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IMPACT OF PROVISIONS OF LEGAL NOTICE NUMBER 161 OF 2003 ON THE UNDERWRITING AND CLAIMS PROCESSING BY PSV INSURERS IN KENYA

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Abstract

The purpose of the study was to determine the impact of Legal Notice Number 161 of 2003 popularly known as the "michuki" rules with respect to Kenyan PSV insurer's underwriting and claims processing. The study focused on 'Matatus' where there was little enforcement and compliance of the law prior to the introduction of the legal notice. In 2003, the new NARC government introduced reforms to PSV operation through Legal Notice 161 whose aim was to reduce PSV related accidents, improve commuter safety, stamp out illegitimate drivers and restore order to the PSV sector. The study objective was to determine how these provisions of Legal Notice Number 161 affected the underwriters of PSV insurers in Kenya. The literature review explored concepts in risk and insurance, reviewed underwriting considerations in commercial motor vehicles, moral hazard and adverse selection challenges in automobile insurance, commercial motor vehicle insurance claims process, and the commuter transport sector in Kenya. The study looked at the situation before and after the implementation of legal notice number 161. The study used an exploratory survey design. The population of the study was confined to six insurance firms which insured PSV. The primary data was collected by means of a self-administered questionnaire that employed open and closed ended questions. Descriptive statistics consisting of the arithmetic mean, standard deviation, and graphical methods were used to present the findings. The study concluded that PSV insurers in Kenya placed a lesser emphasis on the conduct of the driver and the crew. After the implementation of this legal notice number 161 greater emphasis was placed on risk assessment of the

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mechanical conditions of the vehicles. On the other hand, claims related factors and fraud detection were top priorities before and after the implementation of legal notice number 161. The study findings recommended Kenyan government consistency in enforcing compliance of the LNN 161 of 2003 regulations.

Keywords: Legal notice number 161, Matatus, Public service vehicles, PSV insurers, Matatu Owners Association, National traffic safety authority

INTRODUCTION

Public passenger transport in Kenya and especially in urban areas is dominated by 'Matatu' vehicles. The term 'Matatu' (popular term initially used to refer to the 14-seater vehicles used to transport fare paying passengers) was thought to be derived from a local Kikuyu vernacular term "Mang'otore Matatu", which means "thirty cents". In the 1960s and 1970s, this was the standard charge for every trip made. In the early 1960s, the total number of Matatus operating in the country were less than 400 and did so in the form of taxis.

The origins of 'Matatu' sector could be traced from the type of transport system that operated in towns in the early 1960s. Initially, the Kenya Bus Service existed as the sole legal provider of public transport services but only operated in major towns such as Nairobi (Kariuki, 2020). They were, however, not able to cope with the increased demand for the urban and upcountry transport services.

Odero, Khayesi and Heda (2003) observed that Kenya, with an average of 20 deaths per crash each day, being one of the highest road fatality rate in relation to vehicle ownership in the world. They noted that on average, the annual death rate per crash was 6.8%, which was 30 to 40 times greater than in highly motorized countries. Despite this huge burden, road safety measures in place were ineffective, characterized by sporadic knee jerk reactions of crack downs on motor vehicles following a tragic road crash.

Public Transport Service Reforms

The high rate of crash fatalities seen earlier were occasioned by the pre-2003 Government's neglect of the road sub-sector over the past 10 to 15 years. In October 2003, the new National Rainbow Coalition (NARC) Government took two measures to correct the situation. First, it developed the integrated national transport policy and secondly, introduced reforms in the operation of Public Service Vehicles (PSVs) by publishing Legal Notice Number 161.

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Legal Notice Number 161 sought to regulate the Public Service Vehicle (PSV) sub-sector. The key objectives of the Legal Notice were to: reduce accidents caused by over speeding; enhance commuter safety; ensure responsibility, accountability and competence of drivers and conductors; eliminate illegal drivers, conductors and criminals that had infiltrated the sector; and facilitate identification of vehicles and restrict their operation to authorized routes (Government of Kenya [GoK], 2004).

The provisions of Legal Notice Number 161 were: Fitting of speed governors in all PSVs and commercial vehicles whose tare weight exceeded 3,048 Kgs in order to limit speed to 80 kph; Fitting of seat belts on all vehicles (public, commercial and private); employment of drivers and conductors on permanent basis; issuing of badges and uniforms to PSV drivers and conductors; indication of route details and painting of a yellow band on Matatus for purposes of easy identification; re-testing of drivers after every two years and finally, every driver to prominently display on the front windscreen, his or her photograph of postcard size, showing the head and shoulders taken full without a hat.

The photograph together with the driver's copy of identity card were to be approved by a police officer of a rank above that of a superintendent. The other requirement was that those vehicles meeting these conditions were to be inspected by the Government motor vehicle inspection centres in different parts of the country for testing and certification. The legal notice indicated that any person who contravened or failed to comply with these provisions, would be guilty of an offence leading to specified fines or face imprisonment. A passenger found not wearing a seat belt would also be liable to pay a specified fine.

There were a number of criticisms of the Legal Notice Number 161. First, (Gachuki, 2004). observed that its provisions were not new since the Traffic Act 403 section 42(1) and (3) of 1975 specified speed limits for PSV vehicles and Act No. 10 of 1984 set out rules for drivers and conductors. Mconcluded observed that the key weakness of the LNN 161was lack of enforcement. Secondly, Gachuki noted that the rules were discriminatory in so far as their enforcement targeted mainly PSV. Gachuki argued that the rules should be applied to all vehicles including private ones. The reason for his argument was that whereas say, Matatus caused about 19% of the accidents on Kenyan roads, private vehicles contributed to 25% of the accidents.

Infiltration by informal transport providers in the 1990s led to an upsurge of 17,600 of public service vehicles commonly referred to as "matatus" operating in the industry (Lotuiya, 2014) and by the year 2003, this number stood at 40,000. As at 2016, the number of matatus operating on Kenya's roads was estimated to be over 100,000 (NTSA, 2016).

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Growth in the motor industry and more specifically in the PSV sector has been tremendous in both revenue and in the numbers of vehicles in the last two decades. In the four years between 2008 and 2012, for instance, the number increased by approximately 51% from 61,886 to 93,343 (KNBS 2013). As at 2017, the number of matatus was 69.62% constituting the largest 5 proportion of the licensed PSVs. Despite this growth, the PSV insurance industry has failed to keep pace and enjoy the full benefits of this expansion. Invesco. A report by Insurance Industry expert Alexander Forbes presented to the Matatu Owners Association national governing council on 16th September 2016, revealed that PSV insurance companies were undercharging KNBS. (2019). Lotuiya, (2014) observed that challenges faced in PSV insurance sector in Kenya were not as a result of the legalities but the issue was on the enforcement mechanism? (Unpublished LLM Thesis). The University of Nairobi, Kenya.

The LNN 161 provisions were expensive to adopt because they involved installation of speed governors and reconfiguring the internal seating arrangement. However, it had been pointed out that part of this high cost would be recovered from reduced insurance premiums. These regulations resulted in reduced income for the operators owing to the fact that the seating capacity of the smaller 'Matatu' vehicles (a standard 14-seater vehicle commonly referred by the vehicle's model or its commercial brand name) was reduced from 18 to 14 passengers. There was also additional monetary loss of time owing to the fact that each PSV vehicle had to be inspected by the Vehicle Inspection Unit once the seating capacity was modified and the gadgets had been fitted. Finally, the enhanced regulatory requirements increased the possibility of extortion for bribery by the principal agents of the government (Gachuki, 2004).

The Public Service Transport Insurance Sector in Kenya

In 1973, the then President Jomo Kenyatta, responding to lobbying from 'Matatu' operators declared that Matatus were a legal mode of transport. They could carry fare paying passengers without obtaining special licenses to do so but had to comply with existing insurance and traffic regulations (Aduwo et al., 1992). By 1990, of the 333,300 vehicles registered in the country, 17,600 were Matatus (Bhushan, 1993 cited in Muyia, 1995). By 2003, the numbers of Matatus operating in both urban and rural areas were estimated at 40,000 (Asingo, 2004). They provided employment to over 160,000 persons and generated 1.09 billion in revenue for the Government in the form of charges for licenses, duty, Value Added Tax and other taxes (Chitere et al., 2005).

Other Public Service Vehicle (PSV) passenger carrying operators also include minibuses and buses. Albeit this category was not as notorious as the 14-seaters in terms of non-compliance to Government regulations, they also did not comply with many safety features as

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subscribed to by insurers and the Government. On the flipside, the growth of the passenger transport sector was accompanied by increasing road accidents that threatened the commuters' safety. Between 1963 and 1989, these accidents increased from 3,578 to 10,106, an increase of approximately of 282% (Muyia, 1995). Of the casualties arising, 10.2% were fatal, 33.7% represented serious injuries and 56.1% were minor injuries.

Before the advent of Legal Notice Number 161, the working hours in the informal PSV sector were long, workers were liable to fatigue, they were underpaid, they would engage in drunken driving and many lacked formal training in driving and they did not have valid driving licenses (Wandere, 2021). Additionally, there was the use of young, inexperienced drivers (or squad drivers) as backups to the regular employed drivers. Many of the PSV's were unroadworthy vehicles lacking the necessary safety features such as seatbelts and driving mirrors. There was also lack of law enforcement.

