteration or with both.

4.4 Aggregators

Any aggregator who is in breach of the rules and regulations of section 93 (section 93 refers to the tenets in respect of the licenses, permits and transportation of the aggregators) or of any guidelines made thereunder can be subjected to a penalty up to Rs. 100,000 but also not less than Rs. 25,000. Any aggregator who is in breach of rules of the licence granted under section-93, and is not deputed by the State Government as a mandatory condition, shall be subjected to penalty of Rs. 5000.

4.5 Disqualification of License

This Act proposes a new correction home-like institution for those who violate the traffic rules repeatedly. Names of such people will be kept in public domain and they all have to go through a "driver refresher training course" to get back their driving licences at the end of the disqualification period. If the licencing authority believes that then a penalty of 1,000 rupees and 3 months of licence disqualification for overloading of two-wheelers and not wearing helmet. And a person driving despite disqualification of licence might face penalty of 10,000 rupees.

The government, for the first time has proposed some rules for the ab aggregators like Uber, Meru Ola cabs. Any contravention with the licence conditions by these companies will lead to a penalty of Rs 25,000 to Rs 1,00,000.

5. E-GOVERNANCE AND LICENSING

According to this Act, Aadhar card will be mandatory for obtaining new driving licence and vehicle registration certificate. The mandate will likely help curb the issue of fake licenses or duplicate licenses being issued. Once this bill is approved, all the motor vehicle dealers will be authorised officially to issue vehicle numbers and their registration through an "All-India Electronic Register". As per the Ministry of Road Transport and Highways, total number of digitized vehicles in India 243,510,146.

As per the Ministry of Road Transport and Highways and statistics based on RTOs running on Vahan 4.0 and Sarathi 4.0 are, total number of vehicles registered till date are 20.21 Crore, total number of Driving Licences issued till date are 8.24 Crore.

6. MOTOR VEHICLE ACCIDENT FUND (MVA FUND)

The core purpose of this particular fund is to provide with a mandatory insurance cover to all the motor vehicle users in India. The Motor Vehicle Accident Fund is utilized for - the treatment of the road accident victims in accordance with golden hour scheme, providing a compensation to the representatives of the victims died in a hit and run cases, providing a compensation to the victims for grievous hurt in hit and run cases. The maximum amount of liability that shall be paid in each of the above cases shall be prescribed by Central Government.

6.1 Current Regime

In 'Hit & Run' cases, accident victims can get a compensation through a special fund mentioned in Section 163 of The Motor Vehicle Act, 1988 called "Solatium Fund". The amount of Compensation is Rs. 25,000/- in case of death of a person and Rs. 12,500/- for severe hurt of the person. Every year some proportion of their Gross Written Premium is contributed towards thus fund by all the general insurers in India. However, in case the vehicle has not been insured, the victim/dependents has the right to claim compensation from the owner/driver under Motor Vehicles Act, 1988.

The payment is made usually within 15 days from the date of receipt of the sanction order from the Claims Settlement Commissioner. Contributions to the Solatium Fund are made by the General Insurance Corporation according to an agreed formula and the latter nominates one of its offices or an insurance company in every district for settlement of claims.

6.2 What are the changes under the new act?

This particular Fund will be credited through - the payment quoted and authorized by the Central Government; or a loan or an allowance made by the Central Government; or balance of the Solatium Fund, as it holds immediately before the Bill commencement.

6.3 How will the fund be sourced?

The Central Government, under section 164A, may make some schemes for the financial provision of pro tem cushion to claimants pleading for compensation. Other sources for this fund, if there are, are prescribed and stipulated by Central Government are considered to be the sources of MVA Fund.

7. ACCIDENT RELIEF

7.1 Golden hour treatment

"Golden Hour means the time period lasting one hour following a traumatic injury during which there is highest likelihood of preventing death by providing prompt medical care". A scheme for the cashless treatment of victims of any accident in the golden hour shall be made by the Central Government and such a scheme may encompass the provisions for creation of a fund to support such treatment.

