Research on Compensation for Infringement Damage of Online Car-hailing from the Perspective of Rule of Law in Digital Economy

Wenbin Zheng[1], Shu'an Lu[2]

[1,2] *Changchun University of Finance and Economics, Changchun 130000, China*

ABSTRACT

This article explores the core dilemma and institutional improvement path of compensation for infringement damages caused by online car-hailing from the perspective of digital economy rule of law. This article compares the practices of the three domains of China, the United States, and Europe, and finds that issues such as unclear legal positioning of platforms, divergent identification of driver identities, limited scope of compensation for damages, and cross-border legal conflicts urgently need to be resolved. Based on this, this article suggests clarifying the dual attributes of platform carriers and organizers, and introducing control standards to dynamically allocate responsibilities; Expand the scope of compensation to include data and algorithm infringement, and refine the calculation rules for indirect damages such as downtime losses; Strengthen the obligation of platform data disclosure and implement the reversal of burden of proof; Establish a multi-level compensation system that combines compulsory insurance with special funds, ultimately achieving risk sharing and responsibility balance.

Keywords: *Digital economy, Online car-hailing, Compensation for infringement damages.*

1. INTRODUCTION

The booming development of the digital economy has profoundly reshaped the global transportation pattern. The platform economic model represented by online car hailing, relying on big data, algorithm scheduling and mobile Internet technology, has realized the efficient matching of supply and demand. With the rapid expansion of the industry, online car-hailing infringement incidents are also on the rise, and problems such as casualties caused by traffic accidents, the disclosure of passengers' personal information, and consumer discrimination caused by algorithm "killing" are increasingly prominent [1]. The resulting damages dispute has become an unavoidable legal issue in digital economy governance.

From a legal perspective, the traditional tort liability system is based on the dual structure of "actor-victim", while the online car-hailing operation involves multiple subjects such as platform enterprises, online car-hailing drivers, passengers and third-party victims, and the legal relationship is highly intertwined [2]. Should a platform be recognized as an information intermediary or a carrier? How does the identity positioning of drivers as independent contractors or employees affect the attribution of responsibility? Although the current Civil Code of the People's Republic of China provides a general regulatory framework for tort liability, its application in the face of new forms of infringement in the platform economy is still insufficient. At the same time, the United States, the EU and other jurisdictions have accumulated rich experience in platform liability legislation and judicial practice, such as the EU's Digital Services Act (DSA) strengthening the platform's duty of care, and the California AB5 Act redefining the employment status of online car hailing drivers, all of which provide important references for the improvement of China's system.

Based on this, this article starts from the overall perspective of the rule of law in the digital economy, systematically sorts out the core difficulties faced by online car hailing infringement compensation, and explores the construction of an

infringement liability allocation and compensation mechanism that adapts to the characteristics of the platform economy through comparative analysis of the three domains of China, the United States, and Europe. This article believes that on the basis of adhering to the basic principle of fault liability, a platform control standard should be introduced to dynamically allocate responsibility, expand the scope of damages compensation to cover data and privacy infringement, and improve the rules for platform data disclosure and burden of proof transfer. Ultimately, a multi-level compensation system should be formed, where the platform takes the primary responsibility, the driver supplements the responsibility, and the insurance fund provides support.

2. CURRENT PROBLEM ANALYSIS

2.1 The Determination of the Liable Party for Infringement is Vague

Online car hailing operations involve platforms, drivers, passengers, and third-party victims, with complex legal relationships. The core controversy lies in the positioning of the platform's attributes, whether it is an intermediary "information intermediary" or a transportation operator responsible for the carrier's duties? This issue directly determines the ultimate attribution of infringement liability.

