# THE EFFECTIVENESS OF THE ROAD TRAFFIC LIABILITY SYSTEM IN CHINA? A LAW AND ECONOMICS PERSPECTIVE

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This article analyses the effectiveness of the Chinese road traffic liability system in terms of both deterrence and compensation. We utilize the neo-classical economic model of accidents to assess the key features of the system, such as the basis of liability, the level of the benefits, the impacts of liability insurance and regulation, as well as the capacity of risk-spreading. The analysis shows that the road traffic liability system in China can only achieve partial deterrence. Undercompensation and insufficient risk-spreading seem to be serious problems, at least in the economically underdeveloped regions. Therefore, we propose several legislative changes that the policymaker could implement to improve the system.

**Key words**: road traffic liability, law and economics analysis, neo-classical economic model of accidents, Tort Liability Law in China, Road Traffic Safety law in China.

# TABLE OF CONTENTS

I.	Introduction	60
II.	THEORETICAL FRAMEWORK	63
	A. OPTIMAL DETERRENCE VIA THE TORT SYSTEM	63
	B. OPTIMAL COMPENSATION VIA THE TORT SYSTEM	67
Īπ	DETERRENCE VIA TRAFFIC LIABILITY IN CHINA	68

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	A. TRAFFIC LIABILITY RULES IN CHINA	68
	B. THE IMPACT OF LIABILITY INSURANCE IN CHINA	71
	C. THE IMPACT OF REGULATION IN CHINA	59
Iv.	COMPENSATION VIA TRAFFIC LIABILITY IN CHINA.	78
	A. Eligibility	80
	B. Benefits Level	81
	C. CLAIMS SETTLEMENT	83
	D. Financing	84
V.	DETERRENCE AND COMPENSATION VIA ROAD	TRAFFIC
Lia	BILITY IN CHINA: SOME EMPIRICS	85
	A. DRIVER'S RESPONSE AND THE SIGNIFICANCE OF	•
	DETERRENCE	85
	B. CLAIMS INITIATION	86
	C. CLAIMS RESOLUTION	87
VI.	CONCLUSION AND THE WAY FORWARD	88

# I. INTRODUCTION

Road traffic accidents (RTAs) are one of the major causes of misery and death globally, with a disproportionate high number occurring in low- and middle-income countries. As a result, a lot of compensation disputes arise from these RTAs. To solve these cases, the tort liability system is often invoked to establish liability and to determine the amount of compensation that should be paid out.

As expected, there is rich literature on how to deal effectively with RTA compensation disputes under the tort liability system. However, most of these studies focus on high-income countries. <sup>1</sup> There is a clear lack of research that examines RTAs in low- and middle-income countries. There are

<sup>1</sup> Many studies discuss the traffic liability system in the U.S., for a review of these studies, *see* James M. Anderson et al., The U.S. Experience With No-Fault Automobile Insurance: A Retrospective (Rand Inst. for Civil Justice ed. 2010). For the development of traffic liability in European counties, *see* Wolfgang Ernst, The Development of Traffic Liability (2010).

several reasons to examine the road traffic liability system in low- and middle-income countries. First, these countries are relatively more dangerous for road users as there are a lot more accidents occurring.<sup>2</sup> Second, people in these countries have more limited access to both commercial and social insurance.<sup>3</sup> As a result, the victims in RTAs are very likely to bear a larger fraction of the "under-insured out-of-pocket costs."<sup>4</sup>

This article tries to fill the gap by focusing on the largest emerging country, China. In China, like in other low- and middle-income countries, many RTAs occur on a yearly basis. The rapid economic growth since the late 1990s has brought more vehicles onto the road, but a simultaneous improvement in driving safety and protection for victims of the RTAs has not taken place yet. In practice, road safety laws and regulations are poorly enforced and fail to meet the best practice. The victims of RTAs usually have to wait for a long time to receive their compensation and the amounts usually also fall short of their actual needs. Since 2003, impressive legislative reforms have

<sup>&</sup>lt;sup>2</sup> See Global Status Report on Road Safety 2018: Summary, WHO, https://www.who.int/publications/i/item/9789241565684 (last visited December 12, 2020).

<sup>&</sup>lt;sup>3</sup> The World Health Report 2000—Health Systems: Improving Performance, WHO, https://www.who.int/whr/2000/en/ (last visited July 9, 2020).

<sup>&</sup>lt;sup>4</sup> "Under-insured out-of-pocket costs" refer to the victim's expenditure caused by an accident, minus the compensation obtained from private and publicly funded insurance. *See* Robert D. Cooter & Hans-Bernd Schäfer, *Poverty is Dangerous: Accidents and Liability, in* SOLOMON'S KNOT: HOW LAW CAN END THE POVERTY OF NATIONS 179, 187 (Robert D. Cooter & Hans-Bernd Schäfer eds., Princeton Univ. Press 2012). Even though there is no direct data to support this point, we do have data on health expenditure, which indicate that people from low- and middle-income countries generally bear much larger out-of-pocket health costs than those from high-income countries. This may, however, also be due to the lower level of individual wealth in those countries. *See World Health Statistics* 2015, WHO, https://www.who.int/gho/publications/world\_health\_statistics/2015/en/ (last visited July 9, 2020).

<sup>&</sup>lt;sup>5</sup> See WHO, supra note 2.

<sup>6</sup> See Jiangning District Court (江宁区人民法院), Jiaotong Shigu Sunhai Peichang Anjian Shenli Qingquang de Diaocha yu Sikao [Observations on the Resolution of Traffic Injury Compensation Claims in Court], Ren Min Si Fa (人民司法) [THE PEOPLE'S JUDICATURE], no.2, 2007 at 36, 36—41; 2011—2013 Guangzhoushi Huaduqu Renmin Fayuan Jiaotong Shigu Sunhai Peichang Anjian Baipishu (广州市花都区人民法院交通事故损害赔偿案件 白皮书 2011—2013) [2011—2013 White Book of Traffic Accident Compensation Cases Closed in Huadu District Court of Guangzhou City], GUANG ZHOU HUADU DISTRICT COURT, http://www.gzcourt.gov.cn/xwzx/bps/2014/05/06171335867.html (last visited Dec. 27, 2020).

been undertaken by the Chinese government to deal with RTAs. Interventions include, but are not limited to, implementing a Road Traffic Safety Law (in 2003) and a Tort Liability Law (in 2009), improving damage awards (in 2003), and launching a national compulsory liability insurance scheme for motorized vehicles (in 2006). But the question arises, of why, after all those efforts, road safety and victim protection in China are still that poor? Are these reform efforts heading in the right direction? And what is needed to effectively improve road safety and victim protection in China?

This paper tries to address these questions from a particular angle, the economic approach to law. <sup>8</sup> Since the 1960s, many scholars have examined the specific conditions under which liability rules can be used to increase social welfare by giving incentives to the potential injurer for reducing harmful activities and taking the appropriate level of care. <sup>9</sup> Shortly afterwards, the discussion was expanded to the field of RTAs. <sup>10</sup> Now, it is generally accepted that the traffic liability system should be designed in such a way that it can achieve the goals of accident prevention (deterrence) and victim compensation (risk-spreading) at the lowest cost. <sup>11</sup> This conclusion is especially important for countries like China. These countries have an urgent need, not only to use their limited budget more effectively, but also to find a balance between victim protection and economic development.

Serious Accident Law in China, 9 ASIAN J. L. & ECON. 1, 1–7 (2018).

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<sup>&</sup>lt;sup>7</sup> For more information on the reforms of road traffic accident laws in China as well as the background of these reformations, see YU YAN, ROAD TRAFFIC LIABILITY IN CHINA: A VIEW FROM LAW AND ECONOMICS 15-141 (Brill 2019). <sup>8</sup> In China, only a few papers analyzed the road traffic liability system from the perspective of law and economics. Only recently, a few Chinese studies on this issue is available in English, *see*, *e.g.*, Pan Su, *Economic Analysis of* 

<sup>&</sup>lt;sup>9</sup> See, e.g., GUIDO CALABRESI, THE COST OF ACCIDENTS: A LEGAL AND ECONOMIC ANALYSIS 68–130 (Yale Univ. Press 1970); Richard A. Posner, A Theory of Negligence, 13 J. LEGAL STUD. 29, 29–96 (1972); John Prather Brown, Toward an Economic Theory of Liability, 2 J. LEGAL STUD. 323, 323–350 (1973); Steven Shavell, Strict Liability Versus Negligence, 9 J. LEGAL STUD. 1, 1–26 (1980); Polinsky, A. Mitchell, Strict Liability vs. Negligence in a Market Setting, 70 AM. ECON. REV. 363, 363–67 (1980).

<sup>&</sup>lt;sup>10</sup> See William Vickrey, Automobile Accidents, Tort Law, Externalities, and Insurance: An Economist's Critique, 33 Law & Contemp. Probs. 464, 464–87 (1968); Rune Elvik, The External Costs of Traffic Injury: Definition, Estimation, and Possibilities for Internalization, 26 Accident Analysis & Prevention 719, 719–732 (1996); Donald Dewess, David Duff & Michael Trebilcock, Exploring the Domain of Accident Law: Taking the Facts Seriously 15–94 (1996).

<sup>&</sup>lt;sup>11</sup> See e.g. CALABRESI, supra note 9, at 68-130; DEWESS ET AL., supra note 10, at 146.

The structure of our Article is as follows. In Part I, we present the neo-classical economic model of accidents to theoretically examine how the tort liability system achieves the optimal level of accident prevention and victim compensation. In Parts II and III, we describe and analyze the Chinese road traffic liability system in detail within the economic framework. Part IV presents some empirical evidence regarding both deterrence and compensation, to get a better understanding about the divergences between theory and practice. Part V concludes and presents policy recommendations on how the Chinese road traffic liability regime could be reshaped to better align with insights from the law and economics literature.

#### II. THEORETICAL FRAMEWORK

In this part, we will use the existing economic literature on the neo-classic model for accidents (especially the well-known Calabresi framework) to theoretically examine how the road traffic liability system should be structured to achieve the goals of deterrence and compensation.