Laxity in law enforcement invited criminal elements such as the *Mungiki* and *Taliban* (criminal gangs who extorted money from the 'Matatu' owners), a situation that in turn led to anarchy in the sector. Other traffic offences included PSV owners setting high daily income collection targets that necessitated over speeding and overloading and the presence of fragmented cartels to whom PSV owners paid money to be allocated routes. There was also the use of fake motor insurance certificates and collusion between operators and police to defraud insurers. The insurers bore the brunt of the many ensuing accidents and insurance claims (Muiya, 1995).

Death on Kenyan roads posed a threat to the country's economy and was causing concern within the insurance industry. In response to this state of crisis, insurers would refuse to cover routes with high accident and claim rates in order to limit their risk exposure (Mbogo, 2008). Local insurers additionally insisted on PSVs under comprehensive insurance cover using insurer approved garages for any repairs, maintenance or inspection to minimize fraud. Use of squad drivers implied that when underwriting 'Matatu's', insurers had to factor in the increased risk. In order to counter the increased exposure, insurers normally charged a higher excess when the 'Matatu' driver is below 25 years of age.

Underwriting of PSV was very risky to cover because of the rapid industry's growth that was accompanied by increased road traffic accidents which threatened the safety of Kenyan travellers. The number of fatalities was reported to have increased from 1,800 in 1990 to 2357 in 2015 (NTSA, 2016). The causes of the accidents and deaths could be linked to reckless driving, un-roadworthy vehicles, overloading and poor conditions of the road (Wekesa, 2010).

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Statement of the Research Problem

The introduction of Legal Notice Number 161 was aimed at curbing the malpractices in the 'Matatu' sector cited earlier. Whether their objectives were achieved remains a matter of contention as there appear to be different degrees of compliance and a relapse to old practices. Naturally, insurance companies that underwrite policies covering the sector were impacted differently owing to the varying risk exposures that determined differentials in losses incurred.

A number of studies have been done in relation to the PSV sector in Kenya. Muchilwa (2004) conducted a study on 'Matatu' owner's response to the changing government regulation in Kenya. This was a study on what the owner's thought or did in relation to the introduction of Legal Notice Number 161. The study revealed that some owners were positive about the idea and expressed confidence that the sector was headed in the right direction. Others, who were looking at the short term personal gains complained about the huge costs of complying with the requirements of the notice. Also, quite a number of new investors were found to be eager to join the sector.

Mumenya (2005) investigated the perception by stakeholders of the new traffic regulations in Kenya. The study approached the issue from the perspective of both the operators and commuters. The operators complained about harassment by police enforcing the notice. Mumenya further explained that they were forced to bribe police in order to get their way around. Others, especially the older ones were positive about the rules in helping restore order in the sector. Commuters on the other hand were delighted in that they could travel in comfort and safety. However, they complained about the increased costs of travel.

Other studies done on the sector were those by Mwaura (2002) on perceived service quality of 'Matatu' sector and Ndole (2006) who conducted a survey of the pricing practices of public transport bus companies in Kenya. Mwaura's study revealed that most commuters perceived service quality in the sector as very poor. Ndole's study revealed that the bus companies used discriminatory pricing, charging different prices for different routes based on the conditions of the roads and security. From the foregoing none of these studies investigated the impact of Legal Notice Number 161 on the insurance industry. The purpose of this study was therefore to determine the impact of the implementation of Legal Notice Number 161 with respect to underwriting and claims processing by PSV insurers in Kenya.

Research Objective

To determine the impact of the provisions of Legal Notice Number 161 on the underwriting and claims processing by PSV insurers in Kenya.

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UNDERWRITING CONSIDERATIONS IN COMMERCIAL MOTOR VEHICLES

Binder and Mußhoff (2017) on the state of insurance worldwide reveals that the global insurance market in general was on a growth trajectory. They found that the Americas' contribution to the total insurance market in the period from 2010-2016 appeared rather stable. The Asian Pacific American Community (APAC) region on the other hand was losing ground to Europe Middle East and Africa (EMEA), with its share of total global premiums slipping from 34 percent in 2010 to 28 percent in 2016. They noted a shift in momentum from mature markets toward the emerging markets. For instance, total insurance premiums in Western Europe declined by 1 percent from 2015 to 2016, whereas the rest of EMEA region grew at 7 percent during this period. In Kenya specifically, Insurance Regulatory Authority (IRA) (2018) reported that the insurance industry had proven resilient. Despite the prolonged electioneering period experienced in 2017 for example, the industry recorded a growth in insurance premium of 6.3% from KES 196.64 billion in 2016 to KES 209.0 billion in 2017. The industry net profit grew by a similar margin to KES 13.64 billion in 2017 from KES 12.83 billion in 2016. This growth in revenue reflects ability of insurance industry to thrive even in the face of adversity which contrary to our expectations, the PSV (matatu) insurance underwriting has not been fully embraced. If the insurance industry was indeed doing as well as it was reported to be, we raised the question, why was the PSV insurance sector not depicting a similar trend.

Government regulations play a crucial role in influencing uptake of insurance products. In Kenya, motor vehicle insurance is governed by the Motor Vehicle (Third Party Risk) Act, Cap 405, which provides for compulsory insurance for all PSVs, whose main objective was to protect third parties. However, all the PSVs that were financed by banks and other asset financing firms were required to have a comprehensive insurance cover to cover the cost asset in case of a loss. These requirements created a large market for insurance underwriting which served to draw more players into the PSV insurance market. The mandatory third party cover regulation however placed a strain on the insurance companies as underwriting PSV risks became unsustainable due to the increase in the number of claims received, the results being heavy underwriting losses. Attempts by insurance companies to mitigate the costs arising out of insurance claims have incidentally served to escalate their own costs. The practices observed in the PSV transport have often failed to work in favour of increased insurance underwriting in this sector. Graeff (2010) argued that the reputation of this industry where drivers are associated with poor driving behaviour in a bid to increase their daily income dependent on the amount they are able to collect per day, may be a deterrent to PSV insurance underwriting. The author noted that efforts such as enforcing stringent road traffic rules are often futile due to the presence of corrupt police and traffic officers on the roads. The PSV transport sector has seen poor

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implementation of plans. Regulations such as the 'Michuki rules' were implemented temporarily and in waves and that failure to have proper and permanent plan to bring order to the PSV transport sector has deterred PSV insurance underwriters.

When insuring commercial vehicles, consideration was given as to the type of cover required. There were four basic types of covers available. These are the Road Traffic Act Cover (RTA), Third Party Only (TPO) Cover, Third Party Fire and Theft (TPF&T) Cover and Comprehensive Cover (Kerby and Williams, 2004). The RTA cover is the least expensive level of cover provided by motor insurers. Though rare, this type of cover is provided on evidence of a poor driving or conviction record. It is also provided in case of extensive damage to a vehicle until satisfactory repairs are undertaken. The basic RTA cover provides for unlimited legal liability to third parties for death or physical injury to any person which is unlimited in amount and for damage to third party property up to a given capped amount; emergency treatment payments under the RTA; and legal costs incurred in defending action for damages among other items.

TPO insurance covers against liability which the insured may incur to another person. Every driver in Kenya has to be covered for third party motor insurance. If the driver damages someone else's car or injures someone (the third party), the third party insurance will pay for any damages due to the third party. The guilty party will only be able to claim for damage to their own car if they have comprehensive insurance (Cummins & Tennyson, 1996). TPO cover extends third party liability cover to any situation involving a motor vehicle. Whereas RTA cover applies only to 'on the road' incidents as defined in the Act, TPO policies cover applies to 'off the road' incidents as well.

TPO policy makes provisions for meeting legal costs depending on the class of the vehicle. PSV insurers are duty bound to defend the policyholder in court in the event of liabilities or damages that might be subject of a claim. By representing the policyholder, the insurer can then control the case to some extent and limit their moral hazard. The insurer ought to be satisfied that any third party settlement reached is in the best possible resolution under the given circumstances. Passenger indemnity was also offered whereby passengers were protected against any liability incurred (The Chartered Insurers Institute, [CHI], 2004).

TPF&T policy provides additional indemnity for loss or damage to the insured's vehicle caused by fire, theft or attempted theft. Theft cover is operational only in instances where there is intention to permanently deprive and also where there is loss or damage caused by unauthorized use of the insured's vehicle. 'Loss' of a commercial vehicle may also occur as a consequence of deception. Insurers normally will apply discretion as to how to treat such cases

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(Tennyson & Salsas-Forn, 2002). For example, an excess is normally charged to discourage small claims and unnecessary risk taking.

Wang' (2004) observed that comprehensive insurance provides the greatest extent of cover. This is a term used to describe an insurance policy in which a wide range of risks are covered. The term comprehensive may be a bit misleading in that such a policy does not provide 100% cover no matter what the nature, extent and cause of loss. The objective was to provide cover for accidental damage to the insured's vehicle plus a range of additional benefits. These benefits could include cover on accessories that go with the vehicle e.g. spare tyres and maintenance equipment. Comprehensive insurance gave additional cover to the insured including damage to their vehicle, personal effects, overseas travel etc. Consequently, premiums payable under comprehensive cover are greater than in the case of TPO or TPF&T covers.

