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ASSESSMENT OF THE COST REIMBURSEMENT OF DAMAGES CAUSED TO OWNERS OF WHEELED VEHICLE ACCORDING TO THE POSITION OF INSURANCE COMPANIES

ОЦІНКА ВАРТОСТІ ВІДШКОДУВАННЯ ЗБИТКІВ, ЗАВДАНИХ ВЛАСНИКАМ КОЛІСНИХ ТРАНСПОРТНИХ ЗАСОБІВ, ВІДПОВІДНО ДО ПОЗИЦІЇ СТРАХОВИХ КОМПАНІЙ

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Волчек Р.М., Большаков С.И., Найда А.В. Оцінка вартості відшкодування збитків, завданих власникам колісних транспортних засобів, відповідно до позиції страхових компаній. Науково-методична стаття.

У статті доведено, що порівняно із іноземними, вітчизняні страхові компанії при частковому і повному страхуванні транспортних засобів відшкодовують лише частину збитків при дорожньо-транспортній пригоді внаслідок врахування вікового зношення автомобіля. Задля дотримання прозорості у розрахунках збитків при дорожньо-транспортних пригодах, обґрунтовано внесення змін до нормативної бази України у частині того, що розмір відшкодування реальних збитків власнику пошкодженого автомобіля повинен дорівнювати вартості відновлювального ремонту, розрахованого за цінами, наведеними у первинних документах, без врахування фізичного зносу.

Ключові слова: колісний транспортний засіб; страхування; оцінка; збитки; ринкова вартість

Volchek R.M., Bolshakov S.I., Naida A.V. Assessment of the cost reimbursement of damages caused to owners of wheeled vehicle according to the position of insurance companies. Scientific and methodological article.

The article proves, that compared to foreign ones, domestic insurance companies with partial and full insurance of vehicles, reimburse only part of the damages in a traffic accident due to age-related wear of the car. In order to maintain transparency in the calculation of damages in road accidents, it is justified to amend the regulatory framework of Ukraine in part, that the amount of compensation for real damages to the owner of the damaged car should be equal to the cost of overhaul, calculated at the prices listed in the primary documents without taking into account physical wear.

Keywords: wheeled vehicle; insurance; evaluation; damages; market value

Unfortunately, the operation of wheeled vehicles is not without causing of road traffic accidents. It is generally imagined, that every person living in Ukraine and has in its own possession a wheeled vehicle (hereinafter WV), is obliged to insure this vehicle. Therefore, it is quite logical, that in the event of a road traffic accident (hereinafter – RTA), the insurance company will compensate the damages caused to the owner of a WV. Meanwhile, we believe, that the amount of damages by the insurance company in practice is much smaller than the amount of money that must be spent for the actual restoration of the technical condition of the wheeled vehicle. Calculations, made by the insurance company as for the amount of compensation to owners of wheeled vehicles cause by the RTA are clearly administered by normative legal acts, and are free from errors from the standpoint of mathematical calculations. At the same time, numerous dissatisfaction of WV owners regarding the amount of compensation for damages has led to a number of lawsuits, the result of which is that judges usually side with the victims of the RTA. Therefore, the relevance of the studied issues is manifested in the implementation of a thorough analysis of economic and legal aspects of the features of compensation for damages during the RTA.

Analysis of recent researches and publications

An analysis, devoted to peculiarities of property insurance for individuals and legal entities had shown,

that scholars and practitioners focus on the feasibility of choosing an assessment base to determine insurance payments for different types of property. In particular, Y.V. Krumelis and S.V. Sushko [1] emphasize the fact, that insurance companies must take into account the guidelines of National Standard 1 "General principles of property valuation and property rights" in terms of regulating the methods and principles of determining the sum insured. They consider peculiarities of property valuation in order to insure it in accordance with the terms of the contract based on the cost of reproduction (replacement) or market value. Emphasis is placed on taking into account the technical condition of the insured object in determining the specified types of the property value and provides recommendations, that do not violate the principle of compensation – when the owner of the property, which before the insured event was in poor material position, after it will be in a better position. D.V. Nalivayko [2, p.95] notes, that the most suitable method for use by insurers is when the insured value is calculated as the replacement value of the insured object. This method is able to most fully meet the needs of the client during property insurance, as well as to fully realize the insurance indemnity without using the coefficient of proportionality. This will have possibility to increase customer loyalty. However, this method is almost impossible to apply when you plan to insure built-in real estate, because in the case of destruction of the object, its restoration by reconstruction is almost impossible – built-in premises are not built separately. In this case, when determining the sum insured, it is advisable to focus on the market value of the insured object. T.D. Krivoshlyk, M.M. Mikhailov [3] see the use of franchise by vehicle owners, which makes insurance services available to them. Usually, under an auto-hull insurance contract, the amount of the deductible is from 0 to 15%. It can be differentiated by risks, namely: the risk of an accident ranges from 0 to 5%, the risk of "vehicle theft" – from 10 to 15%. On two auto-hull insurance contracts with different terms of the franchise, the insured can receive fundamentally different insurance products. If, according to his driving experience, he has not been involved in a large amounts of losses the RTA, but was in the RTA with small losses, it makes no sense for him to conclude a contract with a large amount of deductible. After all, in the event of a minor the RTA, the costs of compensation (within the deductible) are borne by him. And although in this case the client is protected from the risk of the RTA, but not to the extent that he may need. The authors note, that in the case of insurance of expensive vehicles, a franchise of 0.5% or even 0% is optimal. However, it is the zero deductible or its small size that significantly increases the cost of insurance, which is not cheap, but provides full compensation for losses.