#### A. OPTIMAL DETERRENCE VIA THE TORT SYSTEM

Tort law should aim to prevent the accidents that are worth being prevented, more particularly those where the marginal cost of prevention is smaller than the marginal benefit in reducing the accident risk. <sup>12</sup> Otherwise, the overall social welfare will decrease.

In RTAs tort law could play an important role in incentivizing road users to take the cost-justified preventive measures. Although some traffic accidents are random events caused by drivers' momentary lapses of attention, <sup>13</sup> tort law could still play a role in accident prevention because it can affect the "general level of care." Also it is true that most individuals choose to prevent traffic accidents because of the fear of self-injury rather than the fear of liability. <sup>14</sup> But people tend to discount the costs of injury inflicted on others. So that

<sup>13</sup> Bruce therefore argued that if traffic accidents occur randomly, it's impossible for tort liability to create any deterrence incentives. *See* Christopher J. Bruce, *The Deterrent Effects of Automobile Insurance and Tort Law: A Survey of the Empirical Literature*, 6 L. & POL'Y. 67, 67–100 (1984). <sup>14</sup> The reasons why society may have somewhat less need to rely on tort law to achieve the goal of accident prevention (or deterrence), are summarized by Gary T. Schwartz, *Auto No-Fault and First-Party Insurance: Advantages and Problems*, 73 S. C. L. REV. 611, 611–76 (2000).

<sup>&</sup>lt;sup>12</sup> See, e.g., CALABRESI, supra note 9, at 17–18;

discounting also needs to be internalized, and that is exactly where tort law might be needed.

Since the traffic liability system could have a deterrent effect, how to effectively achieve this effect becomes a really important question. As shown below, it depends on the extent to which a given liability system embodies the structural characteristics proposed in the law and economics literature.

Liability Rules. Much literature is devoted to the question of what kind of liability rules can incentivize the parties to take the appropriate levels of care and activity, to find the optimal way of preventing accident damage. <sup>15</sup> A distinction is often made between two different accident settings: the unilateral setting (where only the injurer can influence the accident risk) and the bilateral setting (where both the victim and the injurer can take precautions to reduce the accident risk). RTAs can be classified either as unilateral or bilateral, depending on who (car drivers, or vulnerable road users, or both) influences the accident risk.

Economists normally agree that both strict liability and the rule of negligence could lead to optimal results in the case of unilateral accident settings, with the following conditions: (1) the liability standards are optimally set; (2) the level of activity is constant; (3) the information is perfect; and (4) the legal sanctions are equal to the harm suffered. Strict liability is preferred when we only relax the first two assumptions. But when we relax the last assumption, strict liability becomes inferior because now damages are not perfectly compensated. However, the advantage of the rule of negligence over strict liability in the case of insolvency should not be over-stated since in practice, liability under negligence rises *continuously* and other instruments (e.g. insurance) might be able to address the insolvency issue.

When it comes to the bilateral accident setting, neither strict liability nor the rule of negligence will lead to efficient outcomes. However, if controlling the injurer's activity is more important than controlling the victim's, strict liability might still be preferred and would be better combined with a defense that could take into account the victim's fault.<sup>17</sup> With such a defense,

<sup>&</sup>lt;sup>15</sup> See, e.g., William M. Landes & Richard A. Posner, The Economic Structure of Tort Law 54–84 (1987); Steven Shavell, Foundations of Economic Analysis of Law 177–206 (2004); Robert Cooter & Thomas Ulen, Law and Economics 187–229 (2012).

<sup>&</sup>lt;sup>16</sup> Marcel Kahan, *Causation and Incentives to Take Care under the Negligence Rule*, 18 J. LEGAL STUD. 427, 427–48 (1989).

<sup>&</sup>lt;sup>17</sup> The classic bilateral accident can also be called as "bilateral care and

the victim would have to bear his/her own losses and consequently, (s)he will be induced to take the optimal amount of care. 18

In summary, it is difficult to make a general conclusion about which liability rule is economically optimal in the cases of RTAs, as each rule has its own pros and cons. The ultimate choice seems to be dependent on a weighing of all these pros and cons; and thus searching for a trade-off among different factors, e.g., the availability of information, the capacity of courts, the risk of insolvency, and the importance of controlling the activity level.

Quantum Rules. The deterrent effect of the tort system may also be affected by the quantum rules (rules regarding the assessment of damages). However, assessing these losses entails costs; the higher these costs, the more difficult it is to make an accurate assessment.<sup>19</sup> Therefore, it remains to be seen if a more accurate assessment of the losses ex post provides better ex ante incentives for the injurer to change his/her behaviour.<sup>20</sup> As long as the assessment of the tort damages is on average correct, the injurer will receive the correct incentives as if the damages were assessed accurately.<sup>21</sup>

*Impact of Liability Insurance*. The deterrence incentives generated by the tort liability system might be weakened when the injurers are widely protected by liability insurances (either compulsory or voluntary), because insurance may isolate the potential injurer from the full costs of an accident which they are accountable for. This is very likely to be the case in RTAs, as most countries have mandated drivers to carry liability insurance.

As long as the insurance premiums are properly set (equal to the value of expected losses for the period plus the costs of administering the system), the well-known issues of moral

unilateral harm accidents."

<sup>&</sup>lt;sup>18</sup> STEVEN SHAVELL, ECONOMIC ANALYSIS OF ACCIDENT LAW 14–15 (1987). <sup>19</sup> Mitchell A. Polinsky, Resolving Nuisance Disputes: The Simple Economics of Injunctive and Damages Remedies, 32 STAN. L. REV. 1075, 1075-1112 (1980); James E. Krier & Stewart J. Schwab, Property Rules and Liability Rules: The Cathedral in Another Light, 70 N.Y.U. L. REV. 440, 453 (1995).

<sup>&</sup>lt;sup>20</sup> Kaplow Louis & Steven Shavell, Property Rules Versus Liability Rules: An Economic Analysis, 109 HARV. L. REV. 713, 713-90 (1996); KAPLOW LOUIS & STEVEN SHAVELL, FAIRNESS VERSUS WELFARE 265 (Harvard Univ. Press 2002).

<sup>&</sup>lt;sup>21</sup> LOUIS & SHAVELL, FAIRNESS VERSUS WELFARE, *supra* note 20, at 265.

hazard and adverse selection are properly mitigated, <sup>22</sup> the existence of insurance will not dilute parties' incentives to take care. <sup>23</sup> This outcome is socially optimal as the insured will take precautions whenever they are cost-justified and no one will bear the risk. <sup>24</sup> However, this may not be reached in practice, not only because premiums cannot be set accurately, but also because the issues of moral hazard and adverse selection cannot be perfectly addressed by the insurers. Even though insurers could ideally resolve those issues by using co-payment mechanisms (e.g., coverage limits and deductibles) or premiumrating methods (e.g., risk categorization and experience rating), the extent to which the liability insurers actually employ these methods still varies largely across countries.

Impact of Regulation. So far, we have assumed that injurers face liability but not safety regulation and that tort liability is in certain conditions sufficient to control the accident risk. However, regulation might in some cases be a more appropriate instrument than tort liability to control certain accident risks. <sup>25</sup> In RTAs generally, tort liability and regulation should be jointly used to reach a socially optimal outcome. <sup>26</sup> Regulation could play a role in communicating the optimal preventive devices to the public, and in restoring deterrence when there is insolvency and when a liable tortfeasor cannot be found. Liability can play a role in, for example, facilitating the enforcement of public regulation, disclosing anticipated or new risks, and checking the accuracy of relevant information and the behavior of relevant public authorities.

<sup>&</sup>lt;sup>22</sup> Moral hazard refers to the situation where the insured's incentive for prevention will be diluted as soon as the risk of the accident is shifted from to the insurer. *See* TOM BAKER & KYLE D. LOGUE, INSURANCE LAW AND POLICY: CASES, MATERIALS, AND PROBLEMS 239 (2003). Adverse selection is an example of "the market for lemons." It refers to the tendency of those with high risk to purchase insurance" which benefit them the most, at the expense of those with low risk. *See* George A. Akerlof. *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q. J. ECON. 490, 490–92 (1978).

<sup>&</sup>lt;sup>23</sup> See Steven Shavell, On the Social Function and the Regulation of Liability Insurance, 25 The Geneva Papers on Risk & Ins. 166, 166–179 (2000); Gerhard Wagner, Tort Law and Liability Insurance, in Tort Law and Economics 386 (Michael Faure eds., 2009).

<sup>&</sup>lt;sup>24</sup> See SHAVELL, supra note 15, at 262.

<sup>&</sup>lt;sup>25</sup> See Steven Shavell, Liability for Harm versus Regulation of Safety, 13 J. LEGAL STUD. 257, 357–74 (1984); and SHAVELL, supra note 18, at 277–90.

<sup>&</sup>lt;sup>26</sup> The complementary relationship between tort and regulation has been examined by many scholars. For a summary of these scholars' arguments, *see* Hu Weiqiang, An Economic Analysis of the Regulatory Compliance Defense (Doctoral Dissertation of Erasmus University Rotterdam 2013).

The exact shape of the combination may vary across countries. For example, in developing countries, the tort liability system might be less effective in terms of deterrence, due to the prevalence of the "judgment proof" (injurers are often insolvent and cannot pay liability judgements in full) and "trial proof" (poor victims cannot afford to pay lawyers to sue the injurers) issues.<sup>27</sup> In addition, the preference of regulation versus tort liability may also depend on who the policymakers trust most. For instance, if regulators trust police more than judges, they may show more reliance on regulation, whereas if they trust judges more than police, the tort system is more reliable.<sup>28</sup>

## B. OPTIMAL COMPENSATION VIA THE TORT SYSTEM

In addition to deterring the occurrence of the accident, the tort system could also be used as an instrument to provide compensation for accident victims. In this regard, a proper assessment of the tort system includes not only the effectiveness of the amount of compensation awarded to the victim, but also whether the victim's loss is effectively spread or shifted.