An accurate risk rating mechanism was vital in underwriting of insurance risk. Setting an inadvertently low rate will result in potential losses for policies underwritten while setting too high a rate, may not be justified by the risk level. Risk selection is that process by which the market exploits inconsistencies or weaknesses in rating structures. Motor premiums are composed of two components. The claims ratio and the expense ratio (Wang', 2004). The claims ratio is the percentage of the premiums that is required to pay claims. The expense ratio was split into two parts, viz, the variable and fixed costs. The main variable cost was agent commission. Other expenses are classified as fixed or variable only in the long term and included the company's operating expenses that must be met regardless of the number of policies sold.

When insuring passenger carrying commercial motor vehicles in Kenya, insurers generally classify them in to the following categories: Omnibus, Public Hire (or Taxi), Matatus, Private Hire and Self Driven Hire (Blue Shield Insurance, 2008). The full name for a bus was an 'Omnibus Vehicle'-meaning a 'vehicle for all'. A bus is a large road vehicle designed to carry numerous passengers in addition to the driver and sometimes a conductor. The Latin word Omnibus, means 'for all'. In most cases, a bus was defined as a vehicle that carries 9 passengers or more (Wikipedia, 2008). The buses were distinguished by their axle size and number, a factor that determined their carrying capacity. This formed the basis for insurer rating. Those buses with larger carrying capacity attracted higher premiums and excess.

Public hire vehicles are Taxis licensed to 'ply for hire' and are available for use by the general public. The requirement was that such a vehicle must have less than 9 passenger seats (Kerby & Williams, 2004). In the UK, Taxis are subjected to rigorous tests and inspection procedures to ensure roadworthiness. Taxi drivers too must pass special tests, have special

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insurance certificates and disclose their driving history especially in relation to accidents, in order to be licensed to operate Taxis.

Taxi operators were generally classified as high risk owing to their profit orientation and insurers imposed a substantial accidental damage excess. Matatus in Kenya fit into the category of commercial fare paying passenger vehicles, as they were hailed on the street though local by-laws restricted the waiting points to certain areas such as bus stops and bus stations. However, most Matatus have a carrying capacity exceeding 9 passengers and would then fall under the 'bus' category. Their greater carrying capacity implied increased risk.

Private hire vehicles were not licensed to operate as Taxis but were hired for passenger travel through the operator's office or agency. This category of vehicles was regarded as high risk owing to the compelling need to drive for maximum optimization on returns. Drivers tended to work long hours, they were employed on casual basis and they suffered from prolonged periods of fatigue. However, vehicles hired for special occasions or for luxury purposes were classified as good risks by insurers. This was because they portend to have low material damage accident levels even though passenger liability risk may be potentially high.

Private and public hire vehicles were rated according to various factors. One factor was the location of usage and if the vehicles were to be used in densely populated areas. In these areas the risk of accident was high, for instance, risk of hit-and-run motorists or mere scratches on expensive paint coatings. The rating was affected by the vehicles engine cubic capacity to weight ratio, an excess being charged where this exceeds a certain value. It was important to note that engine size alone was insufficient for rating purposes. For comprehensive cover, the excess paid was substantial. The principal rating factors were type of vehicle, usage, location of use, and the level of driving proficiency (The Chartered Insurance Institute [CHI], 2004).

Kerby and Williams (2004) noted self drive hire vehicles included small goods-carrying vehicles and caravanettes plus normal passenger carrying vehicle of up to 12 seats. In this category, the owner made the vehicle available to the hirer and also will have arranged insurance upfront. The hirer was required to complete a short proposal form. This will cover the following areas: age-which will be subject to age bands (i.e. between 25 and 70 years) albeit the owner may reserve the right to quote outside such a band; occupation-there were some occupations that fell outside the normal criteria and therefore might be ineligible for hire; driving experience and history-the owner would be obliged to check the driving license of the hirer and satisfy themselves that the information provided was correct.

Any non-disclosure or misrepresentation could render the contract null and void, which, in theory, may result in the vehicle not being covered for any damage that may result during the period of hire. If the policyholder can demonstrate that they exercised due diligence to ensure

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the risk (that is, the hirer) was acceptable, then some insurers may extend the cover. Also, the risk of fraud might be incorporated into the cover, subject to an additional premium. In many instances, vehicles for hire are not treated respectfully by hirers and as a consequence, they tend to accumulate minor bumps and scrapes. In order to reduce liability, such vehicles are normally subjected to pre- and post-hire inspections. The operator would complete a form detailing all the defects which the hirer would confirm. Any additional defects noticed would then be assumed to have occurred during the period of hire and the hirer was then liable (Cummins & Tennyson, 1996).

There were three different ratings for self-drive hire vehicles. The first was charging a flat rate per vehicle. This entailed computing an annual premium for each vehicle and in return, an annual certificate was issued. The insurance charge to the hirer was determined by the frequency with which the vehicle was hired out. Insurers set a rate for self-drive vehicles hire business based on the fact that this business was seasonal with the greatest period of hiring tending to be during holiday periods. An increased risk on self-drive hire vehicles was witnessed where thieves would hire the vehicles and organize for their theft. This added risk resulted in insurers revising premiums upwards (Schmit & Yeh, 2003).

Small buses were defined as those vehicles with 9 to 16 passenger seats (Kerby & Williams, 2004). Most 14-seater Matatus fall into this category. These too carry an increased passenger liability risk. The risk factor is increased for various reasons. These include the need to maximize on the vehicles use, employing young inexperienced drivers and sub-standard maintenance to lower costs. The premium rating will take into account the type of cover on offer. This may be comprehensive, third party fire and theft and third party only. Rating will also be determined by the location of operation, the type of use (whether for hire and reward or not) and the seating capacity.

The PSV insurance subsector has several players in some forms of agency relationships, who may take advantage of claim process (IRA, 2011). According to (Lotuiya, 2014), the entire process of claims reporting, claim screening and claim processing presents an opportunity that has been exploited by the fraudsters. The fraud triangle theory coined by Cressey in 1950 looked at the perceived opportunity, rationalization and pressure. Accordingly, fraudulent opportunity arises when the fraudsters sees a way to use their position of trust to solve the financial problem by justifying themselves as ordinary, honest people who are caught in a bad situation. The theory was criticized by (Dominey, Fleming, Kranacher, & Riley, Jr, 2012) who argued that the model cannot solve the fraud problem alone because two sides of the fraud triangle, pressure and rationalization cannot be easily observed. The drivers and conductors in matatu PSV sector have an opportunity to defraud the matatu owners in that they collect

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revenue on behalf of the owner. These owners have no way of proving and verifying daily collections by these matatu crew. In their fraudulent activities, the matatu crew rationalize that the matatu owner was earning from other businesses or employment. The fraud Scale theory by Albrecht mainly looked at three factors, situational pressures, perceived opportunities and personal integrity as ingredients of fraud. The situational pressures consider immediate environmental conditions like personal debts or losses. Where the pressure is high, there was likelihood of high fraud and likewise where the opportunities are high as a result of poor controls the fraud was also high. There was also a likelihood of high fraud where the personal integrity was low. It was not until the year 2003 when the certificates of good conduct were made mandatory for matatu crew with an aim of integrating and ensuring integrity among the players in the industry.

In order to reduce the risk of liability, insurers may use different methods. This may involve partnerships with specialist risk management providers. The insurer, prior to underwriting, might also assess the risk management measures put in place by prospective policy holders (Doerpinghaus, Schmit & Yeh, 2004). For commercial vehicles, these entailed assessing the vehicle condition, driver qualification and length of hours worked among other things. Other possible risk management measures could be the enforcement of rules regarding use of mobile telephones while driving, more effective vehicle maintenance and a clear policy on accident reporting.

Vehicle modifications may also alter the risk rating afforded by the insurer. Local Matatus for example normally feature many enhancements aimed at increasing passenger comfort or to attract certain types of passengers. Such enhancements may include alloy rims, Digital Versatile Discs players and music systems. Whereas these do not affect the vehicles engine performance, they increase the risk of theft or malicious damage (Schmit & Yeh, 2003). Thus, the premium charged will be higher owing to the vehicle's higher valuation. In certain cases, any mechanical changes aimed at improving engine performance will certainly lead to increased premium ratings owing to the risk of over speeding, albeit that this is not practiced in Kenya. Insurance policies cover for loss or damage to radio or audio equipment up to a given financial level. In some cases, upon payment of additional premiums, insurers may be prepared to increase the maximum level of indemnity.

Insurers also normally have a new and young driver's clause when underwriting motor insurance. Where the insured's vehicle is being driven by a young driver, the excess payable on each and every claim increases (Jonah, 1986). A new or young driver is defined as any person below the age of 25 years or any person 25 years and above, but who holds only a provisional license, or who has not held for a period of 1 year, a driving license other than a provisional

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driving license. For instance, for young drivers, a comprehensive policy may entail an additional excess at the rate of 7.5% of the insured value of the vehicle or 2,500/=, whichever is greater. In third party policies a flat figure will be added over and above that charged for a motor vehicle being driven by drivers above 25 years.