Unsolved aspects of the problem

In spite of the fact, that the problematics of determining the amount of payments for property insurance, in particular, vehicles, is quite thoroughly

described in publications of theoretical and methodological nature, in our opinion, very little attention is paid to the peculiarities of determining the damages, caused to the owners of WV in the RTA, and comparing the methods of calculation provided by the Civil Code of Ukraine and the Law of Ukraine "On Insurance". The complexity of the problematics we are considering, is due to the fact, that usually the difference between the value of the actual damage caused to the owner of the vehicle, and the amount, reimbursed by the insurance company, must be paid in court by the person who caused the RTA. Thus, there is a manifestation of non-transparency of calculations of the damage cost, inflicted to WV, the main reason for which, in our opinion, is the different interpretation of the term "losses" in regulations, governing both legal and economic principles of assessing the replacement cost of caused damage.

The purpose of the article is to summarize the international and domestic experience in determining the cost of losses, caused to the owner of a vehicle as a result of the RTA, in order to provide recommendations, the implementation of which will increase transparency in their calculation and reimbursement.

Main part

According to Art. 22 of the Civil Code of Ukraine [8] damages are:

- expenses, incurred by the person in connection with the destruction or damage of the thing, as well as expenses, incurred by the person or must do to restore his violated right (real damages);
- incomings, that a person could actually receive under normal circumstances, if his right was not violated (lost benefit).

Damages are reimbursed in full, unless the agreement or law provides for compensation in a larger or smaller amount.

Insurance companies are guided by the provisions of the Law of Ukraine "On Insurance", when compensating the cost of material damage to the owner of a WV that was in the RTA [5]. The norms of Art. 25 of this Law [5]. provide, that the implementation of insurance payments and insurance indemnity is carrying out by the insurer, in accordance with the insurance contract on the basis of the insured's application and insurance act (accident certificate), drawn up by the insurer or his authorized person (accident manager) in the form, determined by the insurer. The same article stipulates, that the accident manager is a person, who determines the causes of the insured event and the amount of damages, the qualification requirements for which are established by acts of current legislation of Ukraine.

Article 33.3 of the Law of Ukraine "On Compulsory Insurance of Civil Liability of Land Transport Vehicles Owners" [6] stipulates, that in the event of an accident, which may be the basis for insurance compensation, the insurer appoints – an employee (insurance company), accident manager or expert.

Regarding the organizational aspects as for compensation of damages, caused to the owners of a WV, damaged as a result of the RTA, we consider, that the norms of insurance companies operating in Ukraine, are identical to the international norms of motorcar insurance. Meanwhile, according our opinion, the position of domestic insurance companies in relation to foreign insurance companies regarding the methodology of valuation of damages and a clear distinction of essentials of such terms as "value of loss of commodity value", "amount of material damage" and "damage" is radically opposite. These differences, according our opinion, stipulate significant

differences in the choice of accounting and analytical tools for estimation the value of the damage to the owner of a WV in Ukraine, compared to foreign countries and violation of transparency and prudence principles, which, in turn, underestimates the tax base of income tax in case, if participant of the RTA is a legal entity. In order to identify differences in the methodological basis for estimation the value of damages caused to the owner of a WV by foreign and domestic insurance companies, we provide characteristic of car insurance in different countries (Table 1).

Table 1. Characteristics of the process of compensation for damages to owners of WV by insurance companies in the leading car manufacturers and in Ukraine

Country	Compensation for damages to owners of WV by insurance companies during the RTA
USA	There are two car owners insurance systems. In most states, the RTA victim is paid by the insurance company of the RTA originator. However, approximately 12 states have a "No Fault" system, which provides for, that the victim receives compensation from his insurance company, regardless of the RTA originator. In some regions, it is possible to choose between these two types of damage compensation
Germany	The owner of the motor vehicle cannot receive license plates without certificate of insurance. "Basic" insurance covers the cost of a damaged WV
France	There are two types of insurance: "basic" and "all risks". The "all- risks" policy guarantees reimbursement of the sum spent on the purchase of the car. However, not at the value, that the owner would spend in the showroom, but the one, that he could get if at the time of the theft he decided to sell the car. In France, this type of value is called "vinal value"
Japan	It is impossible to drive a vehicle without insurance. Auto insurance can be full or partial. In the case of partial insurance, the amount of material damage is paid by the originator of the RTA
Ukraine	It is impossible to drive a vehicle without insurance. Insurance, as in other countries, can be partial or complete. In any type of insurance, compensation is based on the norms of the Methodology of commodity examination and assessment of wheeled vehicles, approved by the order of the Ministry of Justice of Ukraine and the State Property Fund of Ukraine dated 24.11.2003, № 142/5/2092. At any type of insurance, definition of material damage is carried out taking into account wear of the WV depending on its age

Source: compiled by authors on materials [7].