Full Compensation of Harm. Victims of tort injuries are entitled to sue for compensation, if they have suffered harm. In economic terms, harm is a downward shift in the victim's utility function.<sup>29</sup> The victim cannot be brought back to the original utility curve, if his/her damage could not be completely repaired or replaced at the expense of the injurer. Therefore, tort compensation should fully compensate the victim for his/her losses; otherwise, the injurer will not internalize the negative externalities that (s)he has caused.<sup>30</sup>

However, less than full compensation may also produce efficient results, particularly in bilateral RTA cases, because in those cases, the contributory negligence defense is often used. However, invoking such a defense may not always be easy, especially considering the fact that the idea of protecting the victims is deeply rooted in the mind. Hence, if the courts cannot correctly apply the defense of contributory negligence, less than full compensation should be awarded to the victim, at least in

<sup>&</sup>lt;sup>27</sup> See Cooter & Schäfer, supra note 4, at 191.

<sup>&</sup>lt;sup>28</sup> See Göran Skogh, *The Combination of Private and Public Regulation of Safety, in Essays* IN LAW AND ECONOMICS 97 (Michael Faure & Van den Bergh eds., Maklu, 1989).

<sup>&</sup>lt;sup>29</sup> See COOTER & ULEN, supra note 15, at 311.

<sup>&</sup>lt;sup>30</sup> *Id.* at 323; RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 192 (Aspen Publishers 2003); *and* SHAVELL, *supra* note 18, at 236.

bilateral accident settings.31

Secondary Accident Cost Reduction. The issue of risk distribution is determined by both liability rules and quantum rules. 32 For example, if RTA cases are subject to the rule of strict liability, and if the quantum rules exclude certain categories of losses from recovery, the victim is then the residual risk bearer of these losses, providing that all parties are risk neutral. However, if risk aversion is introduced into the analysis, especially if parties differ in their degrees of risk averseness, rules regarding liability and damages will influence the way in which a given loss affects social welfare. 33 The impact of a loss on social welfare will be minimized if accident losses are perfectly spread through insurance arrangements, and/or if they are transferred to risk-neutral parties. 34 In this way, the secondary accident costs are minimized and the goal of effective risk-spreading/risk-transferring is achieved.

#### III. DETERRENCE VIA TRAFFIC LIABILITY IN CHINA

The previous sections provided a theoretical framework for analyzing whether tort liability is an effective device for deterring traffic accidents and compensating victims. This section will use this economic framework to address the extent to which the formal rules correspond with the theoretical starting points.

## A. TRAFFIC LIABILITY RULES IN CHINA

Basis of Liability. Art. 76 of the Road Traffic Safety Law (RTSL) in China requires that the rule of presumed fault liability should be applied to RTAs that occur between motorized and non-motorized traffic participants. <sup>35</sup> Under presumed fault liability, the injurer's fault is presumed and (s)he can only override this presumption by proving that (s)he is not at fault, which is very difficult in practice.

To escape liability under presumed fault liability, one must invest a lot in care, at least in theory. The investment, from an economic perspective, might be excessive when compared to

<sup>34</sup> See Shavell, supra note 18, at 259.

<sup>&</sup>lt;sup>31</sup> See Samuel A. Jr. Rea, Nonpecuniary Loss and Breach of Contract, 11 J. LEGAL STUD. 35, 50–52 (1982).

<sup>&</sup>lt;sup>32</sup> See Louis Visscher, *Tort Damages*, in TORT LAW AND ECONOMICS 180–81 (Michael Faure eds., 2009).

<sup>&</sup>lt;sup>33</sup> *Id*.

<sup>&</sup>lt;sup>35</sup> These accidents can be referred to as "unilateral harm traffic accidents", as it is the non-motorized participants who are likely to suffer accident losses.

the optimal behavior that strict liability would induce. <sup>36</sup> However, presumed fault liability can be more attractive than strict liability in China, as most RTAs are not inherently dangerous. Therefore, in those classes of activities, the potential injurer "has consistently lower costs of presenting evidence regarding the presence or absence of fault"; and at the same time, "the occurrence of the accident, or its surrounding circumstances, are good indicators in probabilistic terms of the presence of fault on the side of the injurer". <sup>37</sup>

It is difficult to evaluate whether the use of fault-based liability (Art. 76 of the RTSL and Art. 6 of Tort Liability Law, TLL) in the RTAs, where all parties are motorized or nonmotorized, follows the economic predictions. On the one hand, the economic analysis suggests that strict liability can be equally efficient as fault liability only if the insolvency risk is adequately tackled.<sup>38</sup> This condition cannot be met in China, especially in cases of fatal traffic accidents or in accidents with serious injuries. As will be discussed in detail later, even though the Chinese traffic liability system is combined with a variety of instruments (e.g. compulsory liability insurance, private insurance, and social security schemes) to provide solvency guarantees, these guarantees are far from satisfactory. However, this does not mean that the application of fault liability should be advocated in bilateral harm accidents in China. As mentioned earlier, even though some economic scholars do argue that fault liability should be preferred in the presence of insolvency, this argument is built upon one important assumption: liability increases sharply and discontinuously when one's care falls below due care. <sup>39</sup> In general cases, however, liability increases gradually and continuously when one becomes negligent. 40 Therefore, the merit of fault liability in the case of insolvency becomes weak and the problem of under-deterrence is still serious. Since both of these situations are likely to occur in China,<sup>41</sup> it seems erroneous to conclude that the application of

<sup>&</sup>lt;sup>36</sup> See supra Part II.A.

<sup>&</sup>lt;sup>37</sup> Fernando Gómez, *Burden of Proof and Strict Liability: An Economic Analysis of a Misconception*, in Konsequenze Wirtschaftsrechtlicher Normen 386 (Hans-Bernd Schäfer & Hans-Jürgen Lwowski eds., Deutscher Universitäts-Verlag 2002); *See also supra* Part II.A.

<sup>&</sup>lt;sup>38</sup> See supra Part II.A.

<sup>&</sup>lt;sup>39</sup> See Gómez, supra note 37, at 386.

<sup>&</sup>lt;sup>40</sup> See e.g. Mark F. Grady, *A New Positive Economic Theory of Negligence*, 92 YALE L. J. 799, 799–829 (1983); Marcel Kahan, *Causation and Incentives to Take Care Under the Negligence Rule*, 18 J. LEGAL STUD., 427, 427–47 (1989).

<sup>&</sup>lt;sup>41</sup> See Zhang Jiayong (张家勇) & Zan Qianglong (昝强龙), Jiaotong

fault liability in China is effective.

In addition to the rules of presumed-fault liability and fault liability, an innovative liability rule, the equitable liability rule, has been adopted in China to deal with very exceptional cases. 42 Under this rule, the losses are shared among parties involved in the accidents, even if none of them is at fault. 43 Cases have shown that this form of liability can be applied for examples when a vehicle causes a stone to jump and that stone hits the windscreen of the car behind it, 44 or when a car hits falling tyres (whose guardian is unknown), and the tyres then bounce up and cause injuries to cyclists on the road. 45

Under the equitable liability scheme, the exact split of shares depends on the "actual situations" of each specific case (not always a 50-50 split).<sup>46</sup> So the courts need to consider the specific circumstances of each case, including the means and details of the action, the magnitude of the loss and its impacts, and the financial positions of the involved parties.<sup>47</sup> As a result, it is common to see that parties with a "deep pocket" often take

Guanzhi Guifan Zai Jiaotong Shigu Qinquan Zerenzhong de Zuoyong: Jiyu Sifa Anli de Shizheng Fenxi (交通管制规范在交通事故侵权责任中的作用:基于司法案例的实证分析) [The Role Played by Traffic Regulatory Norms in Determining Road Traffic Liability], 6 Faxue (法学) [LAW SCIENCE] 31, 31–41(2016). In some cases, the Chinese courts will find the injurer liable once (s)he becomes negligent and causation is presumed. Whereas in other cases, the Chinese courts will first establish fault and then causation in order to establish liability.

<sup>&</sup>lt;sup>42</sup> See Helmut Koziol & Yan Zhu, Background and Key Contents of the New Chinese Tort Liability Law, 1 J. Eur. Tort L. 328, 340–41 (2010). For example, Koziol and Zhu argue that equitable liability can only apply in "extremely exceptional" cases and its application is greatly restricted in practice.

<sup>&</sup>lt;sup>43</sup> Qinquan Zerenfa (侵权责任法) [Tort Liability Law, TLL] (promulgated by the Standing Comm. Nat'l People's Cong., Dec. 26, 2009, effective July 1, 2010), art. 24, SUP. PEOPLE's CT. GAZ, Jun. 1, 2010, at 3 (China).

<sup>&</sup>lt;sup>44</sup> See Chengmoumou v. Shengmoumou & Shanghai Moumou Qichezulin Youxiangongsi Jidongche Jiaotongshigu Zeren Jiufenan (程某某诉盛某某、上海某某汽车租赁有限公司机动车交通事故责任纠纷案) [Cheng v. Sheng & Shanghai Car Renting Company] (Shanghai Pudong Dist. People's Ct. Apr. 21, 2011).

<sup>&</sup>lt;sup>45</sup> See Xiongmouhua v. Xiongguimou Deng Jidongche Jiaotongshigu Zeren Jiufenan (熊某华诉熊桂某等机动车交通事故责任纠纷案) [Xiong v. Xiong et al.] (Longhai Interm. People's Ct. of Fujian Province Aug. 19, 2012).

<sup>46</sup> See TLL (2009), art. 24.

<sup>&</sup>lt;sup>47</sup> See WANG LIMING (王利明), Qinquan Zerenfa Yanjiu (侵权责任法研究) [STUDY ON THE TORT LIABILITY LAW] 117 (Renmin Daxue Chubanshe [REMIN UNIV. PRESS] 2010).

a larger portion of the damages in practice.<sup>48</sup>

Apparently, the equitable liability rule in China is more concerned with distributional justice. Even when the damage was caused by some unexpected events that cannot be foreseen, the potential injurer should still be held liable. From an economic perspective, holding the car driver liable for these cases would not have any value from a deterrence perspective as these types of accidents could not be prevented anyway.<sup>49</sup>

Defense to Liability. In cases of RTAs, both fault-based liability and the rule of presumed fault liability are accompanied by the defense of contributory negligence (art. 26 of the TLL and art. 131 of the General Principles of Civil Law). With such a defense, the amount of compensation should be reduced in proportion to the victim's contribution to the injury. It should be noted that the legislators in China have imposed an important restriction on the defense of contributory negligence. This restriction is often referred to as the "10 per cent rule", which can only be applied in traffic accidents that happen between motor vehicle drivers and vulnerable road users.<sup>50</sup> Under the "10 per cent rule", the motor vehicle drivers will still bear up to 10 per cent of the damages even if they are not at fault. This rule is designed to guarantee that a victim will get at least a minimum amount of compensation when a traffic accident happens.