One of the main reasons proposed for younger drivers being at a particularly elevated risk of traffic accidents was their propensity to engage in risk-taking driving behaviours (Jonah, 1986). Such behaviours included driving at excessive speeds; failure to use occupant restraints; and driving under the influence of alcohol Begg and Langley (1999).

In addition to driver behaviours there has been considerable recent interest in the personality and characteristics of people who are likely to be involved in traffic accidents. They have been characterised as being involved in crime, drug and alcohol use, those who are socially deviant, with antisocial and oppositional behavioural tendencies (Halek & Eisenhauer, 2001). When underwriting PSVs, insurers also wanted to know the drivers level of experience and driving history, especially that relating to accidents. This information was then used to assess risk and determine the level of premiums and excesses payable. Additionally, illnesses and other medical conditions may be monitored by insurers very closely and in cases where this was justified, they may be incorporated into the premium or excesses paid.

There existed various underwriting and claims related incentives to encourage safer driving and lower claims liability. An example in the United Kingdom is the No Claims Discount (NCD) (Cummins & Tennyson, 1992). This system is not applicable in Kenya today. Through this, policyholders were offered premium discounts for every period over which they did not make any claims. The period could be every financial year or other. NCD was a mechanism for adjusting the parameters of insurance contracts according to the past record of policyholders. For example, the premium could be adjusted based on individuals' past record of reported accidents (Brouhns et al., 2003) or on the number of demerit points accumulated (Dionne et al., 2000). By adjusting the information underlying the risk classification criteria, an *a posteriori* scheme can be used to revise the *a priori* rating.

Dionne et al. (2000) argued that the NCD makes it possible to use information disclosed on past experience to improve the insurance rating and thus render risk classes more homogeneous. With this system, was possible to maintain incentives encouraging cautious behaviour and to reduce the inefficiencies associated with moral hazard. Introducing the NCD could, in theory, be expected to create more incentives for safe driving, this linked individual premiums to past reported accidents.

The second role was linked to moral hazard and implied that the distribution of reported accidents over time must be taken into account in order to maintain the incentives for cautious

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behaviour at an optimal level. This means that more weight must be given to recent information of erroneous driving in order to maintain such incentives. Use of a NCD was also justified by the need for equity in insurance pricing, meaning that policyholders should pay premiums corresponding to their level of risk (Dionne & Vanasse, 1989).

In the literature, several aspects of the NCD have been criticized by insurers and insurance actuaries dealing with analyzing and advising the World Bank on global insurance trends (Vitas, 1995). One school of thought took particular exception to the low premiums and the regulatory nature of these premiums, as insurance companies are thereby deprived of any power to initiate private measures promoting safe driving. And, since rates are fixed, insurers are prevented from using the rate technique (i.e., setting the basic premium on driving records). But, as suggested by a different school of thought, that was exactly what NCD was supposed to achieve. This called for the attention to the excessively long waiting for claim settlements. For their part, practising insurers complained that the NCD applied to only one category of vehicles (vehicles for private use), representing only a fraction of those on the road.

THE COMMUTER TRANSPORT SECTOR IN KENYA

Situation before Introduction of Legal Notice Number 161

Unlike the formal employment sector where the employees largely work for a regulated number of hours, this was not the case for the majority of the PSV drivers, especially the 'Matatu's'. Only 39% of the drivers worked for 8 hours and below. The other 61% worked for a period of 10 hours and above on any given day (Wandere, 2021). Insurers would regard such a work environment as being high risk owing to the increased risk of accidents caused by fatigue. They required a declaration in the motor vehicle proposal form on the driver's fitness of mind, accuracy of vision and general wellbeing and health.

Despite the high profits generated by the drivers for PSV owners, on the average most of the drivers were underpaid. For instance only a mere 2% of the drivers earned above KSh. 10,000. For the drivers to supplement their low incomes they engaged in other income-generating activities such as farming, sale of milk, sale of vegetables, sale of second hand clothes, kiosk operation and retail shops. This in effect, implied that it was difficult to keep one driver employee as they would keep rotating in order to manage their various interests (Wandere, 2021).

In particular, 'Matatu' drivers would delegate to temporary (squad) drivers who, in essence, were more of learners, inexperienced and prone to cause accidents. Most of these were also young drivers. As seen before, these are categorized by insurers as high risk and their effect on underwriting was that the excess paid on PSV claims was correspondingly higher.

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This was required by the insurer needed to indemnify themselves against large claims (Asingo, 2004).

By 1994, the insurance industry was overburdened with the high number of accident related claims that were being made. In fact, very few insurance companies were willing to provide insurance covers for PSVs owing to adverse risk selection problems. In 1994, a major insurer, Access Insurance Company had to be liquidated by the government since it could not cope with the accident related claims (Kimani et al., 2004).

Insurers that did insure the PSV sector placed stringent requirements like insisting on limiting the routes on which the PSVs could operate in. The rationale for route restriction is that the insurer selected those routes with good roads and lower levels of industry anarchy, such as the affluent areas. The refusal to cover some PSV categories (e.g. Matatus) was informed by a bid to contain soaring exposures. PSVs travelling to Western Kenya, Nyanza and Coast provinces were also among those finding the going tough in securing insurance services since the exposure on these routes was just too high (Mbogo, 2008).

To further lower moral hazard problems, local insurers insisted on PSVs using insurer approved garages for any repairs, maintenance or inspection, and they limited these to those vehicles under comprehensive insurance. As Wang (2004) indicated PSV matatu exposed insurers to the highest risk as they are covered for most (or all) types of risks. Most PSVs owners tend to prefer third party cover owing to the lesser premiums demanded. For the insurer, this also reduces problems arising from moral hazard and adverse selection. However, it also virtually means that maintenance was always done in garages not approved by insurers. It was then difficult to ensure quality of maintenance, resulting in unroadworthy PSVs. This too resulted in many accidents or potentially risky situations, with ensuing increases in third party insurance claims and compensation.

Providing cover for PSVs had destroyed the whole essence of insurance, where individuals contributed money to a common pool to assist in case of a problem, but the claims exceeded the money contributed in the pool (Kimani et al., 2004). This made a number of insurance companies in Kenya unwilling to provide cover for PSVs. Motor vehicle owners also lost faith in insurance companies, and if it were not a mandatory requirement to insure motor vehicles, many would have opted to operate without insurance cover.

Whenever road accidents occurred, the general public always blamed the ‘Matatu’ drivers. But according to the ‘Matatu’ drivers, factors responsible for road traffic accidents in the country were: driving unroadworthy vehicles, poor conditions of the roads, harassment from passengers and employers, obstruction, pedestrian/bicycle riders and animal crossings. The drivers complained that employers put pressure on them by setting high revenue targets, long

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hours of work and many return journeys at late hours. The passengers interfered with the drivers' work by insisting on reaching their destinations fast, therefore, urging drivers to move at a very high speed, demanding to alight abruptly, picking quarrels with drivers or the conductors and engaging drivers in lively talks. The drivers also cited cases of drunk and/or ignorant passengers jumping or alighting from moving vehicles (Wandere, 2021).

As a way of solving the traffic road accidents, the drivers had suggested the following practical and urgent steps to be taken: less working hours and a union or umbrella body for all PSV drivers to bargain for their terms of employment. They considered themselves forgotten by the Government, passengers and even their own employers. The need to improve Kenyan roads, the establishment of a police unit whose work should be to remove obstructing vehicles, the need for public education for all road users, removal of the many police checks that served very little purpose besides collecting bribes from drivers and re-training of 'Matatu' drivers (Wandere, 2021).

The vehicle owners identified five factors responsible for road traffic accidents, careless driving, poorly maintained roads, drunken driving, police harassment and poor maintenance of vehicles (Kimani, et al., 2004). The vehicle owners had practical steps to address the problem of road traffic accidents in the country. These included, retaining of drivers not only in driving skills but courses in public relations and road safety, confiscating of driving licenses belonging to drivers who caused road accidents, improving the state of the roads, provision of public education for all road users and giving awards on a yearly basis to drivers who did not cause road accidents.

On the regulatory side, the Government's efforts to control road traffic accidents were neither emphatic nor systematic. In 1987, the government wanted speed governors to be fitted into all public service vehicles. The PSV operators lobbied and the plan was shelved. In 1998 the Kenyan government also came up with a requirement that all vehicles must be fitted with safety belts. This initiative too did not materialise because motorists felt that it was very expensive undertaking. In March 1996, the government recommended that all public service vehicles be fitted with speed recording devices (SRD) which was also rejected.

All these happenings only augmented to complicate the risk of insurers venturing into this industry and anyway most of them shied away. Those that did underwrite charged high premiums and excesses on claims to deter fraud and small value claims. The insurers would frequently conduct motor vehicle audits to assess roadworthiness in order to establish the limit of their exposure. PSV operators who had a large pool of licensed drivers would be viewed as having a lower exposure than those who did not.