7.2 Good Samaritan Protection

"Good Samaritan means a person, who is in good faith, voluntarily and without expectation of any reward or com-

pensation renders emergency medical or non-medical care or assistance at the scene of an accident to the victim or transporting such victim to the hospital. Under section-134A, in case of the death of a victim in an accident due to usage of a motor vehicle, a Good Samaritan is not liable for any civil or criminal action, where such a death or injury is resulted from the Good Samaritan's negligence in failing to act or acting while rendering any emergency non-medical or medical care or assistance to the victim".

According to a survey made by Save Life Foundation, after Good Samaritan Law came into effect, the willingness of bystanders to help road crash victims has increased to 88%. But there are still 62% of the respondents are reluctant to help the road crash victims because of factors like police issues and appearances for the legal proceedings in court. The Supreme Court Judgment on Good Samaritan Law states that "The disclosure of personal information, such as name and contact details of the Good Samaritan is voluntary and optional including in the Medico Legal Case (MLC) Form provided by hospitals."

7.3 Hit and run compensation

Under section 161, "(i) a compensation of 2,00,000 rupees or such higher amount as prescribed by Central Government shall be payable in case of death of any person resulting from a hit and run motor accident; (ii) a compensation of 50,000 rupees or such higher amount as prescribed by the Central Government shall be payable in case of grievous hurt of any person ensuing from a hit and run motor accident". A contravention of any provision thereof shall be punishable with imprisonment which may extend to 2 years, or with fine which shall not be less than 25,000 rupees but may extend to 5,00,000 rupees or with both.

7.4 Higher compensation for no fault

Under section 164 - "Special provisions as to payment of compensation on structured formula basis", the maximum amount a claimant can get on no-fault basis is Rs. 5 lakhs in event of the person's death and Rs. 2.5 lakhs in cases of a person's severe hurt. In any claim compensation under the above scheme, it is not required for the claimant to adjure or establish that it is because of an unlawful act or negligence or default of the vehicle owner the death or injury has occurred. In the above case, if at all any compensation amount of claim was already settled under some other regulation for the time being in force, then such amount of claim compensation should be lessened from the compensation amount that is payable under section 164. Some significant impacts made due to this provision are Increase in Liability for the Insurers, reduce in Investment Income and Speedy disposal of these claims.

8. THIRD PARTY LIABILITY AND COMPENSATION

Under the previous law, a claim can be filed at any time the claimant wants, without any cap or a limitation of time. It is a settled law that a Claims Tribunal does not have any power to accept or allow the delay unless the Bill specifically grants such power.

The approval of this Bill will authorize the insurers to dismiss the claims by anyone appealing for the claim compensation outwith the stipulated time period of 6 months. With the delays in reporting, there is great chance of fraudulent cases going up which in turn takes a long and difficult process to establish the fraud. 5% to 10% of claims are reported after 5 years of an event of accident occurring. This makes the insurers job difficult to make provisions for reserves and settle claims faster. Because of this, the insurance companies are obliged to keep aside some funds for Incurred But Not Reported (IBNR) claims and reserves for claims that are outstanding under the third party motor segment as cases go on for longer time period and in many cases claims are reported after 5-7 years.

But fixing a time for filing claims will help in boosting the claim compensation settlement. This also helps the insurers to have a better accounting of reserves which eventually leads to the better accuracy in pricing. There is a chance of premium on motor insurance falling as insurance companies are facing lesser liability, could lower the charges on automobile third party premium.

8.1 Statistics from Insurance Information Bureau of India (IIB)

- Out of all the Third Party claims that are settled in the FY year 2016-17, almost 90% of claims are from the last ten accident years.
- An extensive and substantial amount of TP Reported Claims by Accident Year-all class of vehicles come from years 2014-16.
- Among all the class of vehicles, maximum death cases were reported from Goods Carrier at 42% whereas Private Car contributed 21% of the total deaths.
- For injury claims, all the classes of vehicles had almost equal share at an average of 20-25%.

8.2 Factors Impacting Reporting and Settlement Patterns

Factors that affect Reporting Delays are emotional trauma undergone by the victim or victim's representatives; lack of awareness regarding the traffic rules, insurance terms and conditions, claims tribunal office; fraudulent motives of claiming a compensation; stringency of the law enforcement. Similarly, we've Factors affecting the Settlement Delays like police investigation; accident information report; reporting delay; lack of sufficient reserves with the insurer; court settlement delays; some problems related to the policy wordings.