The "10 per cent rule" is problematic from an economic perspective, because it distorts the victim's care-taking incentives and leads to a danger of over-deterrence.<sup>51</sup> However, this over-deterrence effect might be minimal, especially compared with other countries, such as the Netherlands, where there is a "50 per cent rule" if cyclists and pedestrians are 14 years or older and a "100 per cent rule" if they are younger than  $14.^{52}$ 

# B. THE IMPACT OF LIABILITY INSURANCE IN CHINA

The Impact of Compulsory Liability Insurance. In China, motor vehicle drivers were not mandated to buy liability

<sup>&</sup>lt;sup>48</sup> *Id.*, at 119.

<sup>&</sup>lt;sup>49</sup> See supra Part II.A.

<sup>&</sup>lt;sup>50</sup> See art. 76 (2) of the RTSL.

<sup>&</sup>lt;sup>51</sup> See supra Part II.A.

<sup>&</sup>lt;sup>52</sup> See Willem H. Van Boom, The Netherlands, in COMPENSATION FOR PERSONAL INJURY IN A COMPARATIVE PERSPECTIVE 233 (Bernhard A. Koch and Helmut Koziol eds., Springer 2003). Under the 100% rule, traffic accident victims up to 14-years-old are allowed to receive 100% compensation, even if they were 100% negligent. Under the 50% rule, traffic accident victims of 14 years of age and over are entitled to claim at least 50% of the damages, even if they were more than 50% negligent.

insurance until 2003 when the RTSL was promulgated. <sup>53</sup> However, between 2003 and 2006, the number of motor vehicles with compulsory liability insurance (CLI) was small. <sup>54</sup> By the end of 2005, only 36 per cent of motorized vehicles had been covered by the CLI. <sup>55</sup> The situation did not change a lot until July 2006 when a specific regulation on the CLI was released. <sup>56</sup> By the end of 2015, the number of motor vehicles with CLI had reached 66 per cent. <sup>57</sup> However, the insurance rate is much higher for cars (which is 92 per cent) but lower for motorcycles and tractors (which is 24 per cent and 14 per cent respectively). <sup>58</sup> Therefore, even though all motor vehicles are required to buy CLI in China, the duty to insure is under-enforced in practice, especially among motorcycles and tractors. Consequently, two problems may arise. First, the victim's chance of receiving full compensation is low, if his/her loss or injury is caused by

<sup>&</sup>lt;sup>53</sup> Art. 17 of the RTSL (2003) clearly states that all motor vehicle drivers in China will be mandated to buy liability insurance.

<sup>54</sup> One study reported that only 36 percent of the owners of motorized vehicles had purchased compulsory liability insurance by the end of 2005. See Tian Hui (田辉) & Bo Yan (薄岩), Woguo Jiangqiangxian Shichang Fazhan Zhuangkuang Pinggu (我国交强险市场发展状况评估) [Evaluation on the Development of Compulsory Liability Insurance Market in China]. Zhongguo Jingji Shibao (中国经济时报 2013 年 2 月 13 日第 7 版) [China Economic Times], (Feb. 13, 2013).

<sup>55</sup> See Liu Ran (刘然), 2018 Nian Qiche Jiaoqiangxian Toubaolü Yi Tigao Dao 95% (2018 年汽车交强险投保率已提高到 95%) [The Insured Rate of CLI Raised Up to 95 Per Cent in 2018] Renmin Wang (人民网) [PEOPLE.CN] (Dec. 6, 2019, 4:36 PM), http://money.people.com.cn/n1/2019/1206/c42877-31494468.html (last visited Oct 24, 2020).

<sup>&</sup>lt;sup>56</sup> See Jidongche Jiaotongshigu Qiangzhi Zeren Baoxian Tiaoli (机动车交通事故强制责任保险条例) [Regulation on Compulsory Traffic Accident Liability Insurance for Motor Vehicles] (2006). (promulgated by the St. Council, Mar. 21, 2006, effective July 1, 2006) CLI.2.75730(EN) (Lawinfochina). This regulation is enacted by the State Council and aims to provide clarifications regarding conflicting or unclear issues related to the CLI.

<sup>57</sup> Zhang Wenting (张文婷), Jiaoqiangxian Yunxingshinian Xiyoucanban (交强险运行十年喜忧参半: 累计承保亏损 538 亿元) [The Operation of Compulsory Motor Vehicle Liability Insurance in the Past 10 Years], Xinhua Wang (新华网) [XINHUA NET] (Nov. 13, 2016, 9:09 AM), http://money.people.com.cn/n1/2016/1113/c42877-28856137.html (last visited Sep. 10, 2018).

<sup>58</sup> Wang Xiangnan (王向楠) et al., Jiaoqiangxian Yunxing Zhuangkuang Fenxi Ji Jizhi Wanshan Jianyi: Jiaoqiangxian Shizhounian Huigu (交强险运行状况分析及机制完善建议:交强险十周年回顾) [A Study on the Current Operation of Compulsory Auto Insurance in China and Suggestions on its Mechanism Enhancement: A Review on its Tenth Anniversary of Operation] 9 Baoxian Yanjiu (保险研究) [INSURANCE STUDY] 8, 8–15 (2016).

motorcycles or tractor drivers. As a result, these drivers' caretaking incentives might be diluted, because they no longer bear the full costs of the accidents. Second, it might be the case that only motor and tractor drivers with higher risk would buy CLI. If so, the problem of adverse selection arises. The existence of adverse selection may drive up the premiums and further discourage motor and tractor drivers with lower risk from purchasing CLI.

Moreover, the CLI in China is subject to strict regulation. Not only the initial premium rates, <sup>60</sup> but also the liability limits 61 and the Bonus-Malus system (BMS) are all strictly regulated by the government. Due to this fact, the insurer's capacity to differentiate between high and low risks is limited and the problems of moral hazard and adverse selection may arise. 62 Moreover, the BMS used in China is too simplistic (see Table 1). Under such system, the size of the accident loss does not necessarily reflect the riskiness of the behavior. For example, it does not matter whether the insured causes two or more than two non-fatal accidents; the surcharge in premium is always the same, which is 110 per cent of the initial premium. However, the surcharge in the premium will increase to 130 percent if the insured causes a fatal accident. The logic behind this seems to be that, causing one accident where the victim dies is much worse than causing two or more accidents without fatality (which might be just pure luck).

<sup>&</sup>lt;sup>59</sup> See supra Part II.B.

<sup>60</sup> See Guanyu Zhongguo Baoxian Hangyexiehui Tiaozheng Jidongche Jiaotong Shigu Zeren Qiangzhibaoxian Feilv de Pifu (关于中国保险行业协会调整机动车交通事故责任强制保险费率的批复) [China Insurance Regulatory Commission's (CIRC) Reply on Adjusting the Premium of Compulsory Motor Vehicle Liability Insurance] (promulgated by the CIRC, Jan. 11, 2008) CLI.4.101121 (Lawinfochina). The initial premium rates of the CLI depend only on the type and the usage of the insured and they do not vary with other important risk-related factors, e.g. the driver's age, how much (s)he uses the car, and the geographical area where (s)he drives.

<sup>&</sup>lt;sup>61</sup> See Zhongguo Baojianhui Guanyu Tiaozheng Jiaoqiangxian Zeren Xian'E de Gonggao (中国保监会关于调整交强险责任限额的公告) [CIRC's Notice on Adjusting the Limits of Compulsory Motor Vehicle Liability Insurance] (promulgated by the CIRC, Jan. 11, 2008) CLI.4.101184(EN) (Lawinfochina).

<sup>62</sup> See supra Part II.A.

Table 1. Bonus Malus System under the CLI in China

Class	Factors Affecting the Premium	Premium	
A 1	The policyholder caused zero traffic	Initial	
A1	accidents in the previous year.	Premium*90%	
4.2	The policyholder caused zero traffic	Initial	
A2	accidents in the previous two years.	Premium*80%	
4.2	The policyholder caused zero traffic	Initial	
A3	accidents in the previous three years.	Premium*70%	
	The policyholder is liable for causing one		
A4	traffic accident the in the previous year, but	Initial Premium	
	that accident does not involve a death.		
	The policyholder is liable for causing two	T 12 1	
A5	or more traffic accidents in the previous	Initial	
	year.	Premium*110%	
4.6	The policyholder is liable for causing fatal	Initial	
A6	traffic accident(s) in the previous year.	Premium*130%	

\*Source: Zhongguo Baoxian Jiandu Guanli Weiyuanhui Guanyu Yan'ge Zhixing Jidongche Jiaotong Shigu Qiangzhi Baoxian Feilv Fudong Zanxing Banfa de Tongzhi (中国保险监督管理委员会关于严格执行《机动车交通事故强制保险费率浮动暂行办法》的通知) [Notice of the China Insurance Regulatory Commission on Strictly Implementing the Interim Measures for the Floating Premiums Rates of Compulsory Traffic Accident Liability Insurance for Motor Vehicles] (promulgated by the Ins. Regulatory Comm'n, July 30, 2009, effective July 30, 2009) CLI.4.120201(EN) (Lawinfochina).

Compared to the problem of adverse selection, the problem of moral hazard under the CLI might be less serious in China, because the liability limits imposed on the CLI coverage are low (see Table 2). <sup>63</sup>

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<sup>63</sup> Note that recently the liability limits imposed on the CLI coverage in China have almost been doubled. Now, the total amount of CLI coverage is capped at 200,000 RMB when the insured is at fault, while the cap is recued to 19,900 RMB when the insured has no fault. Moreover, the bonus-malus system under the CLI has also been modified to take into account the regional differences in China. See *Zhongguo Yinbao Jianhui Guanyu Tiaozhang Jiaoqiangxian Zeren Xian'e He Feilv Fudong Xishu De Gonggao* (中国银保监会关于调整交强险责任限额和费率浮动系数的公告) [Announcement of the China Banking and Insurance Regulatory Commission on Adjusting the Indemnity Limits and Premium Rate Floating Coefficients of Compulsory Auto Liability Insurance] (promulgated by the China Banking and Ins. Regulatory Comm'n, Sep. 9, 2020, effective Sep. 19, 2020) CLI.4.345973(EN) (Lawinfochina).