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Public Interest Theory of Regulation in this study demonstrated that information asymmetry in both the insurance sector and the public transport sector leads to problems of moral hazard and adverse selection. Public Interest Theory by Pigou (1938) emphasized that regulation should maximize social welfare. The objective of regulation should be to mitigate the impact of significant market imperfections (or 14 market "failures") compared to the ideal of a perfectly competitive market (Niehaus & Harrington, 2005). Regulation of insurance industry in Kenya was under the commissioner of insurance until the creation of Insurance Regulatory Authority through the Insurance (Amendment) Act of 2006. While several insurance firms had ceased or gone bankrupt before the establishment of IRA, insurance firms have continued to shy away from PSV insurance underwriting (Irungu, 2015). Insurance companies were heavily regulated to protect policyholders from the threat of an insurer's insolvency. In case the company went bankrupt, policyholders lost much of their investment from the promised insurance benefit (Muriuki & Mutugi 2017). In Kenya, IRA monitors insurance companies to ensure that they are solvent enough to pay off claims. Claims paid lead to customers gaining trust of the insurance industry and therefore more confidence in spending on insurance products (Jus, 2013). In their regulatory role, the IRA have enacted price controls and fraud management mechanisms which have negatively affected insurance penetration in the country. The IRA price regulation framework, although intended to create competitive markets and lower premiums, have not served their intended purpose. The overall insurance sector Regulations in the transport sector range from mandatory third party insurance, tighter requirements on the motor vehicle crew, and sitting capacity of the vehicles among others. In 2003, the new government introduced reforms to PSV operation through Legal Notice 161 whose aim was to reduce PSV related accidents, improve commuter safety, stamp out illegitimate drivers and restore order to the PSV sector (Macharia, 2017). Additional amendments have been made since 2003. The Traffic Act (Cap. 403), provided for the minimum age and working hours of PSV drivers. Further, the crew was supposed to be paid a monthly salary by the PSV owner, as per Section 103A (6) of the Traffic (Amendment) Act No. 37 of 2012. PSV operators were required to belong to a SACCO or a company before applying for a PSV license.

Gazettement of Legal Notice Number 161

The year 2003 witnessed a new Government committed to the rule of law in place. The Legal Notice Number 161 was formulated and implemented. The fitting of speed governors on all PSVs and commercial vehicles whose tare weight exceeded 3,048 Kgs in order to limit speed to 80 kph was expected to reduce, first and foremost, the high numbers of accidents caused by over speeding. This was to be complemented by the fitting of safety belts (Asingo, 2004).

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Subsequently, this legal notice was expected to reduce drastically the high rate of passenger related deaths and expensive destruction of property. To the insurer, this would reduce the liability occasioned by the same. In particular, claims arising from human related casualties would reduce as well as liabilities borne out of accident related repairs and write-offs.

Bonyo (2008) observed that the provision of Legal Notice Number 161 that required drivers and conductors to be employed on permanent basis and for every driver to prominently display on the front windscreen, his or her photograph of postcard size, showing the head and shoulders taken full without a hat, were in combination expected to reduce crime rate in the sector. Permanent employment was expected to reduce the insurers' moral hazard by eliminating the possibility of unqualified, younger and riskier personnel taking charge of the vehicle.

It would be easier for the insurer to access the drivers past history and in particular, accident history aided by the requirement to obtain certificates of good conduct from the police. Based on this, the insurer could even recommend to the 'Matatu' owners on the best calibre of personnel to hire. This provision was largely expected to aid in eliminating squad (temporary) drivers from the scene. Driver competence was to be appraised through retesting after every 2 years. Such records, if obtained from qualified assessors, would ensure that ratings reflected the risk exposure arising from this aspect of insurance underwriting, such as drivers age and accident history.

Again, there was an expectation that there would be a restoration of sanity and order in the industry. The requirement that vehicles be clearly marked, and that their destination and passenger carrying capacity indicated, was expected help implement order and sanity in the sector. The requirement that all vehicles pass an annual inspection would help remove most of the defective vehicles from the roads. Indeed, many unroadworthy vehicles that did not comply with that provision were removed from the roads. The government further directed all local authorities to take over the management of public bus stops within their areas to help remove cartels from the routes. Consequently, cartel activity was minimized and PSV owners largely took control of the running of their vehicles. Overall, all this was expected to reduce the cost of doing business in the sector (Chitere et al., 2005).

Due to the decreased risk levels, insurers would naturally lower the insurance premiums in the PSV sector. Additionally, PSV operators would be able to access comprehensive insurance cover, considered too expensive for the sector to adopt. Access to comprehensive insurance was expected to enable PSV owners to indemnify themselves against property losses since this type of cover insured both the passengers and the vehicles. Restrictions on the number of passengers carried by each PSV would further reduce the insured's and insurer's costs.

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Since the total premium payable increases with the vehicles passenger carrying capacity, by rationalizing the number of passengers each type of vehicle could carry, Legal Notice Number 161 was additionally expected to reduce the large numbers of extra passengers not covered by the insurance policy (Asingo, 2004). Use of seat belts was expected to reduce minor injuries that were also easy to falsify and exaggerate.

Owing to the conducive work environment it was expected that new investors would flock into the sector. These would be drawn from both the wider public and the formal business sector. The expectation was that, with the greatly reduced risk of doing business, more insurance firms would venture into underwriting of the PSV sector. Implementation of Legal Notice Number 161 was expected to also have a positive impact on motor insurance in other segments such as private and public hire vehicle categories.

In support of this, Non-Governmental Organizations (NGOs) and private sector players such as insurance firms showed interest in the sector through sponsoring seminars and workshops on safe driving for owners and the crew. The Transport Licensing Board (TLB) had by August, 2004 suspended licenses of 42 vehicles that had flouted the safety regulations (Gachuki, 2004). It had also ordered vehicles belonging to the government, tour firms, schools and colleges to be fitted with the speed governors. The number of PSV underwriters also increased, from two in 2003 to six in 2008 as a result of the implementation of Legal Notice Number 161.

After the implementation of Legal Notice Number 161, the Government proposed the formation of a PSV motor insurance pool with the intention of encouraging more insurers to enter the PSV underwriting business. A motor insurance pool would generally be operated by PSV underwriters who were required to pay a certain percentage of the premium into a central pool. The kitty would then pay out compensation on behalf of the underwriters to a motor PSV insurer who might be in financial distress. All aggregated claims would then be paid from the pool with the contributors sharing the surplus of unutilized funds, if any (Onditi, 1995).

Kenya had previously made two attempts to have a motor pool: in the 1980s through the Kenya Motor Insurance Pool. Both of them collapsed because of mismanagement. The previous pools were meant to spread losses from the public service vehicle (PSV) line estimated at 75%, but fell through because of alleged irregularities in distributing the losses among participating firms (Republic of Kenya, 1995). The Insurance Regulatory Authority (IRA) had suggested a motor insurance pool as a way forward to help ‘Matatu’ insurers reduce exposure to regular and fraudulent claims. Instead of the pool, the public service vehicle underwriters want the Government to enforce traffic rules more stringently like in 2004 when road accidents dropped by over 50% and reduced incidences of insurance claims.

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The insurers felt that a PSV motor insurance pool would encourage complacency and lack of innovation. It would increase the incidents of ambulance chasers, who will see a big opportunity in the pooled funds, one of the biggest problems facing the industry. The insurers have proposed the concept of structured compensation, whereby a specific injury is compensated for with a specific amount of money to eliminate the risk of ambulance chasers and fraudulent claims. Also, the industry should come up with laws that discourage price undercutting which contributes to the general fraud and mismanagement in the PSV underwriting sector (Mbogo, 2008).

Perhaps, Kenya could borrow this concept from the Indian experience that is working. In 2007, The India Motor Insurance Pool (IMIP) was formed by 12 public and private sector non-life insurers. The India Motor Insurance Pool (IMIP) was formed to take over third party motor risks where the loss ratio was 70% (Mbogo, 2008). The share of each insurer in the pool is based on gross direct insurance premium collected. Insurers underwriting on behalf of the pool are entitled to an administrative commission of 10% of the premium. General Insurance Corporation of India provides reinsurance support of up to 15%.

METHODOLOGY

Research Design

The study used an exploratory survey design, a design that Kotler and Armstrong (2001) observed was best suited for gathering descriptive information; where the researcher wanted to know about people's attitudes or preferences concerning one or more variables through direct query. Since this study was aimed at obtaining the insurers experience regarding the before and after determinants of Legal Notice Number 161, it was felt that a survey would best elucidate their views. This was because different insurers would have different perspectives on the subject.

Data Collection

The study distributed structured questionnaires on five point Likert type scalesto rank the various rating and claims variables according to their level of importance or the various challenges according to the extent to which they affected the underwriting or claim assessment processes respectively.

Data Analysis Method

Descriptive statistics consisting of the arithmetic mean, standard deviation, frequencies and percentages were used to present the findings. According to Mugenda and Mugenda (1999) descriptive statistics enable meaningful description of a distribution of scores or

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measurements using a few indices. Analysis was executed using Statistical Package for the Social Sciences (SPSS) software (version 11.5). Mean values gave us the expected score from a group of scores in a study. Standard deviations informed the analyst about the distribution of scores around the mean of the distribution. Frequency distribution showed a record of the number of times a score or record appeared.

FINDINGS

Impact of Legal Notice Number 161 on Public Service Vehicle Insurers in Kenya

To assess the objective, the study employed five point Likert type scales with the rankings '1 = not important to 5 = most important' and "1 = no extent at all to 5 = greatest extent" to rank the various rating and claims variables according to their level of importance or the various challenges according to the extent to which they affected the underwriting or claim assessment processes respectively. N refers to the number of respondents that answered each particular questionnaire item.