The platform usually claims that it is only an "information intermediary" under the Service Cooperation Agreement, claiming that the driver is an independent contractor in order to avoid responsibility. However, judicial practice has begun to "penetrate" this formal appearance of cooperation. The court generally found that the platform has substantial organization, management and control over the driver's operation behavior through unified dispatching, pricing, drawing, formulating service rules and implementing control [3]. Therefore, the platform has the dual attributes of carrier and organizer [4]. According to Article 16 of the Interim Measures for the Administration of Online Reservation Taxi Operation Services, the platform company shall bear the responsibility of the carrier, ensure operational safety, and safeguard the legitimate rights and interests of passengers. This means that under the transportation contract, the platform shall bear no fault liability for the damage caused to passengers. Even under the premise of assuming carrier responsibility, there is still controversy over the division of responsibility between the platform and the driver. For example, in the case where the driver is not qualified or the vehicle has not purchased operational insurance, if the platform fails to fulfill its obligation of prior, proactive, and substantive qualification review, and has systematic fault for the occurrence of damage, it shall bear corresponding proportional or joint responsibility. However, these rules still need to be finely judged based on specific circumstances when applied, lacking unified and clear legal standards.

2.2 The Standard and Scope of Compensation for Damages are Unclear

In the context of the digital economy, the forms and scope of infringement damages have far exceeded traditional personal and property damages, but the legal provisions on this are not yet clear, which makes it difficult for victims to protect their rights. Although the tort liability section of the Civil Code and related judicial interpretations stipulate the items of compensation for personal injury, the criteria for determining indirect losses unique to online car retailing, especially "suspension losses", are very strict. The victim needs to prove the rationality and necessity of the outage time, and provide evidence of real income such as platform running water before the accident. In practice, the court often decides a lower amount because of insufficient evidence or vague standards [5]. The damage caused by passenger personal information leakage, algorithm discrimination and other infringement behaviors is often non-material, cumulative or difficult to quantify. At present, there is a lack of clear and operational norms in the law regarding the determination of causal relationships, quantification of damage consequences, and calculation of compensation amounts for such damages. Victims often face difficulties in obtaining effective compensation due to difficulties in providing evidence, which makes it difficult to apply the provisions of Article 1182 of the Civil Code on compensation for property losses caused by infringement of personal rights and interests in practice.

2.3 Difficulty in Collecting and Presenting Evidence

In digital economy infringement disputes, the acquisition, preservation, and identification of evidence are the key to determining the outcome of the case, but victims are often in a structurally disadvantaged position. The platform holds core

electronic data such as order details, driving trajectories, in car surveillance videos, driver qualification records, and platform accountability records. Victims, as vulnerable parties, often find it difficult to obtain such evidence on their own. Although the law requires platforms to bear the burden of proof, in practice, platforms may refuse or delay providing evidence on the grounds of "privacy protection," "trade secrets," or "technical limitations," or only provide selective evidence in their favor. This makes it difficult for victims to prove that the platform has key facts such as dereliction of duty and management fault. Infringement litigation generally follows the principle of "whoever claims, who gives evidence" [6]. But in new cases such as algorithm infringement, the mechanism of damage is embedded in complex algorithm models, and victims can hardly directly prove the existence of discrimination in algorithms and its causal relationship with damage. The traditional rule of "whoever asserts, who provides evidence" seems inadequate in such highly technical cases, and there is an urgent need to introduce rules that reverse or mitigate the burden of proof, requiring platforms to provide evidence on the compliance of their algorithms.

2.4 Cross Border/Cross Regional Legal Application Conflicts

There is a natural contradiction between the digitalization and boundaryless operation of online car hailing platforms and the localization and decentralization of infringement damage results, which has raised new challenges in legal application. For disputes over online consumption contracts, if the contract does not make effective provisions, according to Article 24 of the Civil Procedure Law, the court of the defendant's domicile or the place where the contract is performed shall have jurisdiction. Among them, the "place of contract performance" for online car hailing is usually the actual place where the service occurs. However, when the damage involves multiple jurisdictions, determining the closest connection, avoiding parallel litigation, and conflicting judgments is a complex issue. Although judicial interpretations have detailed provisions on the jurisdiction of online consumer contracts, the jurisdictional rules for online car hailing infringement, especially cases involving third-party victims, still need to be further clarified.