Table 2.	Insurance	Payment unde	r the	CLI in	China
Table 4.	mourance	i aviliciit uliuc	ı uıc		Ciiiia

Table 2. Insurance Layment under the CLI in China			
When the insured is at-	The Amount of Insurance Payment		
fault	(RMB)		
For Injury (or Death)	110,000		
For Medical Expenses	10,000		
For Property Loss	2,000		
Total	122,000		
When the Insured has no	The Amount of Insurance Payment		
fault	(RMB)		
For Injury (or Death)	11,000		
For Medical Expenses	1,000		
For Property Loss	100		
Tor Property 2000			

<sup>\*</sup>Source: Zhongguo Baojianhui Guanyu Tiaozheng Jiaoqiangqian Zeren Xian'e De Gonggao (中国保监会关于调整交强险责任限额的公告) [Announcement of China Insurance Regulatory Commission on Adjusting the Liability Limits for Mandatory Liability Insurance for Traffic Accidents of Motor Vehicles] (promulgated by the Ins. Regulatory Comm'n, Jan. 11, 2008, effective Feb. 1, 2020) CLI.4.101184(EN) (Lawinfochina).

12,100

Total

The data collected by one Chinese insurance company indicates that in 2013, nearly 26 per cent (which is 4,624 divided by 18,052) of the medical expenses claims and 31 per cent (which is 46,064 divided by 149,586) of the property loss claims were above the prescribed thresholds (see Table 3).

Table 3. Number of CLI Claims by Different Types of Losses

Tuble 3. I tuliber of CEI Claims by Birterent Types of Losses			
Injury and Death:			
Number of Claims	14,651		
Number of claims that received 110 thousand yuan for			
injury (or death)	975		
Medical Expenses:			
Number of Claims	18,052		
Number of claims that received 10 thousand yuan for			
medical expenses	4,624		

#### **Property Loss:**

Number of claims

149,586

Number of claims that received more than 2 thousand

yuan for property loss

46,064

It seems that for a considerable proportion of RTA cases, the coverage for medical expenses and property losses under the CLI is too low to fully cover the claims. Due to the low coverage under the CLI, the insured, in a considerable number of cases, might still be partially exposed to the costs of accidents. In this regard, the deterrent effect of the traffic liability system has been partially retained.

The Impact of Optional Liability Insurance (OLI). Since the liability limits imposed by CLI coverage are likely to be lower than the costs of the damage, Chinese car drivers, especially those in economically developed regions, choose to carry OLI in addition to the CLI. It is striking that the OLI has less of the problematic features than the CLI and is therefore more in-line with the economic predictions<sup>64</sup>: the premiums are more risk-related; deductibles are allowed; the BMS is more refined; and coverage is less regulated. Problems of moral hazard and adverse selection are thus better controlled, which partially restores the under-deterrence problem caused by the CLI.

However, the merits of OLI should also not be overstated. First, the OLI is only popular among drivers of cars (rather than motorcycles and tractors) and is only popular in rich regions (possibly because the cost of the OLI is high, as a result of which poor drivers cannot afford it). For example, one report has shown that the percentage of cars with OLI in China was on average 76.4 per cent in 2015.<sup>65</sup> But this ratio is higher in richer

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<sup>\*</sup>Source: Computed from data collected by the Huatai Insurance Company. This data only contains the insurance claims that were death with by this insurance company. Note that, the data excludes the cases where the insurers have made no payments.

<sup>&</sup>lt;sup>64</sup> See supra Part II.A.

<sup>65</sup> See Chinese Insurance Information Technology Co., Ltd. (CIITC) (中国保信), 2015 Nian Quanguo Jiaotong Shigu Zeren Baoxian Baozhang Chengdu Fenxi Baogao (2015 年全国交通事故责任保险保障程度分析报告) [the 2015 edition of the CIITC's Annual Report on Auto Liability Insurance in China], (中保网) [Sinoins] (Mar. 30, 2016, 10:08 AM), http://xw.sinoins.com/2016-05/30/content\_196130.htm (last visited Dec. 27, 2020).

regions (more than 90 per cent) and lower in poorer regions (lower than 50 per cent). <sup>66</sup> Second, among all OLI products, low-coverage policies (especially those with a limit of 200,000 yuan, or  $\[ \epsilon \]$  25,641) are more popular than high-coverage policies. <sup>67</sup> OLI can therefore provide some additional compensation to traffic accident victims, although, especially in the poorer Chinese regions, its role is rather limited.

In China, the percentage of drivers with liability insurance is far larger than those with first-party insurance.<sup>68</sup> This is striking and at the same time difficult to explain from a law and economics perspective. Economists generally accept that the imposition of liability creates a demand for liability insurance. <sup>69</sup> However, liability insurance merely covers property damage and personal injury caused to others. If people want to protect themselves or their own assets from an accident, they should purchase first-party insurance policies (e.g. accident insurance, collision insurance). Obviously, the economic analysis of insurance alone is not sufficient to explain what is going on in the Chinese car insurance market. <sup>70</sup>

#### C. THE IMPACT OF REGULATION IN CHINA

Traffic safety regulations and traffic liability rules are jointly used in China which seem to correspond with the economic model. <sup>71</sup> However, even though China has implemented many regulations on traffic safety, the enforcement

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<sup>66</sup> Li Hua (李华), 2015 Nian Jidongche Sanzexian Toubaolv Yousuo Tigao (2015年机动车三责险投保率有所提高) [The 2015 CIITC's Annual Report on CLI in China], Zhong Bao Wang (中保网) [CHINA BANKING AND INSURANCE NEWS] (May 30, 2016, 10:08 AM), http://xw.sinoins.com/2016-05/30/content\_196130.htm (last visited March 19, 2019).

<sup>67</sup> Liu Ying & Ren Yanyan, Cong Daode Fengxian Kan Jilixing Baoxian Qiyue De Sheji: Jiyu Jidongche Disanzeren Baoxian De Jianyan (从道德风险看激励性保险契约的设计—基于机动车第三责任保险的检验) [Moral Hazard and Contract Design: A Study of Motor Vehicle Liability Insurance], 2 Dongyue Luncong (东岳论丛) [DONG YUE TRIBUNE] 39, 41 (2014).

<sup>&</sup>lt;sup>68</sup> See supra note 65. First party insurance in this case refers to first party insurance that car drivers would take to cover their own damage (as a victim).
<sup>69</sup> See supra Part II.A.

<sup>&</sup>lt;sup>70</sup> The high OLI ownership rate in China may have something to do with the fact that there is a "hidden part" of the OLI, which provides first-party coverage for the driver and passengers in the car. In fact, certain types of first-party auto insurance, such as driver and passenger insurances (which cover injury to, or death of, the driver and passengers), must be purchased in addition to the basic OLI coverage in China.

<sup>&</sup>lt;sup>71</sup> See supra Part II.A.

of those regulations is relatively weak.<sup>72</sup> As a result, traffic liability may still have an important role to play in China to facilitate the enforcement of public regulation, to disclose anticipated or new risks, and to check the accuracy of relevant information and the behavior of relevant public authorities. Given this reasoning, the joint use of safety regulation and tort liability in China makes perfect sense from an economic point of view.

#### IV. COMPENSATION VIA TRAFFIC LIABILITY IN CHINA

When a RTA occurs in China, the victim may be compensated from a variety of sources, including the tort system, the (compulsory and voluntary) liability insurance, the first-party (victim and injurer) insurance, and the social security schemes. However, since first-party (victim) insurance in China only covers a limited proportion of the total population, and since social security schemes compensates for a minimum amount of money, <sup>73</sup> these compensation schemes are not analyzed in detail in this article.

The Supreme People's Court (SPC) defines the order in which the liability insurer and the tortfeasor are obliged to pay.<sup>74</sup> According to the SPC, a victim's loss should first be covered by

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<sup>&</sup>lt;sup>72</sup> One empirical study reported that nearly half of the drivers in Zhejiang province have used some strategies to escape penalties when being caught. *See* JUDY J FLEITER ET AL., CHARACTERISTICS OF CHINESE DRIVERS ATTENDING A MANDATORY TRAINING COURSE FOLLOWING LICENSE SUSPENSION 7, 16TH INTERNATIONAL CONFERENCE ROAD SAFETY ON FOUR CONTINENTS (2013). Some empirical studies report that certain traffic regulations (e.g. regulations are poorly enforced in China, especially in rural areas and among vulnerable road users. *See* Wei Du et al., *Understanding Onroad Practices of Electric Bike Riders: An Observational Study in a Developed City of China*, 59 ACCID. ANAL. PREV. 319, 319–326 (2013); and Yan Fangfang et al., *Red-Light Running Rates at Five Intersections by Road User in Changsha, China: An Observational Study*, 95 ACCID. ANAL. PREV. 381, 381–88 (2016).

<sup>73</sup> See 2014 Zhongguo Jiating Jinrong Diaocha Baogao (中国家庭金融调查报告) [2014 Report on China Household Finance Survey], CHINA HOUSEHOLD FINANCE SURVEY (CHFS), 212. China Household Finance Survey (CHFS) revealed that only 5.5 per cent of the urban households and 2.2 per cent of the rural families owned life insurance by the end of 2013.