In the United States, the legislature of most states requires, at least, civil liability insurance, that is, the damage, that a driver can cause to other people moving in their cars or the environment. In some states, it is possible to opt out of insurance, but in this case it is necessary to prove your solvency in the event of the RTA. A typical civil liability insurance formula is written in three numbers. In the District of Columbia, the minimum insurance requirements look like "25/50/10". The first – is the sum of maximum compensation for physical and moral damage to one victim in thousands of dollars (i.e, up to 25 thousand US dollars), the second – is the maximum sum of compensation for all victims in one RTA The third – compensation for material damage of property. These limits vary from state to state.

For lack of insurance where it is mandatory, there are foreseen large fines and disqualifications. It is optional, but common, to insure against possible damage to one's own health or property, including if the originator responsible for the RTA does not have a policy or lacks coverage. Most Americans buy policies, but the risk of encountering a driver who does not have an insurance policy is quite high. The price of insurance can depend on a number of factors, including the driver's gender, age, driving experience,

and the credit rating and the history of the car owner. The average cost of car insurance varies greatly in each state and ranges from 1 to 2.5 thousand US dollars per year.

In Germany, the owner of a WV will not be receive license plates without insurance. The insurance requirements are set out in the Law "Gesetz über die Pflichtversicherung für Kraftfahrzeughalter (Pflichtversicherungsgesetz)" (Law on Compulsory Insurance for Vehicle Owners) [8]. In addition, the insurance company is also obliged to notify the car admission office about the termination of the insurance contract with each specific car owner. Any legal or private person who has suffered material damage, has the right to directly claim compensation from the insurance company of originator responsible for the RTA.

Strict financial stations provide a fine for the absence of an insurance policy.

Car insurance in Germany is provided in three types [8]:

- Haftpflicht (-versicherung) – compulsory liability insurance.
- Teilkasko – medium or partial insurance of the vehicle.
- Vollkasko – full voluntary car insurance.

Compulsory liability insurance (Kfz-Haftpflichtversicherung). Depending on the terms of the contract, the insurance covers material, financial damage caused to third parties while driving. Personal damages due to an accident or collision with objects are not reimbursed by the insurance.

The purpose of such insurance is to reimburse to victims through the fault of the driver, regardless of the financial situation of the perpetrator of the RTA. A limit of 1.12 million euros has been set for the repair and restoration of the victim's vehicle. If, as a result of the RTA, the victim had to rent a car, the costs are also paid by the insurance company of the person, who is perpetrator of the RTA.

Up to 50 thousands euros to be covered by harming the affairs of the victim for example, as a result of RTA, a person didn't catch on the important meeting and couldn't make an agreement.

For damage to the health of victims, including passengers, which were in the car of the accident perpetrator, German insurance companies must pay up to 7.5 million euros. In this sum there are included compensations to direct relatives of dead persons.

The insurance company of the perpetrator of the RTA independently resolves cases with victims of the RTA and compensates damages. If the offer of the insurance company does not satisfy the victims, the case adjudicated by the court. The insured perpetrator of the RTA is not subjected to further court proceedings. Although he will have to accept the increase of calls due to the insured event. The more often the insurance indemnifies, the higher the insurance premiums.

In addition to compulsory insurance in Germany, there are two types of additional voluntary insurance: full and partial kasko.

Teilkasko – covers the damages from theft and attempted burglary of the vehicle, theft of serial parts of the car, such as wheels. Also is included compensation for storm damages, fires and natural disasters. As a rule, this type of insurance provides, that part of the damages the car owner pays himself. The larger the sum of self-cover the damages, the lower the insurance premiums.

Vollkasko – covers damage, that is not covered by the two types of insurance mentioned above, such as the repair of the vehicle of the RTA perpetrator. Damages from acts of vandalism or repair of parking scratches are also reimbursed.

A new car purchase on credit, as a rule, provides for an insurance agreement on the terms of Vollkasko [9].

In France, there are two types of insurance: "basic" and "all risks".

Penalties are provided for using an uninsured car. Meanwhile, more catastrophic events would have occurred with the perpetrator of the RTA, when he caused damage to a "third party" – a wheeled vehicle; to the person who drove it; passengers or an accidental victim. In this case, without "basic insurance" he would have to pay the full cost of the damaged car, large sums for the treatment of victims

and other payments, which in some cases can amount to hundreds of thousands of euros.