Impacts of changes in Reporting Delays - Under the section 166, the cap of 6 months for filing a claim can imply a Reduction in the Reporting delays to a large extent; Reduction in Fraudulent Cases, Improvement of Reserves Estimates and Appropriate Pricing.

Impacts of changes in Settlement Delays – Faster settlement of claims due to the offer made by the insurance company (settlements within 30 days by consent), lesser likelihood of fraud, higher frequency of claims pouring in, liability might go up due to onetime compensation in case of no fault liability, can make better investment choices as IBNR claims might reduce in frequency.

8.3 Accident Information Report

Under section 159, based on the investigation done, the police officer shall make an accident information report within 3 months to catalyse the claim settlement process and submit to the Claims Tribunal or any such agency as prescribed.

8.4 Immediate Liability

Under section 164, the motor vehicle owner or the insurer who is authorised is obliged to pay Rs. 5 lakhs in case of death or Rs. 2.5 lakhs in case of grievous hurt to the victim or victim's legal heirs due to any accident ensuing out of the usage of motor vehicle.

For the above compensation scheme, it is not required for the claimant to adjure or establish that it is because of an unlawful act or negligence or default of the vehicle owner the death or injury has occurred. Under section 173, No appeal shall lie against any award of a Claims Tribunal if the amount in dispute in the appeal is less than 1 lakh rupees.

8.5 Defence for liability

Under section 150, the insurer can defend their third party liability in some cases like, when the person driving is disqualified for either obtaining or holding a license, or the person driving is under the influence of drugs or alcohol, or the fatality is caused by wars, riots, or civil commotions. A non-receipt of premium is also provided as statutory defence-Violation of 64 VB of Insurance Act (which states that no amount risk is assumed unless the premium is received by the insurer in advance).

9. IMPLICATIONS TO INSURERS BASED ON MOTOR VEHICLE BILL, 2017

9.1 Reasons for Higher Costs

9.1.1 Faster claims reporting

An amendment has been made in section 166, i.e. if a claim has not been made under the first 6 months of the event (accident) occurring then such an application of compensation shall be rejected. And this cap on filing a claim has resulted in faster claims reporting and compared to previous years.

9.1.2 More Claims Reported

Under section 164 – “Special provisions as to payment of compensation on structured formula basis”, the maximum amount a claimant can get on no-fault basis is Rs. 5 lakhs in the case of a person's death and Rs. 2.5 lakhs in case of a person's severe hurt. Under the above claim compensation scheme, it is not required for the claimant to adjure or estab-

lish that it is because of an unlawful act or negligence or default of the vehicle owner the death or injury has occurred. Thus leading to more number of claims being reported. Some other significant impacts made due to this provision are Increase in the Liability for the Insurers, Reduce in Investment Income and Speedy disposal of these claims. Currently the average cost for death is around 4-6 lakh rupees.

9.1.3 Faster claims settlement

Under section 159, based on the investigation done, the police officer shall make an accident information report within 3 months to catalyse the claim settlement process and submit to the Claims Tribunal or any such agency as prescribed. After receiving the accident information report, the insurance company will be appointing an officer to monitor and oversee the process of claims settlement in regard of such accidents. The officer can make an offer to the person who is claiming regarding the settlement within thirty days before the Claims Tribunal.

(i) If the claimant accepts the offer, then the insurer should make the payment settled by consent within 30 days starting from the date of receipt in which the settlement is recorded. (ii) And if the claimant rejects the above offer then the Claims Tribunal shall fix a date of hearing to adjudicate such claims. From the above cases the 1st case implies that settlement of claims will be done in a faster way.

9.1.4 Contribution to MVA Fund

This particular fund is used for the treatment of injured persons under section 162 and for providing the compensation amount to the representatives of a person who died in the hit and run accident. The maximum liability under this scheme is generally prescribed by the Central government including its records and statements. The MVA Fund's source of income is prescribed by the Central Government. And MVA Fund is expected to be higher than the Solatium Fund because of the benefits it provides like hit and run compensations (which has been increased in this act). So thus leading to the increase in the contributions from the insurer to the MVA Fund.