For each response category, the mean values and standard deviations were computed using Statistical Package for the Social Sciences (SPSS) software (version 11.5). Mean values were an indicator of the level of importance of a given rating or claim payment factor or an assessment of the extent to which a given challenge affected the underwriting or claims assessment process. High mean values for a given aspect indicated that aspect of underwriting or claims process was of high importance or was a big challenge while the converse was also true.

The observed mean values were rounded off to 2 decimal places and assigned a meaning derived from the nearest corresponding point on the Likert scale, e.g. 1 = no extent, 2 = small extent and so on. The standard deviation values are an indicator of the extent to which respondents were in agreement over the level of importance of the different rating or claims payment factors or the in agreement about the extent to which the challenges enumerated affected the insurers.

For clarity of analysis, only those findings that were significant were analyzed. These are those findings that lay at the outer fringes of the findings e.g. the highest and the lowest values for the means in each response category. Since a mean of 3.00 is the median ranking, mean values above 3.00 were considered to be in the former category while those less than 3.00 were considered in the latter category. For purposes of this study, standard deviations greater than 1.00 indicated a high dispersion about the mean while those below 1.00 indicated a relatively high clustering about the mean. The former implied that the respondents differed widely in their opinions on how they rated the given variables on the Likert-type rating scale while the latter implied that they gave largely similar ratings.

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To determine how the Provisions of Legal Notice Number 161 have affected the Underwriting Process

From Table 1, before implementation of Legal Notice Number 161, the most important factors in descending order of importance were drivers age, risk of fraud in the PSV sector, drivers driving history, engine cubic capacity to weight ratio, incidence of intoxication while driving, drivers level of driving proficiency, vehicle maintenance and condition, number of hours worked by drivers, passenger carrying capacity, tendency to over speed, drivers medical history, the claims ratio for the sector and use of co-insurance ("ceeding") to spread the risk. All these observations had mean values above 3.00.

Table 1 Relative Importance of Parameters When Rating before Implementation of LNN 161

Rating Parameters	N	Mean	Std. Dev.
Drivers age	4	4.25	.957
Risk of fraud in the PSV sector	4	4.25	1.500
Drivers driving history	4	4.00	1.155
Engine cubic capacity to weight ratio	3	4.00	1.732
Incidence of intoxication while driving	4	4.00	1.155
Drivers level of driving proficiency	4	3.75	.957
Vehicle maintenance and condition	4	3.75	1.258
Number of hours worked by drivers	3	3.67	1.155
Passenger carrying capacity	4	3.50	1.732
Tendency to over speed	4	3.50	1.732
Drivers medical history	3	3.33	1.155
The claims ratio for the sector	4	3.25	2.062
Use of co-insurance ("seeding") to spread	4	3.25	1.258
High claims frequency/value	4	3.00	1.414
Market value of insured vehicle	4	3.00	.000
Modification and enhancements to the PSV	4	3.00	1.414
Need to maximize on use to optimize profits	4	3.00	1.414
The expense ratio in the PSV sector	4	3.00	1.414
Route plied by the PSV	4	2.75	1.258
Type of cover required	4	2.00	1.414
Valid N (list wise)	3		

The pattern of importance of those findings confirmed observations in the literature review to the effect that drivers driving history, level of intoxication and age are all linked to a drivers driving proficiency and that driver qualification and length of hours worked were important risk mitigating measures put in place by insurers to reduce risk. Also confirmed from the literature was the observation that driver's age was seen to be important owing to the propensity of young drivers in particular, to engage in high risk behaviours.

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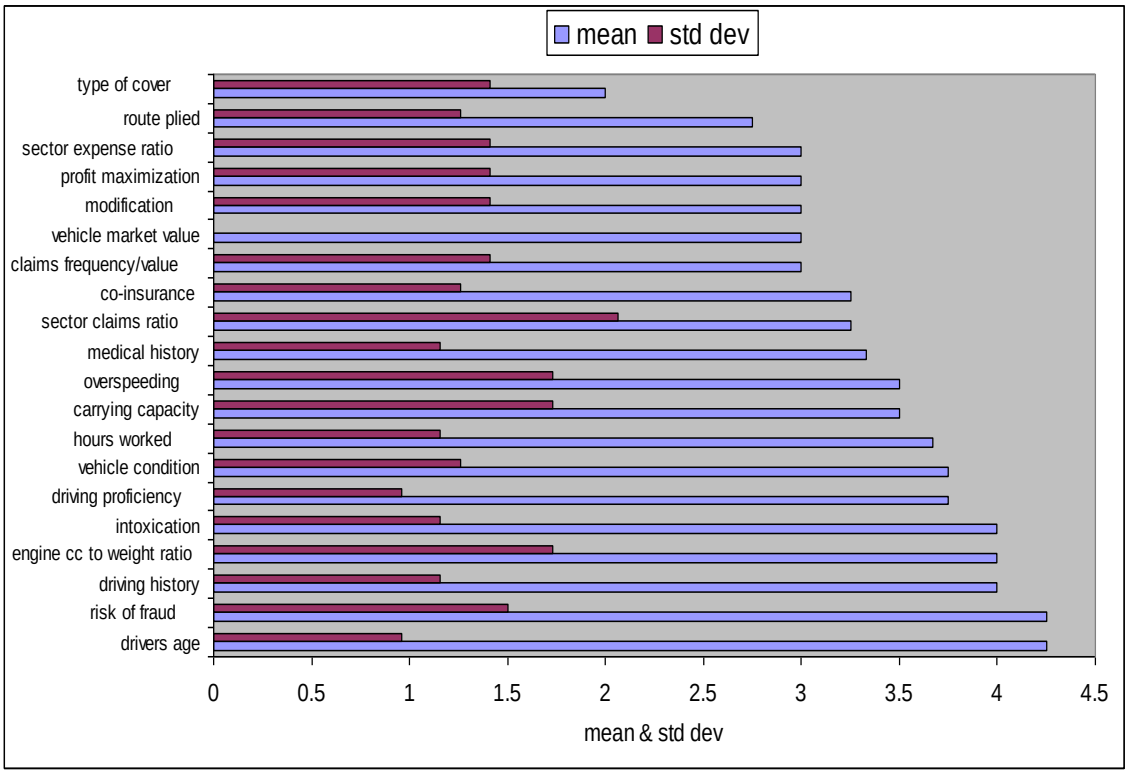
Such behaviours as documented included driving fast for thrills; taking risks for fun; reckless overtaking; and following very close behind slower drivers. Documented characteristics of persons likely to be involved in accidents are those likely to be involved in among other things, drug and alcohol abuse. In this study, it is such aspects of driver characteristics that emerged as top concerns for the local insurance industry as they were immediate determinants of the level of risk that the insurers would face.

Given the risk level posed by 'Matatu' drivers in Kenya as pointed out in the literature review, the study findings reflected the insurers concerns in this area. Market value of insured vehicle had a zero standard deviation implying that all four respondents who answered this question rated it equally. Driver's age and proficiency had standard deviation values below 1.00 indicating close agreement among the respondents as to their level of importance when rating PSV. The rest of the observations had standard deviation values above 1.00 indicating wide differences in opinions as to their level of importance. This could be due to the fact that all these factors, other than driver's age and proficiency impacted the insurers' bottom lines differently, and hence received different ratings.

Figure 1 Relative Importance of Parameters When Rating before Implementation of LNN 161



The least important rating factors were the route plied by the PSV and type of cover required with mean values of less than 3.00 and in that order. Type of cover may have been the

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lowest rated parameter owing to the fact that 'Matatu' owners almost always prefer third party cover only since it is the least expensive. Also, route restriction seemed not to feature highly in the rating requirements. This was contrary to observations in the literature review where route restriction was used to minimize risk but its low mean value may imply that it was not yielding the expected results. All these findings were further visually illustrated in the Figure 1.