"Basic insurance" covers all these sums. The perpetrator himself, provided that this minimum insurance policy is available, will pay for his own treatment and repair of the wheeled vehicle. Usually, this type of insurance is used in France, when the car is not expensive or the age of the car is more than 5 years. Those, who will buy a new car, as a rule, add at extra charge to the list of insured risks – glass damage, arson, natural disasters and other risks. The best and the most expensive type of insurance – "all risks". This type of car insurance provides compensation for all costs at the expense of the insurance policy, regardless of whether the owner of this policy is responsible for the accident or not. This policy costs 3 times more than a regular insurance policy.

Such a policy also guarantees a refund of the sum spent on the purchase of a car. However, not at the value, that the Frenchman would spend in the showroom, but the one, that he could get if at the time of the theft he would decide to sell the car. In France, this is called "vinal value". In the event that a car that is one year old is stolen from the owner, the compensation according to the algorithm for calculating the vinal value will be slightly more than 70% of its original value. If the theft took place a couple of years later, the cost of vinal value would be lower – less than 50%.

In Japan, driving without insurance is not possible. Auto insurance can be full or partial. In this case, to drive a car, it is enough to have a policy of compulsory motor third party liability insurance (CMTPLI), the cost of which is relatively low and is set by the state. Its calculation takes into account the level of consumer prices and population wage level. CMTPLI in Japan is purchased for at least one year, and covers medical and other costs in the event of harm to life and health of third parties. It is more profitable to buy a policy for three years. Payments according policy CTPLIC do not provide for payments to relatives of the perpetrator of the RTA. In other words, if the driver's father or mother was sitting in the passenger seat at the moment of the TRA, the insurance company is not responsible for any damage to their health. The driver must also pay for financial damage and car repairs out of his own pocket [7].

The generalization of the characteristics of insurance companies' reimbursement of the value of a damaged vehicle to its owner during its RTA in different countries of the world, shows that the world's insurance companies both at the settle of compulsory (partial) motor insurance, and at the settle of full wheeled vehicle insurance, compensate exactly the amount the caused damage to the owner of the damaged motor transport. In Ukraine, on the other hand, the insurance company reimburses the owner of the damaged vehicle only part of the damage, as it takes into account the age-related wear and tear of the car involved in the RTA. In addition, we believe, that mostly in Ukraine, in accordance with the norms of

the Methodology of commodity examination and assessment of wheeled vehicles № 142/5/2092 [10] (hereafter-Methodology) is determined the cost of the damage caused to the owner of the damaged car, but the amount of financial damage. The essence of this term, according our opinion, differs significantly from the economic category of "damage".

Let's try to understand how the situation occurs, in which in accordance with domestic law, the owner of a damaged WV in the RTA, receives from the insurance company compensation in the amount much less than the actual cost for repair of the car, concluding with the insurance company contracts not only for compulsory motor liability insurance, but also full insurance.

As mentioned earlier, in Ukraine, the person who determines the causes of the insured event and the amount of damage is the accident manager. He draws up an emergency certificate, is personally responsible for the accuracy of the information contained therein.

Note, that Art. 30.1 of the Law "On compulsory insurance of civil liability of owners of land vehicles" [6] provides for a single case where the appraiser can be involved as a business entity, namely, when the vehicle is considered physically destroyed, and its repair is technically impossible or economically unreasonable.

According to the norms of the Methodology, in order to determine the cost of material damage caused to the owner of the WV, the cost approach and the method of calculating the cost of complete renovation are used.

The value of financial damage (Y), caused to the owner of the WV is determined to be equal to the market value of the WV at the moment of damage in the availability of one of the following conditions:

a) if, in spite of the principles of contribution and the most efficient use, the cost of overhaul of the WV is not less than its market value (C),

$$C_{BP} \geq C, \quad (1)$$

where C_{BP} – cost of overhaul, uah.

b) if the sum of the cost of overhaul, taking into account the value of the coefficient of physical wear of the WV and the loss of commodity value is not less than the market value of the WV, provided that $C \geq C_{BP}$,

$$C_{BP3} + BTB \geq C, \quad (2)$$

$$C_{BP3} = C_p + C_M + C_C \times (1 - E_3), \quad (3)$$

where C_p – the cost of repair and restoration work, uah; C_M – cost of materials necessary for repair, uah; C_C – cost of components to be replaced during repair, uah; E_3 – coefficient of physical wear; BTB – the amount of loss of commodity value.

c) if it is impossible to restore the WV in accordance with the technical requirements of the manufacturer.

In other cases, the cost of property damage is determined as the sum of the cost of overhaul, taking into account the value of the coefficient of physical

wear of the components of the WV (C_{BP3}) and the value of BTB according to the formula 4:

$$Y = C_p + C_M + C_C \times (1 - E_3) + BTB, \quad (4)$$

The cost of financial damage, which is determined during the assessment, does not include the costs of the WV owner, related to transportation, storage of the WV, payment for expert research, postage, calling the parties for technical inspection of the WV and other costs.