<sup>&</sup>lt;sup>74</sup> See art.16 of Zuigao Renmin Fayuan Guanyu Shenli Daolu Jiaotong Sunhaipeichang Anjian Shiyongfalv Ruogan Wenti de Jieshi (最高人民法院关于审理道路交通事故损害赔偿案件适用法律若干问题的解释) [Interpretation of the SPC on Several Issues Concerning the Application of Law in the Trial of Cases on Compensation for Damage in RTAs] (promulgated by the Sup. People's Ct., Sep. 17, 2012) SUP. PEOPLE'S CT. GAZ, Mar. 10, 2013, at 7 (China).

the CLI within the policy limits, and the remainder should then be covered via OLI; when the payments offered by CLI and OLI are still insufficient to compensate the victim in full, the compensation should then be provided by the tortfeasor via the tort law system.<sup>75</sup>

As mentioned before, the duty to insure CLI is strongly enforced among cars but poorly enforced among motorcycles and tractors in China. <sup>76</sup> Moreover, a large number of car drivers in China (especially those in economically developed regions) also purchase OLI policies in addition to CLI polices.<sup>77</sup> A study reports that the average payment following a fatal accident equals 456,000 yuan (€58,462) per OLI claim (see Figure 4 in the Appendix). <sup>78</sup> However, the average total compensation (thus also including payments from other sources than liability) amounts to 802,000 yuan ( $\in$ 102,821).<sup>79</sup> This means that when a victim dies as a result of a RTA, only on average 13.7 percent of the compensation is paid through CLI, whereas 56.9 percent is covered by the OLI insurer, and 29.4 percent from other sources (injurer or social security schemes). Similar results are also indicated by another study, which shows that on average, the final award in court is 64,101 yuan ( $\in$ 8,218), whereby 60 percent of this amount is covered by the insurance company and 40 percent is paid through the tortfeasor's own pocket.<sup>80</sup>

All the above-listed figures shown that even though CLI, OLI, the tort system, the social security scheme, and first-party (victim) insurance can all be used to compensate traffic victims in China, victims (especially those who suffer serious injuries or death) are still very likely to be under-compensated. This undercompensation problem happens due to the fact that insurance in China, like in most developing countries, is mostly confined to a limited group of people, such as rich people, public servants, and workers from state-owned companies. Poorer people, especially those in rural areas, are mostly uninsured. This is in contrast with the developed countries where the social security system or the

<sup>76</sup> See supra Part II.B.

<sup>&</sup>lt;sup>75</sup> *Id*.

<sup>&</sup>lt;sup>77</sup> Id.

 $<sup>^{78}</sup>$  The number is calculated by the authors based on the report cited in *supra* note 65.

<sup>&</sup>lt;sup>79</sup> *Id*.

<sup>80</sup> Zhou Jiantao et al. (周建涛等), Suopei Tezheng Dui Baoxian Lipei (Susong) 'E Yingxiang de Shizheng Fenxi (索赔特征对保险理赔 (诉讼) 额影响的实证分析) [Empirical Analysis of the Impacts of Claim Filing Charateristics on Court's Judgment], Baoxian Yanjiu (保险研究) [INS. STUDY], no.4, 2011, at 88, 90.

commercial insurance can cover most accidents. Due to the limited access to insurance, it seems that victims in China still need to rely heavily on the tort system to cover their damages resulting from RTAs. Since the traffic liability system is still used as an important instrument for providing compensation in China, we need to examine how well such a system complies with sound compensation principles.<sup>81</sup>

## A. ELIGIBILITY

The economic analysis argues that tort compensation should exclude the self-inflicted losses that result from accident parties' own intention or gross negligence. 82 However, in China, the use of both the "10 percent rule" and the equitable liability deviates from this optimal compensation requirement. Under the "10 percent rule", even if vulnerable traffic users (e.g. pedestrians and cyclists) are 100 percent at fault, motor vehicle drivers will still bear up to 10 percent of the damages, unless the vulnerable traffic users have intentionally caused their own losses. Under the equitable liability rule, even if damage was caused by unexpected events that cannot be foreseen, the losses are still shared between parties involved in the accidents, mainly based on their financial status. In this case, both rules may lead to suboptimal compensation. But the negative impact is limited, as 10 percent is a low threshold (especially compared with other countries, such as the Netherlands) and the rule of equitable liability is only applied in exceptional cases.<sup>83</sup>

Moreover, according to the economic analysis, a finding of liability only makes sense if it can influence the injurer's incentives to take care or activity levels; otherwise, it only creates the administrative costs of shifting the loss without any compensating benefits for the incentives.<sup>84</sup> Under Chinese tort law, the injurer will not be held liable if a fault is not imputable to him/her. An injurer will be immune from liability if the accident is caused by *force majeure* (art. 29 of the TLL), if the

<sup>83</sup> In the Netherlands, where there is even a "50% rule" if cyclists and pedestrians are 14 years or older and a "100% rule" if cyclists and pedestrians are younger than 14. Under the 100% rule, traffic accident victims up to 14-years- old are allowed to receive 100 percent compensation, even if they were 100 percent negligent. Under the 50% rule, traffic accident victims of 14 years of age and over are entitled to claim at least 50 percent of the damages, even if they were more than 50 percent negligent. See Michelle Slimmen & Willem H. Van Boom, *Road Traffic Liability in the Netherlands*, SSRN Electronic

Journal. 10.2139/ssrn.2975796, 10-11 (2017).

<sup>81</sup> These principles are proposed by DEWESS ET AL., *supra* note 10, at 11.

<sup>82</sup> See supra Part II.B.

<sup>&</sup>lt;sup>84</sup> See supra Part II.B.

injurer has mental diseases and cannot control their behaviour, or if the injurer is a child who has not reached the age of discretion (art. 32 of the TLL). These "imputability" requirements have a clear economic rationale, because in these cases the injurer cannot influence the accident risk.

### B. BENEFITS LEVEL

In China, the TLL, supplemented with two judicial interpretations, <sup>85</sup> lists a variety of losses (e.g. medical expenses, nursing costs, traffic costs, lost earnings, compensation for disability and death, funeral costs, as well as pain and suffering) that could be covered when a traffic accident occurs. This is promising. However, as suggested by economists, whether the compensation for victims is indeed "complete" depends on how the tort damages are calculated, especially the difficult ones, e.g. the compensation for non-pecuniary losses.<sup>86</sup> In this case, two features of the rules for tort damages in China (including the ones for calculating the damages caused by RTAs) contradict the above-mentioned theoretical ideal, which may result in under-compensation for victims in practice.

First, article 22 of the TLL in China requires that in order for emotional damages<sup>87</sup> to be compensable, the damage must be so "serious" that the claimant's injury involves "an impairment of a physical, mental, or emotional function that is

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<sup>85</sup> See Zuigao Renmin Fayuan Guanyu Queding Minshi Qinquan Jingshen Sunhai Peichang Zeren Ruogan Wenti de Jieshi (最高人民法院关于确定民事侵权精神损害赔偿责任若干问题的解释) [Interpretation of the SPC on Problems regarding the Ascertainment of Compensation Liability for Emotional Damages in Civil Torts] (promulgated by the Sup. People's Ct., March 8, 2003), arts. 16–25, CLI.3.34937(EN) (lawinfochina). See also Zuigao Renmin Fayuan Guanyu Shenli Renshen Sunhai Peichang Anjian Shiyong Falv Ruogan Wenti de Jieshi (最高人民法院关于审理人身损害赔偿案件适用法律若干问题的解释) [Interpretation of the SPC of Some Issues concerning the Application of Law for the Trial of Cases on Compensation for Personal Injury] (promulgated by the Sup. People's Ct., Dec., 26, 2003) SUP. PEOPLE'S CT. GAZ, Feb. 10, 2004, at 3 (China).

<sup>&</sup>lt;sup>86</sup> Whether and how non-pecuniary loss should be compensated has been hotly debated for years. For an overview of these studies, *see* Siewert D. Lindenbergh & Peter P.M. van Kippersluis, *Non-pecuniary Losses*, TORT LAW AND ECONOMICS 223–25 (Michael Faure eds., Edward Elgar Publishing 2009).

<sup>&</sup>lt;sup>87</sup> In China, non-pecuniary damages are referred to as "mental distress damages". Article 22 of the TLL reads as follows, "where any harm caused by a tort to a personal right or interest of another person inflicts serious mental distress on the victim of the tort, the victim of the tort may require compensation for the infliction of mental distress."

severe enough to impact upon his/her daily work and life". 88 In practice, victims in RTAs can, in principle, claim non-pecuniary losses when their injuries lead to disability. Theoretically, there should be no statutory cap on non-pecuniary losses, but the local courts often impose a cap in practice, because they believe that doing so could ease the settlement process. The upper limit ranges from 5,000 to 300,000 yuan (€641 to €38,462) across provinces.<sup>89</sup> These caps seem to be arbitrary and are difficult to justify both on compensation and on deterrence grounds. 90 There is another strange feature of Chinese traffic liability law: a traffic offender is not obliged to provide compensation for pain and suffering if (s)he committed a crime. 91 This is a particularly strange feature which is hard to reconcile with economic principles. In practice, it may lead to the situation that when a victim is seriously injured or dead, non-pecuniary losses would not be due by the injurer. Compensation for those losses would be due if the injurer did not commit a crime.

Second, in China, courts have adopted an objective assessment of tort damages. Under this objective approach, most categories of the losses are calculated objectively using

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<sup>88</sup> XI XIAOMING (奚晓明), Zhonghua Renmin Gongheguo Qinquan Zerenfa Tiaowen Lijie Yu Shiyong (《中华人民共和国侵权责任法》条文理解与适用) [INTERPRETATION AND COMMENTARY ON THE TORT LIABILITY LAW OF PEOPLE'S REPUBLIC OF CHINA], 170—72 (Renmin Fayuan Chubanshe [人民法院出版社] [People's Court Press] 2010).

<sup>&</sup>lt;sup>89</sup> Normally, the compensation for emotional damage is capped at 100,000 yuan (e.g. in Yunan, Fujian) or 50,000 yuan (e.g. in Jiangsu, Sichuan, and Shanxi provinces). In a few provinces, such as Guangdong and Shandong, the upper limits on non-pecuniary losses are even higher (300,000 yuan in Guangdong) or lower (5,000 yuan in Shandong).