9.2 Reasons for lower costs

9.2.1 Higher Penalties

According to this act, to ensure the safety of road users regarding the over-speeding, size of the vehicles, driving licenses, Aggregators, overloading there is a hike in the penalties of as much as 5 times of the previous penalty rates. Under section – 199B, the fines provided in this Act shall be increased some amount which is not more than 10% of the prevailing fines, on an annual basis of every year as notified by the central government. Whoever, being a manufacturer, importer or dealer of motor vehicles, sells or delivers or alters or offers to, a motor vehicle shall be punished with an imprisonment for a specific term which may get extended to 1 year, or with a fine of 1,00,000 rupees per such motor vehicle or with both. Thus to ensure the reduction in the violations of rules of road safety leading to more precautionary usage of vehicles and lesser accidents.

9.2.2 Penalties for road contractors

Road contractors and related construction agencies are held accountable for the inappropriate road design, faulty resources used for the roads laid, poor construction and maintenance of roads. This lead to the betterment of the road safety for avoiding some disasters like crumbling or deterioration of the roads, flyovers and bridges.

9.2.3 Golden Hour Treatment

Doctors suggest that 50% of road fatalities can be prevented if the victims are provided with necessary medical care within the first one hour after the accident takes place. To facilitate this particular requirement, in this Act, an insertion of Golden Hour Treatment is made so that the fatalities are reduced to a great extent. And the cashless treatment that is mentioned in this insertion helps to convert so many deaths into injuries by saving the victims' lives.

9.2.4 E-Governance and De-dup

According to this Act, linkage of Aadhar card number to existing driving license is mandatory for the individuals. Aadhar card will be mandatory for obtaining new driving licence and vehicle registration certificate. The mandate will likely help curb the issue of fake licenses or duplicate licenses being issued. Once this bill is approved, all the motor vehicle dealers will be authorised officially to issue vehicle numbers and their registration through an "All-India Electronic Register".

By introducing e-governance, recent developments like Vahan and Sarathi Schemes by the Ministry of Road Transport and Highways, the attainment of driving license and learner's license has become easier. And by digitalization of licenses under one umbrella the duplication of licenses can be reduced to a great extent.

9.2.5 Transport Policy

The Central Government with the consultation of State governments may develop a National Transportation Policy to provide a framework in which any vehicle needs to operate and regulate the permits and schemes in respect of transportation of goods to improve safety of road transportation. This policy aims to improve the partnership of public-private organisations in the transportation sector; foster the innovation, competitiveness, efficient use of resources, smooth mobility.

9.2.6 Lesser TP cases contested

With the help of amendment 164 previously, the number of third party cases contested would be less due to the offer made by insurer for claims which are less than 5 lakhs for death and 2.5lakhs for injuries.

The Motor Vehicle Bill adds 2 more such constraints: "if the person was driving under the influence of alcohol or drugs and if there is non-receipt of premium as required under section 164-B of the Insurance Act 1938." In a way this amendment makes sure that all the paper work of the insurance to be more stringent and insured to be more vigilant because of which we will be able to see the reduction in the total number of third party cases contested.

9.2.7 Vehicle Recall

Under section 110A and 110B, "a manufacturer whose vehicles are recalled under this subsection shall - reimburse the customers who bought the motor vehicles for the full cost of the vehicle, subject to any hire purchase, or leasehold - hypothecation agreement, or to substitute the defective motor vehicle with another vehicle that has a good and better specifications which complies with the standards mentioned according to this Act." Thus leading to substantial amount of reduction in both the OD and TP claims because of the good health of motor vehicles used by citizens.

10.FRAMEWORK FOR ASSESSING THE IMPACT

10.1 Pricing Uncertainty and Reserving Uncertainty

Figure 4 depicts the Pricing and Reserving Uncertainties due to the Amendments made in the Bill.