The calculation of the cost of overhaul is based on the results of the technical inspection of the WV.

If the WV is completely or partially restored at the time of the technical inspection, the calculation of the overhaul is not made, and the customer of the assessment is notified about impossibility of research conducting.

The cost of overhaul is calculated by the formula 5.

$$C_{BP} = C_p + C_M + C_C, \quad (5)$$

The cost of repair and restoration work (C_p) can be defined as the product of labor intensity of the repair in standard hours and the regional cost of standard hour. The need for repair operations and the labor intensity of the repair is established on the basis of regulatory documents of the WV manufacturer or developed according to the order (with the participation) of the WV manufacturer.

The procedure for estimating the value of the WV in case of damage is mandatory.

Here is the calculation of the cost of overhaul of the car Mercedes C-200, the first registration of which took place on 19.11.2008, and the date of the RTA – 19.12.2018. This calculation is taken by us from the materials of the case № 1.102. 18. 0008235 as of 12.19.2018. According to the calculation, the cost of overhaul of this car is 168,074.25 UAH, including the cost of spare parts is 148,669.44 UAH.

An accident manager or forensic expert, calculating the cost of repairs, is guided by the rules of the Methodology [10]. The cost of materials, i.e. spare parts, can be taken by an expert at the level of both original and non-original. Thus, according to paragraph 8.5.10 of this Methodology [10]: "data on the cost of components of the RTA to be replaced, take in accordance according to Annex 8 of the Methodology, information support from the manufacturer of the vehicle, as well as other sources that contain the necessary information on original components".

The specified norm of the Methodology from the practical point of view, can be interpreted as follows: an accident manager can (in practice actually carries out) calculation of cost of the spare parts necessary for carrying out repair of WV, not at the prices of original spare parts, and proceeding from the prices for spare parts not original. That is, instead of the spare part, the German production necessary for repair of the Mercedes C-200 car, the detail which is made in Turkey or China is considered. Such parts are non-original and are cheaper than the original.

An explanation of why in practice an accident manager or appraiser, who calculates the cost of losses, can be found only in the sense, that usually in domestic business practice, these individuals work in accordance with the goals and interests of insurance companies, the main purpose of which is to reduce the cost of repairs. One of the ways to reduce this is to calculate the "understated" cost of the components needed to carry out repairs of the vehicle.

Based on our calculation of the cost of repair of a damaged car Mercedes C-200, we note, that the Methodology [10], determines the cost of overhaul, taking into account the physical wear. That is, an accident manager strictly adhering to the rules of this Methodology, is obliged to reduce the cost of repairing a damaged WV with the help of the Audatex software product, by applying a wear factor that depends on the age of the WV. Therefore, the owner of a damaged WV, even if he has a full insurance contract with the insurance company, will receive from it only partial compensation, compared to that, which should be obtained based on the actual costs to be incurred by the owner of the damaged WV for its "actual repair". At the same time, the insurance company does not violate any legal act that regulates the procedures for assessing and compensating for damages caused to the owner of the damaged WV.

The main manifestation of non-transparency of calculations of the value of damages caused, to the owner of the vehicle damaged in the RTA is, in our opinion, that the Methodology provides compensation for material damage to the car owner, and the Civil Code of Ukraine, states the right of the owner damaged at the RTA WV, to demand from the insurance company compensation for damages. Such a different economic interpretation of the terms "loss" and "cost of material damage", leads to the fact, that in fact insurance companies in Ukraine reimburse the owner of the damaged WV only a partial cost of actual losses. We substantiate this conclusion.

According to paragraph 2.4 of the Methodology [10], the value of material damage (real damage) is defined as the value of costs incurred by the owner in case of damage or dismantling of the vehicle, taking into account physical wear and tear and costs incurred by the owner to restore his violated right use of WV (loss of commodity value).

From this formulation it follows that the Methodology introduces a rule that for components (parts, assemblies) of WV with a service life of more than 12 years, the normative value of the coefficient of physical wear E_3 at the level of 0.7.

According to paragraph 7.38 of the Methodology [10], the value of E_3 is assumed to be zero for new components and components of the WV, the service life of which does not exceed:

- 5 years – for passenger WV manufactured in the CIS countries;
- 7 years – for other passenger WV;
- 3 years – for freight vehicles, freight – passenger vehicles, trailers, semi-trailers, special vehicles, specialized vehicles, buses manufactured in the CIS countries;

- 4 years – for other freight WV, freight-passenger vehicles, trailers, semi-trailers, special vehicles, specialized vehicles, buses;
- 5 years – for two-wheeled motor vehicles.
- Exceptions to the use of these requirements are: the WV is operated in intensive mode (the actual average annual mileage is at least twice the average annual standard) and others.

Thus, the car we studied Mercedes C-200 is 10 years old from the date of first registration (on the date of the RTA), respectively, the market value of spare parts needed for its repair was reduced by 68% (data taken directly from the case file). Therefore, the amount of compensation for repairs from the insurance company will be equal to:

The market value of the overhaul according to the calculation is 168 074,25 UAH, incl. cost of spare parts – 148 669,44 UAH.