<sup>&</sup>lt;sup>90</sup> Rubin and Shepherd argue that imposing caps on the awards for non-pecuniary losses eases the settlement process and promotes efficient deterrence. *See* Paul H. Rubin and Joanna M. Shepherd, *Tort Reform and Accidental Deaths*, 50 J. L. & ECON. 221, 225, 235 (2007). However, this argument was refuted by Viscusi. According to him, the objective of the court should be to have stable and predictable compensation for all categories of non-pecuniary damages, rather than simply imposing arbitrary caps on these losses. *See* Viscusi W. Kip, *Tort Reform and Insurance Markets*, 7 RISK MGMT. & INS. 9, 20–21 (2004).

<sup>&</sup>lt;sup>91</sup> See art. 138 of Zuigao Renmin Fayuan Guanyu Shiyong Zhonghua Renmin Gongheguo Xingshi Susongfa de Jieshi (最高人民法院关于适用中华人民共和国刑事诉讼法的解释) [Interpretation of the SPC Concerning the Implementation of the Criminal Procedure Law] (promulgated by the Sup. People's Ct., Dec., 26, 2003) SUP. PEOPLE'S CT. GAZ, Jun. 10, 2013, at 3 (China). This article clearly states that, "a people's court shall not accept collateral civil actions or independent civil actions seeking compensation for emotional/psychological damage suffered as a result of being a victim of a criminal offence".

geographic norms and average income with an age adjustment. 92 For instance, in cases where a victim is dead or disabled, if the victim is under-60-years-old, (s)he will be compensated for 20 years.<sup>93</sup> Even though this objective approach might be justified in terms of avoidance of administrative costs, it is likely to lead to under-compensation, at least among those victims who are under 55-years-old. This is because for victims under 55-yearsold, the amount of compensation for death or disability awarded by the Chinese courts is always calculated on the basis of 20years, irrespective of the victim's actual age. However, in China, the average life expectancy is 75 and nearly 81 percent of the Chinese population were under the age of 55.94 Given these facts, it seems that 81 percent of the Chinese are expected to live longer than 20 years. Therefore, the younger the victim, the greater the under-compensation will be. This compensation problem can lower the injurer's care-taking incentives, and consequently lead to under-deterrence, at least in theory.95

## C. CLAIMS SETTLEMENT

Economically sound tort compensation should be able to provide rapid and adequate compensation at low costs. In China, a vast majority of traffic accident compensation claims are settled without going to court, <sup>96</sup> so the settlement details are not

<sup>&</sup>lt;sup>92</sup> For example, the living expenses for the dependent, the compensation for death and disability, and the funeral costs are all calculated objectively in China. *See* Zuigao Renmin Fayuan Guanyu Shenli Renshen Sunhai Peichang Anjian Shiyong Falv Ruogan Wenti de Jieshi (最高人民法院关于审理人身 损害赔偿案件适用法律若干问题的解释) [Interpretation of the SPC of Some Issues concerning the Application of Law for the Trial of Cases on Compensation for Personal Injury] (promulgated by the Sup. People's Ct., Dec., 26, 2003, effective May 1, 2004), arts. 25–30, SUP. PEOPLE'S CT. GAZ, Feb. 10, 2004, at 3 (China).

<sup>93</sup> Id., arts. 25-28.

<sup>94</sup> See 2010 Nian Diliuci Quanguo Renkou Pucha Zhuyao Shuju Gongbao (2010年第六次全国人口普查主要数据公报) [6<sup>th</sup> Report on Chinese Population in 2010], NATIONAL BUREAU OF STATISTICS OF CHINA (国家统计 局 ) [NBS] http://www.stats.gov.cn/tjsj/tjgb/rkpcgb/qgrkpcgb/201104/t20110428\_3032 7.html (last visited March 19, 2019).

<sup>95</sup> See supra Part II.B.

<sup>&</sup>lt;sup>96</sup> Even though comprehensive data is not yet available on a national level, data from the Interim People's Court of Zunyi city shows that in 2010 nearly 88% of the traffic accident disputes were settled out of court. The number dropped to 83.09% in 2011 but has then risen to 91.15% in 2012. See Chen Xu (陈旭), Guanyu Jiaotongshigu Renshen Sunhai Peichang Jiufen de Diaoyan Baogao (关于道路交通事故人身损害赔偿纠纷的调研报告)

available to the public due to a lack of data. But some scholars believe that the process of claim settlement is likely to be influenced by extraneous factors, such as litigation costs and the relative bargaining power of the litigants. <sup>97</sup> As such the settlement via negotiations could be speedy (although there is no information available about that), but there is a danger that out of court settlements could lead to low sums being awarded in case of severe accidents as claimants can often not afford the high litigation costs and may have a weak bargaining power.

Also, the compensation of RTA victims via the court may suffer from considerable delays. It is partially related to the adversarial nature of the tort system. Liability insurers often deny liability as a strategy to lure a victim into accepting a low value settlement. <sup>98</sup> Therefore, claims may involve delays caused by the need to evaluate the facts to establish the defendant's liability.

## D. FINANCING

Adequate compensation of tort victims requires on the one hand full compensation (in order to provide injurers with incentives for prevention); in addition, compensation should also satisfy the need of adequate loss spreading. The principle of adequate spreading via the tort system is important for China, as a large proportion of the population can still not afford to buy private insurance and has limited access to social security.

However, in China, the damage awards under CLI are relatively low and not all drivers have taken additional OLI. 99 Moreover, motorists and tractor drivers are often uninsured. 100 Also, people from economically underdeveloped regions are likely to be underinsured. The lack of insurance and the potential insolvency problem may, on the one hand, lead to undercompensation of victim and a too high accident risk. On the other hand, under OLI and first-party victim insurance schemes, the premiums that the insured should pay are mainly based on their risks and are unrelated to their wealth. However, tort compensation awarded to the insured is partially connected with

<sup>100</sup> See Wang Xiangnan et al. supra note 58, at 9.

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<sup>[</sup>Research Report on Traffic Accident Compensation Cases], 6 Zhongguo shenpan (中国审判) [CHINA TRIAL] (2014) at 60–63.

<sup>&</sup>lt;sup>97</sup> See, e.g., Yu Xiaowei, Preventing Medical Malpractice and Compensating Victimized Patients in China 115–72 (Intersentia 2017).

<sup>&</sup>lt;sup>98</sup> See DEWESS ET AL. supra note 10, at 34.

<sup>&</sup>lt;sup>99</sup> See supra part III.B.

his/her wealth in China. 101 As a result, the wealth seems to be transferred from the low-income insured to the high-income insured, which may cause inequality in income distribution. In practice, this issue is alleviated, as the premium of CLI in China has taken into account the insured's wealth to some extent, e.g. the premiums for farm vehicles are relatively low. Moreover, China has adopted a relatively objective approach to assess the compensation for death, disability, and living expenses for the dependent. 102 With that approach, the compensation awarded to the victim is not totally individualized but depends on the average net income with an age adjustment.

## V. DETERRENCE AND COMPENSATION VIA ROAD TRAFFIC

#### LIABILITY IN CHINA: SOME EMPIRICS

Regardless of how accurately the road traffic liability system creates incentives for drivers to adopt cost-justified accident avoidance measures on paper, and regardless of how perfectly the road traffic liability system adopts the optimal economic principles for compensation, the actual realization of these measures or principles depends on a variety of "output criteria". 103 The following sections will discuss these criteria and analyze the actual deterrence and compensation effects of the Chinese road traffic liability system.

#### A. DRIVER'S RESPONSE AND THE SIGNIFICANCE OF DETERRENCE

Due to a lack of data, it is difficult to confirm that traffic liability rules actually induce behavioral changes among drivers in China. Moreover, given the facts that China has also implemented dense regulations on traffic safety and these regulations may also play a role in deterring improper driving behaviour, it is difficult to determine to what extent the observed behavioural changes can reasonably be attributed to the liability system. Nevertheless, it does not mean that there is no evidence on the effectiveness of the Chinese traffic liability system. As

<sup>&</sup>lt;sup>101</sup> For example, if the victim is less than 60 years old, the compensation for death is calculated on the basis of the previous year's average disposable income of urban residents in the city where the court is located, or by the average net income of rural residents where the court is located (a fixed table is given), multiplied by a period of 20 years. See art. 29 of the Interpretation of the SPC of Some Issues concerning the Application of Law for the Trial of Cases on Compensation for Personal Injury, supra note 85.

<sup>&</sup>lt;sup>102</sup> *Id.* arts. 29, 25 and 28.

 $<sup>^{103}\,</sup>$  The output criteria are proposed by DEWESS ET AL.,  $supra\,$  note 10, at 26–

mentioned before, at the micro-level, there are some studies, pointing out that traffic safety regulations are poorly enforced in China, especially in rural areas and among vulnerable traffic users (e.g. cyclists, pedestrians, and e-bikers). 104

Since traffic safety regulations are poorly enforced in China, it seems reasonable to expect that the road traffic liability system may still play an important role in creating incentives for individuals to prevent RTAs in practice. Even so, it is still difficult to determine the significance of this deterrence effect (how much deterrence those rules actually provide). However, the empirical evidence regarding the operation of the no-fault compensation schemes<sup>105</sup> does suggest that the traffic liability system has some deterrence effect; and this effect will be stronger if criminal law and safety regulations are not robust and effectively enforced or if a significant degree of experiencerating is not adopted within the no-fault schemes. 106 Moreover, the empirical studies also shown that traffic participants do react to tort law incentives. 107 It seems therefore reasonable to expect traffic participants in China to also react to the incentives created by the tort law.

#### **B.** CLAIMS INITIATION

Even under the efficient liability and quantum rules, the road traffic liability system will under-deter careless driving if not all eligible victims file claims. In China, there is no available data to show the actual proportion of eligible traffic accident victims who initiate liability claims. Nevertheless, several

<sup>104</sup> See supra Part III.C.

<sup>&</sup>lt;sup>105</sup> Since the 1960s, some regions (e.g. U.S., Quebec, Northern Australia and New Zealand) have begun to replace the tort system with compensation schemes that are not based on the notion of fault. Under the no-fault schemes, the victim's right to sue in tort is often restricted or even barred, giving an opportunity for researchers to investigate the impact of the road traffic liability system in deterring accidents. See Michael Trebilcock & Paul-Erik Veel, No-Fault Accident Compensation Systems, in RESEARCH HANDBOOKS ON THE ECONOMICS OF TORTS 588-607 (Jennifer H. Arlen ed., 2013).