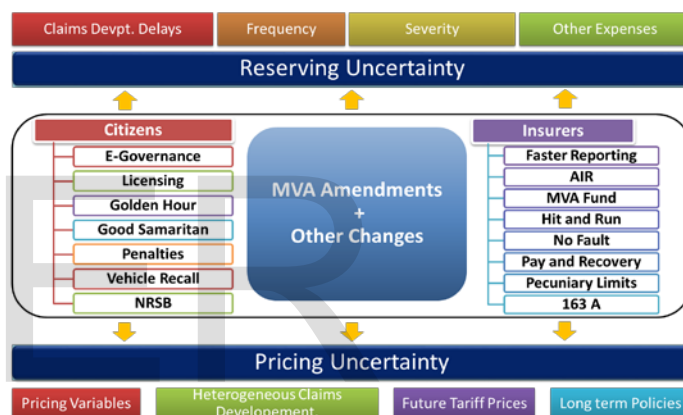


Figure 4 - Insertions and Amendments of the Bill which have impact on Insurer

Overall, the various changes brought through the Amendments are expected to lead to increased safety on the roads and at the same time would lead to additional uncertainty for actuarial reserving and pricing.

With a 6 months' cap on claims reporting and a 3 months' cap for the insurer to give the first quote, the reporting and settlement delays are expected to decrease causing reduction in claims settlement uncertainty. With faster claims reporting, insurers can adjudicate the claims better and hence will be able to reduce fraudulent claims. Frequency in general is also expected to come down with increased safety measures and penalties.

Figure 5 shows us the Reserving Uncertainty and the Variables Impacted like Claim Delays, Frequency, Severity and Other Expenses.

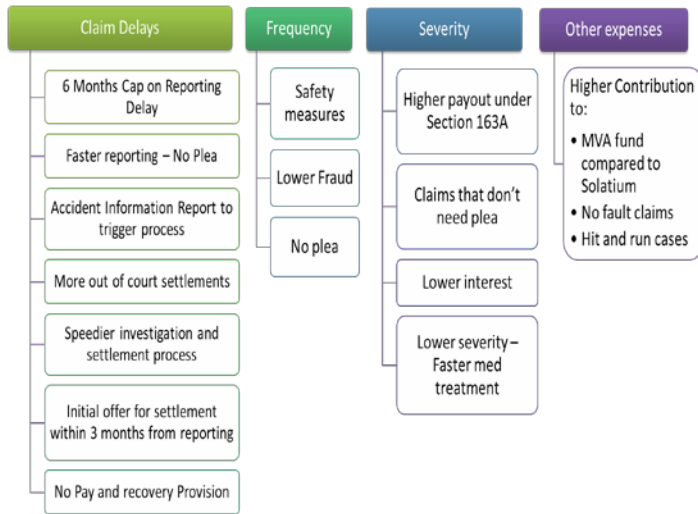


Figure 5 - Reserving Uncertainty and the Variables Impacted

We can also expect an increase in severity as the pay-out for death claims without having to file a plea has been increased to 5 lakhs. Current industry average is about 4-6 lakhs for death. Hence, increasing the minimum to 5 lakhs up on a valid claim is expected to drive up the severity.

In Figure 6 below, we can see the Pricing Uncertainty and Variable Heterogeneity in Tariff Variables, Reserving Variables and Explanatory Variables for claims movement.

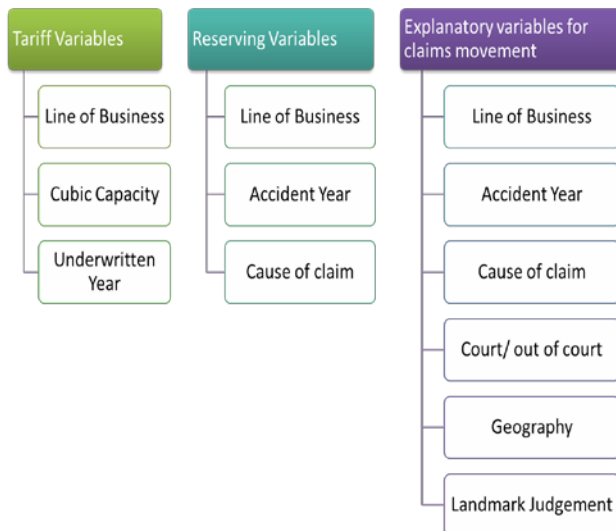


Figure 6 - Pricing Uncertainty and Variable Heterogeneity

In Motor Third Party Insurance, IBNR contributes to a significant amount of the overall claims cost. Changes in reserving variables would have impact on the burn cost as well. But typically, these changes happen at a more granular level than what our reserving looks at. Which means, when assessing our profitability or impact, we can only go as granular as our reserving results and assume homogeneity within the reserving cohort.