According to paragraph 7.36 of the Methodology [10], the market value of a particular component takes into account its completeness and actual technical condition, the conditions in which it was operated (stored), the peculiarities of the market in the region.

The market value of the component of the WV (C_3), taking into account the coefficient of physical wear is determined by formula 6.

$$C_3 = \Pi_c \times (1 - E_3), \quad (6)$$

where: Π_c – the price of a new component, uah;
 E_3 – coefficient of physical wear.

The coefficient of physical wear E_3 is calculated by formula 7.

$$E_3 = 1 - C/\Pi_c, \quad (7)$$

where: C is the market value of the second-hand component.

Accordingly, the calculation of the cost of spare parts (C_3), necessary for the repair of damaged in the RTA car Mercedes C-200, is:

$$C_3 = 148\,669.44 \text{ UAH} \times (1 - 0.68) = 47\,574.22 \text{ UAH},$$

The market value of the overhaul of the Mercedes C-200 taking into account the physical wear of the spare parts of the vehicle is 66 979,03 UAH (168 074.25 UAH – 148 669.44 UAH) + 47 574.22 UAH instead of the previously calculated 168 074.25 UAH.

The logic of calculations, dictated by the Methodology [10] is based on the fact that since the WV, that was damaged in the RTA is more than 12 years old from the date of registration, the spare parts and components installed on it have significant physical wear. Meanwhile, from the standpoint of common sense, there is a significant contradiction: indeed, the components and parts on the damaged WV were physically worn out, but the actual replacement of these components of WV involves the replacement of old parts with new ones, and accordingly, the actual owner of the damaged WV will pay the masters of car repair shop for new details,

instead of for physically worn out. Accordingly, the norms of the Methodology misinterpret the economic essence of the category of "physical wear", as the owner of the damaged WV will actually spend the amount of money for overhaul, which will be much more than the amount, reimbursed by the insurance company under compulsory or full insurance.

A comparison of the legal norms as for compensation of insurance companies to the owners of damages during RTA in different countries of the world and in Ukraine, shows that, for example, in Germany and France, the cost of compensation for actual losses is equal to the amount actually paid or to be paid overhaul. And the use of physical wear to the components of the WV, which will be replaced during the repair, is not applied. This algorithm for calculating the value of real losses is based on the principles of transparency and prudence, because how much a person actually spent or will spend money on the restoration of a WV, is actually confirmed by primary documents provided by a specialized service station.

Therefore, it would be logical to recommend, that changes to be made to the Methodology of Commodity Examination and Assessment of Wheeled Vehicles № 142/5/2092, to determine the value of real damage suffered by the owner of the damaged wheeled vehicle, at the cost of overhaul, without taking into account the age of the damaged WV. This value must be confirmed by primary documents.

If we disregard such details as the legally allowed to accident manager or expert to manipulate the cost of spare parts and adjust the cost of new parts and components to the coefficient of physical wear, which varies depending on the age of the damaged WV, the question arises: why the cost of material damage (real damage), which is declared in paragraph 2.4 of the Methodology [10], is so significantly different from the value of losses, which is determined by the Civil Code of Ukraine and which is determined in Europe, USA, Japan and other countries.

In our opinion, the fundamental difference lies in the incorrect use of the economic content of such economic categories as "price" and "value". Price – is the actual amount of money paid for the object of evaluation. Cost – is the estimated amount of money, that must be paid for the object of evaluation at the date of evaluation. That is, the economic category "price" takes into account all the risks present at the date of assessment, and the category "cost" – does not take into account, because the accident manager or expert, does not have residuals as for intentions of the owner of the damaged in the RTA wheeled vehicle. In fact, overhaul and other factors will be carried out.

We believe that the practical "construction" of the cost of overhaul, which is carried out in the domestic management practice, contradicts the economic essence of the category of "loss". Based on the rules of Art. 22 of the Civil Code of Ukraine [4], we understand, that the damage there are "losses", that a person actually suffered or suffers in connection with damage of property. And they should be calculated

not on the basis of cost, but on the basis of the price contained in the primary documents.

It should be noted, that the compensation of losses actually incurred by insurance companies, which are much less, than the amount actually spent by the owner of the WV injured in the RTA, became the basis for numerous court decisions. In particular, the Supreme Court in the Judicial Chamber of the Civil Court of Cassation in its Resolution 86686/17155/15-ts of 03.10.2018 [11], uphold the legal opinion set out in the Resolution Of the Supreme Court of Ukraine of December 2, 2015 in case № 6-691uc15 [11], where it was stated, that it is correct to collect from the guilty driver the difference between the actual cost of repairs, taking into account the replacement of worn parts with new ones (excluding the coefficient of physical wear), and insurance indemnity, paid by the insurer in the amount of the cost of overhaul of the damaged car, taking into account the wear of parts to be replaced, because in this case the insurer has no obligation to reimburse such a difference, in spite the fact, that these losses are less than insurance indemnity (insurance payment). Based on this conclusion, the Supreme Court determined, that the insurer under the compulsory insurance contract is liable within the insurance limit minus physical wear, and for the rest - the direct perpetrator [11].