<sup>&</sup>lt;sup>106</sup> For a summary of this literature, see Cummins J. David, Richard D. Phillips, and Mary A. Weiss, The Incentive Effects of No-Fault Automobile Insurance, 44 J. L. & ECON. 455, 427–64 (2001); and Alma Cohen & Rajeev Dehejia, The Effect of Automobile Insurance and Accident Liability Laws on Traffic Fatalities, 47 J. L. & ECON. 357, 357–93 (2004).

<sup>107</sup> See e.g. Michelle J. White, An Empirical Test of The Comparative and Contributory Negligence Rules in Accident Law, 20 RAND J. OF ECON. 308, 318-25 (1989). Through analyzing a data set of 582 rear- end automobile accident cases decided by juries in California between 1974 and 1976, the author found that the change in the negligence rule probably reduced the incentive to drive carefully and was expected to raise the costs of accidents.

studies have estimated the percentage of traffic accident victims who seek and recover tort damages in court. For example, one study shows that in 2010, nearly 88 percent of the traffic accident disputes were settled out of court. 108 The number dropped to 83.09 percent in 2011 but has then risen to 91.15 percent in 2012.<sup>109</sup> These figures only suggest that victims of RTAs in China are reluctant to initiate liability claims in court. However, it is still largely unknown if victims of RTAs are also reluctant to initiate claims out of court. Rationally, compared to other tort cases (e.g. medical malpractice and environmental tort cases), RTAs are easy to detect and involve few problems of proving causation. So it is reasonable to expect that the claim initiation rate among eligible traffic victims might be relatively high in China. Therefore, the problem of under-deterrence through inadequate claims initiations might not be very serious in those cases.

#### C. CLAIMS RESOLUTION

Even if all negligently injured victims initiate claims, the traffic liability system may still not generate sufficient deterrent effect if these claims are not correctly resolved in accordance with the optimal liability and quantum rules presented above. 110

Unfortunately, due to the lack of data, it is largely unknown in China whether the finding of liability is easy and accurate in RTA cases. However, since most traffic accident disputes are straightforward in nature, the finding of liability may enjoy a high level of precision and the win rate of the plaintiff might be high in those cases, at least in theory. This is confirmed by one study, which reported that the plaintiff had a 28.7 percent chance of winning outright, while the defendant's chance was only 14.04 percent. <sup>111</sup> In the remaining portion (57.89 percent) of the sample cases, neither party fully won, or in other words, both sides partially won. <sup>112</sup> This implies that in a large number of cases the plaintiff is only awarded partial compensation in China. That can be related to the fact that the damages awarded to the plaintiff are frequently reduced to take into account the plaintiff's negligence. <sup>113</sup>

<sup>110</sup> See supra Part II.A.

<sup>&</sup>lt;sup>108</sup> See Chen, supra note 96, at 60.

<sup>109</sup> Id.

<sup>&</sup>lt;sup>111</sup> See Table 5 in Xin He & Yang Su, Do the 'Haves' Come Out Ahead in Shanghai Courts?, 10 J. EMPIR. LEG. STUD. 120, 135 (2013).

<sup>112</sup> Id., at 128-29.

<sup>&</sup>lt;sup>113</sup> He and Su interpreted the high partial win rates differently. According to them, Chinese judges, "thinking about how their own performance will be

The available evidence also shows that the victim is very unlikely to receive full compensation in China. One study shown that between 2010 and 2012 only 47 percent of the judgments were fully enforced. Another study indicated a similar result, according to which of all the 143 judgments rendered by the court between 2008 and July 2014, only 36.4 percent were fully paid by the defendants, whereas the remaining could not be (fully) paid because the defendants were insolvent. As a result of this problem, a considerable number of injurers cannot be subjected to the total accident costs that they caused, leading to a problem of under-deterrence.

## VI. CONCLUSION AND THE WAY FORWARD

This article has examined the main features of the Chinese road traffic liability regime from a law and economics perspective. The foregoing discussion showed that primary accident costs seem to be relatively high in China, mainly because the fact that traffic safety regulation is weakly enforced and can only achieve partial deterrence in practice. However, some features of the Chinese traffic liability system (e.g. the basis of liability and defense of contributory negligence) are, at least on paper, in line with the economic models. There may even exist an over-deterrence issue (but only to a small degree) because of the application of the equitable liability and the "10 percent" rule. The foregoing analysis also prove that when functioning as a compensation instrument, the traffic liability system in China does not work well. Unsurprisingly, as a result, victims in RTAs are likely to be under-compensated, especially in cases where the victims are seriously injured or dead. The

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assessed, want to avoid enforcement, appeals, or complaints". Moreover, in traffic accident cases the plaintiffs and defendants are often evenly matched in power and resources. Therefore, it is very difficult for the court to decide straightforwardly who wins or loses. See Id., at 130, 136.

<sup>114</sup> See Pan Keming et al. (潘科明等), Jiangsusheng Nanjingshi Zhongji Fayuan Guanyu Daolu Jiaotong Shigu Sunhai Peichang Anjian de Diaoyan Baogao (江苏省南京市中级法院关于道路交通事故损害赔偿案件的调研报告) [Nanjing Interim People's Court's Research Report on Traffic Accident Compensation Claims in Nanjing City], Renmin fayuanbao (人民法院報) [PEOPLE'S COURT DAILY], Jun. 20, 2013, at 8.

<sup>115</sup> See Zheqiang Liu et al. (刘志强等), Qianghua Zhixing Lidu Quebao Qunzhong Liyi (强化执行力度确保群众利益) [Enforcement of Judicial Judgement and Protecting the Interests of Plaintiffs], Renmin Fayuanbao (人民法院报) [PEOPLE'S COURT DAILY], Jan. 8, 2015, http://rmfyb.chinacourt.org/paper/images/2015-01/08/08/2015010808\_pdf.pdf (last visited Oct 24, 2020).

under-compensation problem will ultimately lead to underdeterrence. The available data, although quite limited and incomplete, shows that eligible victims cannot obtain compensation easily and quickly, mainly because a considerable proportion of judgements issued by the court cannot be fully enforced. Furthermore, the method of financing liability insurance cannot be justified as either vertically or horizontally equitable.

All the above-mentioned problems show that the road traffic liability regime in China clashes with certain sound compensation principles proposed by the economic analysis. However, this does not necessarily mean that victims of RTAs are poorly compensated. In fact, in economically developed Chinese regions, the problems of under-compensation and insufficient risk-spreading may not be that severe. Firstly, this is because most drivers have purchased OLI policies in addition to the CLI. Compared with the CLI, the OLI in China functions more effectively in terms of both compensation and risk-spreading. Furthermore, some studies have shown that many Chinese people prefer some traditional forms of risk-management (e.g. personal savings and inter-generational care). 116

After all these discussions, what can we do to improve the current Chinese road traffic liability regime and to make it function more effectively? Ideally, there are a number of strategic and specific issues that could be changed by Chinese legislators. Although these changes are really necessary, we do realize that some of them seem unrealistic or even "utopian", at least in the short run. Therefore, a distinction is made between long-term and short-term strategies (or quick wins).

Most of the quick-wins are related to the CLI. Examples are: increasing the coverages, adopting a more refined Bonus-Malus system, extending the BMS to motorcycles and tractors, and allowing a direct action by the victim against the insurer. In addition, punishing road users when they commit traffic violations, calculating tort damages (especially damages for death, disability, and pain and suffering) more adequately can also be done within a short-period of time.

By contrast, some aspects of the current legislation need long-term changes, such as stimulating competition in the insurance market, removing strict regulation on CLI premiums, assisting victims who cannot afford to pay a lawyer to obtain

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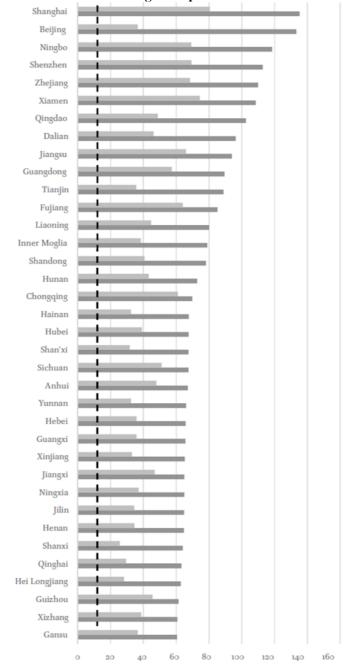
 $<sup>^{116}\,</sup>$  See Cheris Shun-Chung Chan, Marketing Death: Culture and the Making of a Life Insurance Market in China 19-50 (2012).

access to justice (for example via legal aid or contingency fees), and increasing safety awareness among road users via strong enforcement of traffic safety regulations.

Incorporating these suggestions could contribute to improving traffic safety in China. However, we do realize that the role that liability rules play in promoting traffic safety is of course relatively modest; effective regulation may be far more important. And in addition, there are various elements which affect traffic safety and which it is difficult to regulate via the law. For example, a different infrastructure and design of the roads (improving visibility and avoiding vulnerable route users being confronted with motor vehicles) as well as education regarding the importance of traffic safety could in practice might be more important as instruments to promote traffic safety.

## **APPENDIX**

Figure 4. Different Between Average Insurance Coverage Under the OLI and the Average Compensation for Death in China



 $\blacksquare \ \, \text{Average Insurance Coverage under OVLI} \, \blacksquare \, \text{Average Compensation for Death}$ 

Note: the black dash line represents the injury (or death) liability limit under CLI (11,000 yuan); the unit in the graph is 10,000 yuan.

Source: Chinese Insurance Information Technology Co., Ltd. (CIITC) (中国保信), 2015 Nian Quanguo Jiaotong Shigu Zeren Baoxian Baozhang

Chengdu Fenxi Baogao (2015年全国交通事故责任保险保障程度分析报告) [The 2015 edition of the CIITC's Annual Report on Auto Liability Insurance in China], (中保网) [Sinoins] (March 30, 2016, 10:08 AM), http://xw.sinoins.com/2016-05/30/content\_196130.htm (last visited Dec. 27, 2020).