Figure 7 depicts Heterogeneous Claims Developments and the Geography wise relatives for Pricing.

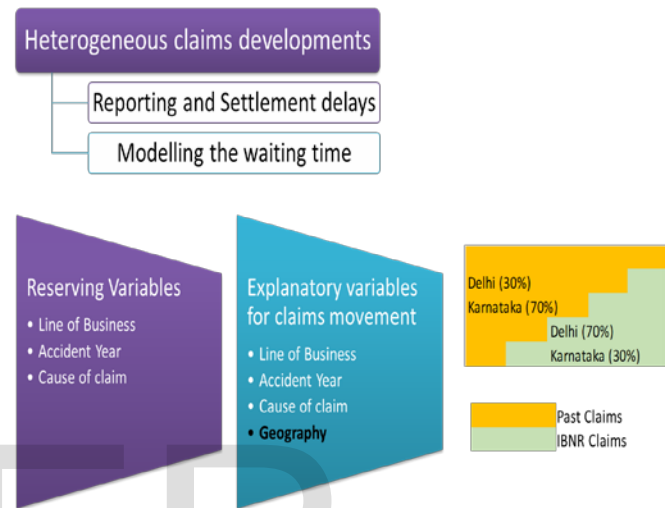


Figure 7 - Heterogeneous Claims Developments and Geography wise relatives for Pricing

Take geography as an example. Courts in Karnataka might traditionally settle claims at a faster pace than courts in Delhi. Which means that most of the claims that I use in my triangle are from Karnataka, whereas most of the IBNR can be expected from Delhi. Hence, the reported LR of Delhi is better than the reported LR of Karnataka. Since we don't have separate reserving results for Delhi and Karnataka, we assume that the Ultimate LR of Karnataka is higher than Delhi.

Figure 8 below shows us the graph of Waiting Time Distribution for Reporting Delay.

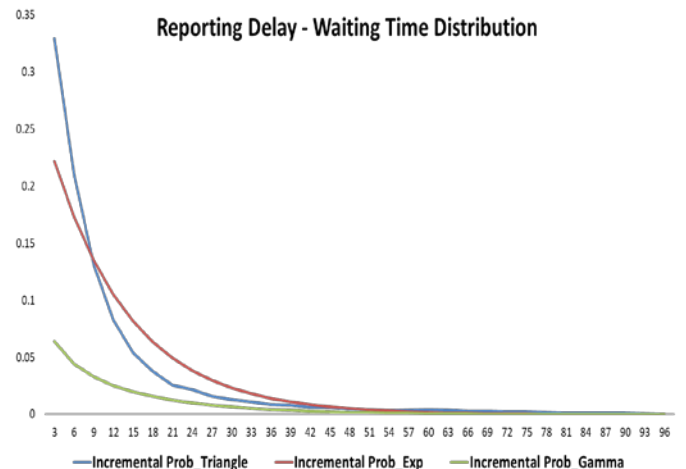


Figure 8 - Reporting Delay - Waiting Time Distribution

In order to be able to derive different reserving results to take differential claims settlement delays into account, we can model waiting time distribution as a positively skewed variable as we see above.

And then once we arrive at rate relativities by geography, IBNR results can be modified to differentiate between geography. We can thus allocate IBNR at a more granular level.

10.2 Variable Boundary Conditions and Impact Distributions

In order to test for various possibilities of changes in the variables, we can define the various minimum and maximum values for input variables as follows:

In Figure 9 below we define the minimum and maximum boundary conditions for the variables.

Variable	Min	Max
Reporting Delay	10% reduction in reporting delay	All claims are reported within 12 months
Settlement Delay - Court	10% reduction in overall settlement delay	All claims are settled within 4 years
Settlement Delay - Out of Court	10% reduction in overall settlement delay	All claims are settled within 2 years
Frequency	20% reduction in frequency	20% increase in frequency
Severity	10% increase in Severity	30% increase in severity
Other Expenses	10% increase in Severity	30% increase in severity

Figure 9 - Variables and their Boundary Conditions

We can then generate different output variables for each combination of input parameters. We can thus, arrive at thousands of output variables for each of the parametric combinations. These can be plotted to form distributions for frequency, severity and IBNR as shown below in Figure 10.