Table 2 Relative Importance of Parameters When Rating After Implementation of LNN 161

Rating Parameters	N	Mean	Std. Dev.
Use of co-insurance ("ceeding") to spread	2	5.00	.000
Vehicle maintenance and condition	3	5.00	.000
Number of hours worked by drivers	3	4.67	.577
Drivers age	3	4.33	.577
Drivers driving history	3	4.33	1.155
Drivers level of driving proficiency	3	4.33	.577
Incidence of intoxication while driving	3	4.33	.577
Need to maximize on use to optimize profits	3	4.33	.577
Passenger carrying capacity	3	4.33	.577
Tendency to over speed	3	4.33	.577
High claims frequency /value	3	4.00	1.732
Route plied by the PSV	3	4.00	1.732
The claims ratio for the sector	3	4.00	.000
Drivers medical history	3	3.67	1.155
Risk of fraud in the PSV sector	3	3.67	1.155
Modification and enhancements to the PSV	3	3.33	.577
Engine cubic capacity to weight ratio	3	3.00	.000
Market value of insured vehicle	3	3.00	.000
The expense ratio in the PSV sector	3	3.00	.000
Type of cover required	3	3.00	.000
Valid N (list wise)	2		

From Table 2, after implementation of Legal Notice Number 161, the rating parameters that were most important, in order of importance from highest to lowest were the use of co-insurance ("ceeding") to spread risk, vehicle maintenance and condition, number of hours worked by drivers, drivers age, drivers driving history, drivers level of driving proficiency, incidence of intoxication while driving, need to maximize on use to optimize profits, passenger

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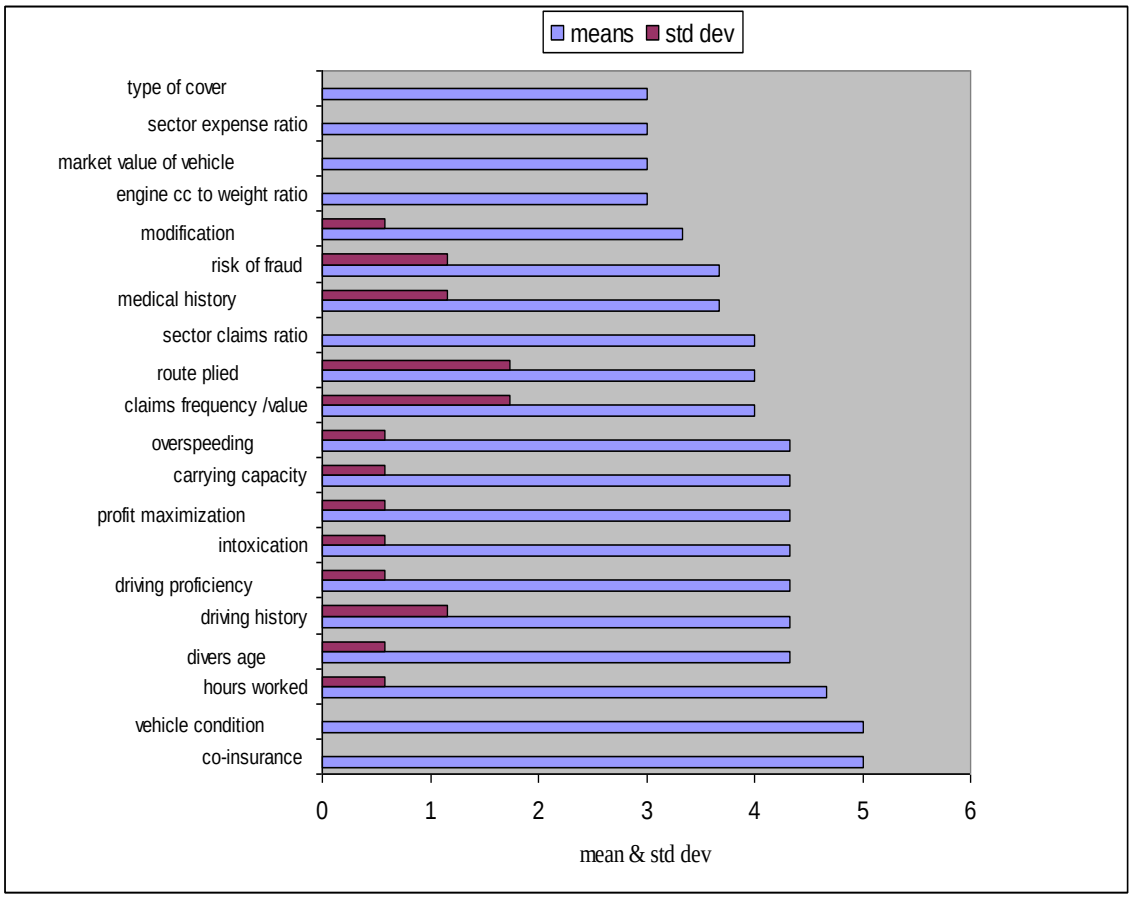
carrying capacity, tendency to over speed, high claims frequency/value, route plied by the PSV, the claims ratio for the sector, drivers medical history and risk of fraud in the PSV sector.

Driver's characteristics and work ethics took on lesser importance and were replaced by insurance mechanisms and vehicle related factors. These may have been due to the emphasis placed by provisions of the legal notice on discipline in the sector. At the top of the table, use of co-insurance and vehicle maintenance and condition replaced drivers age and risk of fraud in the PSV sector as the most important rating factors after the implementation of the Legal Notice. Their zero standard deviations indicated total agreement among the respondent's opinions as to their importance.

Figure 2 Relative Importance of Parameters When Rating After Implementation of LNN 161



The least important were engine cubic capacity to weight ratio, market value of insured vehicle, the expense ratio in the PSV sector and type of cover required with a mean value 3.00 (important) for all. All these factors had standard deviations of .000 implying zero dispersion about the mean, implying that all the respondents who answered these questions rated these

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factors in the same way. Market value of the insured vehicle and expense ratio did not show much significant change before and after implementation of the law.

Market value of the vehicles was unaffected by implementation of the legal notice as this is determined by forces of demand and supply. Expense ratio cover expenses must be met irrespective of the number of policies sold. This factor witnessed a drop in rating attributed to an expected drop in operating expenses due to safer driving practices. Figure 2 further illustrated that perspective for the significant parameters relative to the rest.

To determine the impact of Provisions of Legal Notice Number 161 on the PSV Claims Processing

Table 3 Relative Importance of Claims Payment Factors before Implementation of LNN 161

Claim Payment Factors	N	Mean	Std. Dev.
Ability to insurer to detect fraud by conducting audits	5	4.60	.894
Records of drivers accident history/qualification	6	4.17	.753
Insurers ability to negotiate claims	3	4.00	.000
Veracity of police reports regarding the accident situation	6	3.83	1.169
Periodic vehicle inspections to ensure roadworthiness	6	3.83	1.835
High cost of vehicle repairs	6	3.67	1.211
Moral hazards arising from the garage owners	6	3.50	1.517
Use of approved garages only by PSV operators	6	3.33	.816
Difficulty inherent in diagnosing severity	6	3.33	1.033
Moral hazard arising from PSV owners	6	3.33	1.033
Increased use of general damages claims	5	3.20	.837
Insurers ability to under- indemnify large claims	6	2.67	1.033
Offering no claim discounts on premiums payable for PSV with low claim frequencies	6	2.50	1.517
Valid N (List Wise)	3		

From Table 3, before implementation of Legal Notice Number 161, ability of insurer to detect fraud by conducting audits, records of drivers accident history/qualification, insurers ability to negotiate claims, veracity of police reports regarding the accident situation, periodic vehicle inspections to ensure roadworthiness, high cost of vehicle repairs, moral hazard arising from the garage owners, use of approved garages only by PSV operators, difficulty inherent in

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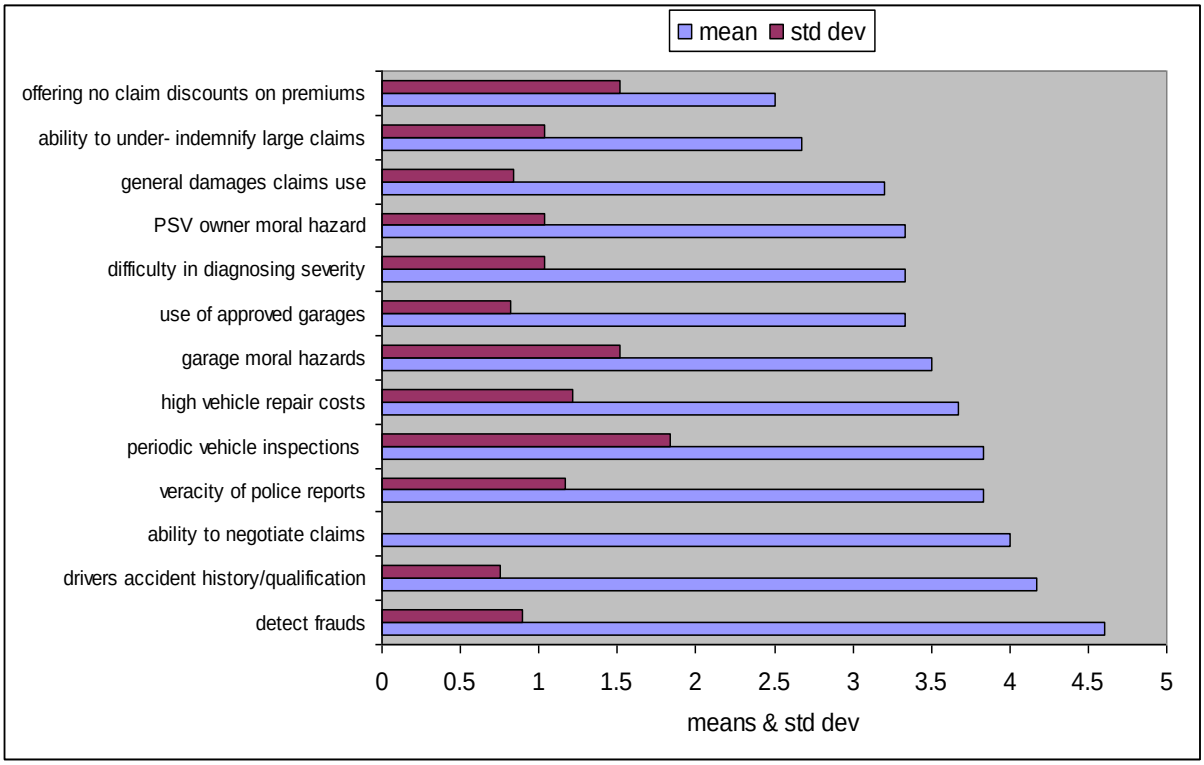
diagnosing severity, moral hazard arising from PSV owners and increased use of general damages claims had the most important rating parameters in descending order.