Note, that if the perpetrator of the RTA was employed at the time of the RTA, the difference between the real cost of overhaul of the damaged vehicle and compensation from the insurance company, will be charged to the employer, and he, in his turn, will collect it from the perpetrator. Meanwhile, these costs will reduce the base of income tax of the said legal entity and, thus, in the current period, the state budget will not receive tax revenues. Compensation received from the perpetrator of the RTA in the future, will still lead to a loss of purchasing power of money, because money today is more expensive than money of the next day.

Conclusions

The generalization of the results of the study of the peculiarities of reimbursement by insurance companies, caused to owners damaged in RTA wheeled vehicles, should indicate, that in order to keep transparency in the calculation of the cost of losses, it is necessary to include in the Methodology of commodity examination and assessment of wheeled vehicles № 142/5/2092 such changes:

- to replace the term "cost of material damage" with the term "loss". This will prevent abuse by accident managers and experts during the "construction" of the cost of overhaul of damaged wheeled vehicle that was involved in the RTA. The abuses will be stopped by estimating the amount of damage on the basis of information on prices for original spare parts (as evidenced by the prices specified in the primary accounting documents), and on the specified service stations in the primary documents, tariffs and standard times for restoration work;

— to indicate, that the amount of compensation for damages (real damage) caused to the owner of the damaged vehicle during the RTA, must be equal to the cost of overhaul, calculated according to the calculation, based on the prices given in the primary documents, excluding physical wear.

Based on the fact, that damages in accordance with the Civil Procedure Code of Ukraine, is the sum of actual losses, i.e. costs, which the victim incurred or will be incurred because of the disaster with his property, and lost profits, we believe, that for a damaged wheeled vehicle lost benefits will be loss of commodity value. In addition, the Methodology contains the appropriate calculation. Therefore, it should be clearly stated in the Methodology, that the damage to be calculated during the RTA, should be based not on the cost of components and restoration work, but on their price, which has already been paid or will be paid and confirmed by primary accounting documents. Accordingly, based on these calculations, the owner of a damaged wheeled vehicle has the right to claim from the insurance company such an amount of compensation for damages that he actually suffered. It does not make sense for the perpetrator to demand payment of the difference between the actual

amount of damages and that reimbursed by the insurance company in accordance with the Methodology of Commodity Examination and Evaluation of wheeled vehicles № 142/5/2092. in the event of an insured event and for this, vehicle users make insurance premiums.

Our proposed changes to the algorithm for estimating the cost of compensation for damages suffered by the owner of a damaged wheeled vehicle at the moment of RTA, are consistent with world insurance practice, and are designed to ensure compliance with the principle of transparency similar to the provisions of Art. 49 of the Customs Code of Ukraine [12], where the customs value of goods moving across the customs border of Ukraine is the value of goods used for customs purposes, which is based on the price actually paid or payable for these goods. We believe, that further research should be carried out in the development of normative documents of a methodological nature, which could be guided by forensic experts and appraisers in determining the value of damages in accordance with the Civil Code of Ukraine, which states that damages are reimbursed in full the law does not provide for compensation in a larger or smaller amount.

Abstract

Unfortunately, the operation of wheeled vehicles is not without causing of road traffic accidents. In the event of a road traffic accident (hereinafter – RTA), the insurance company will reimburse the damage caused to the owner of the vehicle. Meanwhile, we believe, that the amount of damages by the insurance company in practice is much smaller, than the amount of money that must be spent for the actual restoration of the technical condition of the wheeled vehicle. Calculations, made by the insurance company as for the amount of compensation to owners of wheeled vehicles cause by the RTA are clearly administered by normative legal acts, and are free from errors from the standpoint of mathematical calculation. At the same time, numerous dissatisfaction of wheeled vehicle owners regarding the amount of compensation for damages, has led to a number of lawsuits, the result of which is, that judges usually side with the victims of the RTA. Therefore, the relevance of the studied issues is manifested in the implementation of a thorough analysis of economic and legal aspects of the peculiarities of compensation for damages during the RTA.

In spite of the fact, that the problematics of determining the amount of payments for property insurance, in particular, vehicles, is quite thoroughly described in publications of theoretical and methodological nature, in our opinion, very little attention is paid to the peculiarities of determining the damages, caused to the owners of wheeled vehicles in the RTA, and comparing the methods of calculation provided by the Civil Code of Ukraine and the Law of Ukraine "On Insurance". The complexity of the problematics we are considering is due to the fact, that usually the difference between the value of the actual damage caused to the owner of the vehicle, and the amount, reimbursed by the insurance company, must be paid in court by the person who caused the RTA. Thus, there is a manifestation of non-transparency of calculations of the damage cost, inflicted to vehicle owners, the main reason for which, in our opinion, is the different interpretation of the term "losses" in regulations, governing both legal and economic principles of assessing the replacement cost of caused damage.