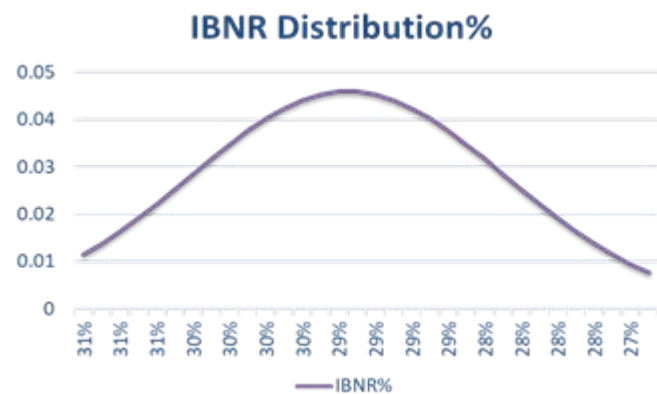


Figure 10 - (i) IBNR Distribution

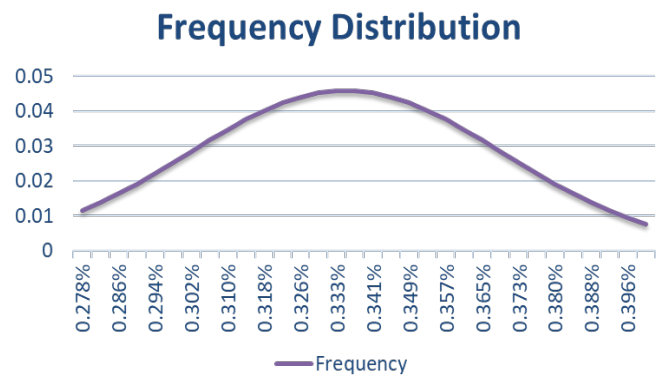


Figure 10 - (ii) Frequency Distribution

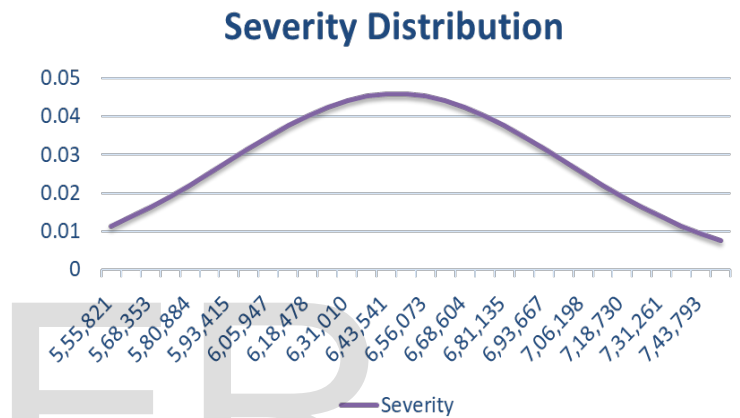


Figure 10 - (iii) Severity Distribution

	IBNR%	Frequency	Severity
Current	39%	0.359%	4,35,995
Min	31%	0.288%	5,27,554
Max	27%	0.431%	7,36,831
Mean	29%	0.359%	6,32,192
Std	1.11%	0.037%	53,387

11.CONCLUSION

The various aspects high lightened in the paper provide a suitable starting step towards understanding the implications and quantifying the possible impact these changes can have on the operations of an insurer. The amendment bill is an important step initiated by the government to benefit the society as a whole and make the roads safer. At the same time, it also calls for a streamlined process for settlement of insurance claims and improves the benefits to the end consumer. Insurers as important stakeholders in the industry have to step up their role to adapt to the changes and ensure they manage the uncertainties involved suitably.

12. NEXT STEPS

The paper signs off on a suitable note to quantify the impact of the various changes. The next steps would be to use appropriate assumptions to generate various scenarios that can arise due to different aspects highlighted in the bill. Once scenarios are generated, it is essential to study the impact under each of them. Since there can be thousands of possible scenarios, the challenge would be to come up with a suitable mechanism to calculate the reserves under each of these scenarios. This calls for a solution that is able to venture beyond the traditional actuarial techniques and leverage enablers from the field of technology.

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