Figure 3 Relative Importance of Claims Payment Factors before Implementation of LNN 161



Insurer's ability to negotiate claims had a standard deviation of zero implying total agreement among the respondents. The top two factors also had standard deviations below 1.00 implying close agreement among the respondents. Insurer's ability to conduct audits may have been the most important owing to the rampant indiscipline in the sector before implementation of the legal notice, making follow up of issues critical. There was the existence of collusion between operators and police to defraud insurers before implementation of the legal notice. This may have prompted the elevation of the ability of insurers to detect fraud by conducting audits as a most important finding since it would inherently be difficult for insurers to deal with such a situation.

This process would have been backed up by driver's accident history, a key ingredient in determining safe driving practices. Claims negotiation would then help in lowering the quantum paid. Insurer's ability to under-indemnify large claims and offering no claim discounts on premiums payable for PSV with low claim frequencies were the lowest rated factors. No claims discounts were not used PSV's in Kenya, hence their lowest rating position. Figure 3 visually illustrates these relationships.

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Again, claim investigation ought to evidence instances of safe driving in order for a claim to be valid. This implicated the driver's accident history/qualifications. In event of a claim, the driver's history would undoubtedly be of particular importance. Police records regarding accident situations were also suspect owing to collusion with operators to defraud, hence the low level of importance of police records in the findings. General damages were used to lower the liability exposure caused by high risk exposure to specials damages. It would appear that these were not widely used before implementation of the legal notice number 161 of 2003.

Table 4 Relative Importance of Claims Payment Factors after Implementation of LNN 161

Claim Payment Factors	N	Mean	Std. Dev.
Ability of insurer to detect fraud by conducting audits	3	4.33	.577
Use of approved garages only by PSV sector operators	5	4.00	.707
Veracity of police reports regarding the accident situation	5	4.00	1.000
Records of drivers accident history/qualification	5	3.80	.447
Moral hazard arising from PSV owners	4	3.75	.957
Increased use of general damages claims	3	3.67	.577
High cost of vehicle repairs	5	3.60	.548
Periodic vehicle inspections to ensure roadworthiness	5	3.60	1.517
Insurers ability to negotiate claims	2	3.50	2.121
Moral hazards arising from the garage owners	5	3.40	.548
Difficulty inherent in diagnosing severity	5	3.20	1.304
Insurers ability to under- indemnify large claims	5	3.00	1.225
Offering no claim discounts on premiums payable for PSV with low claim frequencies	5	1.60	.894
Valid N (List Wise)	2		

From Table 4, after implementation of legal notice number 161, ability of insurer to detect fraud by conducting audits, use of approved garages only by PSV sector operators, veracity of police reports regarding the accident situation, records of drivers accident history/qualification, moral hazard arising from PSV owners, increased use of general damages claims, high cost of vehicle repairs, periodic vehicle inspections to ensure roadworthiness, insurers ability to negotiate claims, moral hazards arising from the garage owners and difficulty inherent in diagnosing severity were the most highly rated factors in descending order of importance.

Ability of insurer to detect fraud by conducting audits retained its top ranking both before and after implementation of the legal notice. Use of approved garages gained in importance greatly after the implementation of the notice compared to before. Both these had standard deviations of below 1.00 implying close agreement among the respondents. These findings could be attributed to the fact that in a regulated environment, the insurers became more

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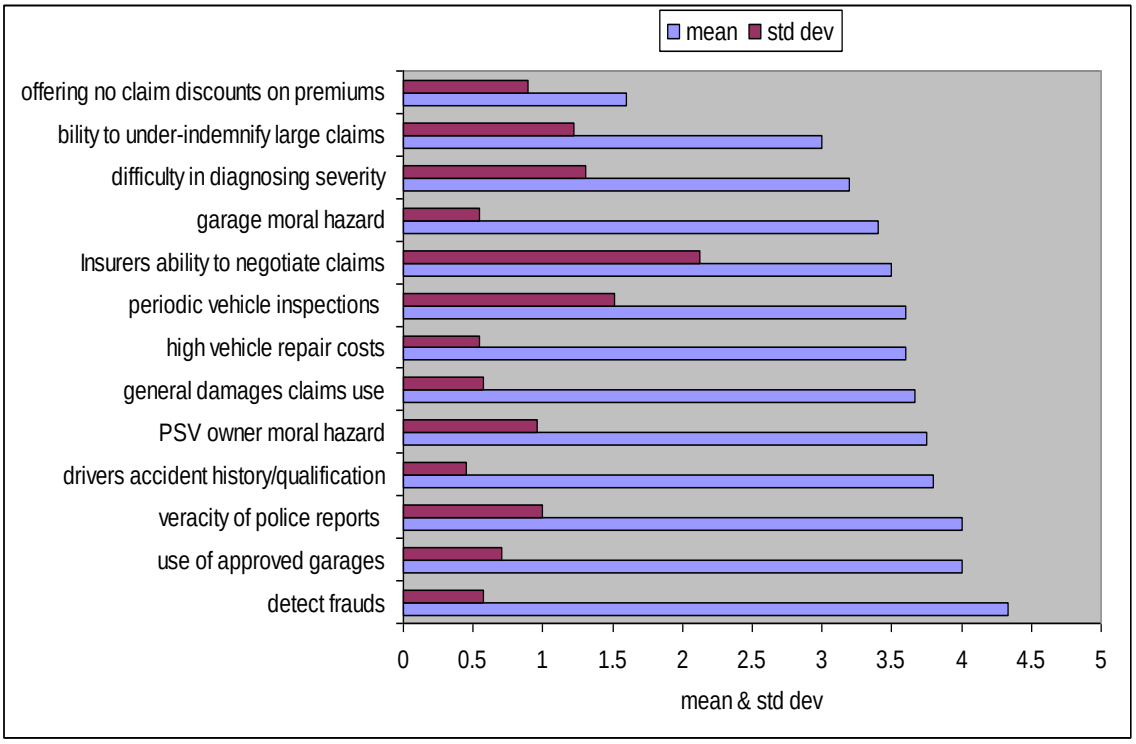
rigorous as shown by the prominence of the top five features. Records of driver's accident history/qualification, moral hazard arising from PSV owners, increased use of general damages claims, high cost of vehicle repairs and moral hazard arising from the garage owners all had standard deviations below 1.00. This was an indicator of the close similarity in rating by the respondents.

Naturally, in order to secure payment, the insured parties would try to outwit the insurers, thus raising the moral hazard. Insurer's ability to negotiate claims also registered a marked fall, but it may not have been relevant on a regulated environment. Insurer's ability to negotiate claims that they suspect are exaggerated or fraudulent is a way of forcing down build-up claims. Its high standard deviation of 2.121 reflected lack on consensus among the respondents as to its relative importance.

Insurer's ability to under-indemnify large claims to deter fraud and offering no claim discounts on premiums payable for PSV with low claim frequencies were ranked at the bottom of the scale both before and after implementation of the legal notice. After implementation of the legal notice, offering no claim discounts on premiums payable for PSV a low standard deviation of .894, implying close agreement among the respondents. Figure 4 is a graphical illustration of these findings.

Figure 4 Relative Importance of Claims Payment Factors after Implementation of LNN 161



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Other response by the respondents as to the impact of the introduction of legal notice 161 on claims was a tremendous reduction of injury related claims. The insurer could also project the number of expected claimants since the number of passengers in the vehicle was known. Other respondents noted that there was reduced road carnage but owing to non-compliance, the accident situation was worsening. Other respondents noted an increase in investors in the sector, discipline among the 'Matatu' crew and the ease of contacting them.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

After the implementation of LNN 161 of 2003 the insurers were able to project the expected number of claimants since the number of passengers in a vehicle were known prior. This made the PSV underwriters to make the necessary technical underwriting reserves. There was an increase in the number of investors in the sector due to regulations and discipline instilled through the legal notice provisions. Kenyan government requirement of periodic PSV matatu inspection instilled confidence among PSV underwriters owing to the fact that un roadworthy vehicles were not allowed to carry passenger.

The research study findings recommend consistency in enforcing compliance of the LNN 161 of 2003 regulations. The law enforcement agencies should be keen on matatus having functional seat belts, speed governors and adherence to the legally accepted passenger carrying capacity. Stiffer penalties should be imposed on those found breaking the PSV traffic laws. On the other hand, Kenyans should adopt a zero tolerance to corruption policy by traffic police. The Kenyan government should also envisage automating some of these traffic roadblock checks and prefer tough penalties to individuals who break the traffic laws. The Kenyan government should be emphatic and systematic in ensuring compliance. To reduce on injury claims exaggeration, insurers should consider having a structured compensation formula whereby a specific injury would be compensated with a specific amount of money to eliminate the risk of claims manipulation by ambulance chasers through fraudulent claims. Other world jurisdictions that have adopted PSV motor insurance pool successfully in Kenya the jury is still out there.

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