The purpose of the article is to summarize the international and domestic experience in determining the cost of losses, caused to the owner of a vehicle as a result of the RTA, in order to provide recommendations, the implementation of which will increase transparency in their calculation and reimbursement.

Research methods – general scientific. The generalization of the characteristics of insurance companies' reimbursement of the value of a damaged vehicle to its owner during its RTA in different countries of the world, shows that the world's insurance companies both at the settle of compulsory (partial) motor insurance, and at the settle of full wheeled vehicle (hereinafter-RTA) insurance, compensate exactly the amount of the caused damage to the owner of the damaged automobile transport. In Ukraine, on the other hand, the insurance company reimburses the owner of the damaged WV only part of the damage, as it takes into account the age-related wear of the car involved in the RTA. In addition, we believe, that mostly in Ukraine, in accordance with the norms of the Methodology of commodity examination and assessment of wheeled vehicles № 142/5/2092 (hereafter-Methodology) is determined not the cost of the damage caused to the owner of the damaged car, but the amount of financial damage. The essence of this term, according our opinion, differs significantly from the economic category of "damage".

The logic of calculations, dictated by the Methodology is based on the fact, that since the wheeled vehicle, that was damaged in the RTA is more than 12 years old from the date of registration, the spare parts and components installed on it have significant physical wear. Meanwhile, from the standpoint of common sense, there is a significant contradiction: indeed, the components and parts on the damaged WV were physically worn out, but the actual replacement of these components of WV involves the replacement of old parts with new ones, and accordingly, the actual owner of the damaged WV will pay the masters of car repair shop for new details, instead of for physically worn out.

Accordingly, the norms of the Methodology misinterpret the economic essence of the category of "physical wear", as the owner of the damaged WV will actually spend the amount of money for overhaul, which will be much more than the amount, reimbursed by the insurance company under compulsory or full insurance.

A comparison of the legal norms as for compensation of insurance companies to the owners of damages during RTA WV in different countries of the world and in Ukraine shows that, for example, in Germany and France, the cost of compensation for actual losses is equal to the amount actually paid or to be paid overhaul. And the use of physical wear to the components of the WV, which will be replaced during the repair, is not applied. This algorithm for calculating the value of real losses is based on the principles of transparency and prudence, because how much a person actually spent or will spend money on the restoration of a wheeled vehicle is actually confirmed by primary documents provided by a specialized service station.

The generalization of the results of the study of the peculiarities of reimbursement by insurance companies, caused to owners damaged in RTA wheeled vehicles, should indicate, that in order to keep transparency in the calculation of the cost of losses, it is necessary to include in the Methodology of commodity examination and assessment of wheeled vehicles № 142/5/2092 such changes:

- to replace the term "cost of material damage" with the term "loss". This will prevent abuse by accident managers and experts during the "construction" of the cost of overhaul of damaged wheeled vehicle that was involved in the RTA. The abuses will be stopped by estimating the amount of damage on the basis of information on prices for original spare parts (as evidenced by the prices specified in the primary accounting documents), and on the specified service stations in the primary documents, tariffs and standard times for restoration work;
- to indicate, that the amount of compensation for damages (real damages) caused to the owner of the damaged vehicle during the RTA, must be equal to the cost of overhaul, calculated according to the calculation, based on the prices given in the primary documents, excluding physical wear.

Based on the fact, that damages in accordance with the Civil Procedure Code of Ukraine, is the sum of actual losses, i.e. costs, which the victim incurred or will be incurred because of the disaster with his property, and lost profits, we believe, that for a damaged wheeled vehicle lost benefits will be loss of commodity value. In addition, the Methodology contains the appropriate calculation. Therefore, it should be clearly stated in the Methodology, that the damage to be calculated during the RTA, should be based not on the cost of components and restoration work, but on their price, which has already been paid or will be paid and confirmed by primary accounting documents. Accordingly, based on these calculations, the owner of a damaged wheeled vehicle has the right to claim from the insurance company such an amount of compensation for damages, that he actually suffered. It does not make sense for the perpetrator to demand payment of the difference between the actual amount of damages and that reimbursed by the insurance company in accordance with the Methodology of Commodity Examination and Evaluation of wheeled vehicles № 142/5/2092. In the event of an insured event and for this, vehicle users make insurance premiums.

Our proposed changes to the algorithm for estimating the cost of compensation for damages suffered by the owner of a damaged wheeled vehicle at the moment of RTA, are consistent with world insurance practice, and are designed to ensure compliance with the principle of transparency similar to the provisions of Art. 49 of the Customs Code of Ukraine, where the customs value of goods moving across the customs border of Ukraine is the value of goods used for customs purposes, which are based on the price actually paid or payable for these goods.

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