Different jurisdictions have different regulations on platform responsibility, data protection and consumer rights. China's judicial practice emphasizes the carrier's responsibility and the organizer's fault of the platform [7]. This difference may lead to the phenomenon of "different judgments in the same case", increase the uncertainty of law application, and also require that international coordination and mutual recognition should be considered when constructing rules in the future.

Table 1 summarizes the common dispute focuses and court bias rules of each responsible party in online car hail infringement compensation disputes. The core dilemma of online car hunting infringement compensation currently lies in the mismatch between the traditional tort law's "individual liability" attribution framework and the operational logic of the platform economy's "organized risk". The platform deeply intervenes and controls the operation process through algorithms and rules, but attempts to evade responsibility with a "technology neutral" and "cooperative" appearance. The reality that the law needs to respond to is that whoever creates risks and has control should bear the responsibility.

Table 1. The focus and bias of disputes among responsible parties in online car hunting infringement compensation disputes

Responsible entity	Core controversy focus	Tendency rules in judicial practice	Main legal basis
Online car hailing platform	Is it an information intermediary or a carrier?	The platform is recognized as having dual attributes as a carrier and organizer, and has a legal obligation to ensure operational safety.	Article 16 of the Interim Measures for the Management of Online Reservation Taxi Operation Services; Article 823 of the Civil Code
	Should we assume alternative liability, joint liability, or proportionate liability?	When the platform fails to fulfill its audit and management obligations, it shall bear joint compensation liability or supplementary liability. Often assume joint or several liability with the driver.	Article 1191 of the Civil Code; Article 823 of the Civil Code

Responsible entity	Core controversy focus	Tendency rules in judicial practice	Main legal basis
Online car hailing drivers	Is it an independent contractor or a platform employee?	Drivers taking orders and operating under the unified management of the platform are considered to be performing work tasks, and any damages caused by their official behavior are the responsibility of the employer (or platform).	Article 1191 of the Civil Code
	Can one's gross negligence be recovered?	After assuming external responsibility, the platform has the right of recourse against drivers who have intentionally or grossly negligent behavior.	Article 1191 of the Civil Code
Insurance company	The change in vehicle usage has significantly increased the level of danger	Engaging in online car hailing operations after purchasing insurance for non-commercial vehicles without notifying the insurance company, commercial third-party insurance is deductible; But the compulsory insurance still compensates within the limit.	Article 52 of the Insurance Law
Victims/Passengers	Claiming breach of contract or infringement?	A lawsuit for breach of contract does not require proof of fault and can be fully compensated; Infringement lawsuits require compensation based on the proportion of fault.	Article 186 of the Civil Code

3. COMPARATIVE ANALYSIS

The issue of compensation for damages caused by online car hailing infringement is not a unique legal issue in China. Major jurisdictions such as the United States and the EU have developed distinctive institutional solutions in legislation and judicial practice. Through comparative analysis, useful insights can be provided for the improvement of China's system.

3.1 The United States: The "Employer" Dispute over Platform Responsibility and the Division of State Legislation

The regulation of online car hailing platform liability in the United States presents a dual layered approach between federal and state levels, with judicial precedents and legislative interactions. The core dispute lies in the legal identification of online car hailing drivers. If the driver is identified as an "independent contractor", the platform is usually exempt from assuming employer substitution liability; if identified as an "employee", the platform shall bear alternative liability for the driver's infringement behavior.

At the federal level, the Federal Trade Commission (FTC) defines online car hailing platforms as "technology intermediaries" rather than transport carriers, and tends to apply the platform exemption clause of Section 230 of the Communications Standards Act. But the 2019 California AB5 Act established ABC testing standards, presumed most online car hailing drivers to be employees, and required platforms to assume work injury insurance, minimum wage, and tort liability. Uber and Lyft subsequently pushed for the passage of Proposition 22, which would maintain drivers as independent contractors through a referendum but also create limited welfare benefits.

3.2 EU: Hierarchical Strengthening of Platform Duty of Care and DSA Framework

The EU has adopted a more systematic legislative approach and gradually established hierarchical norms for platform responsibilities. The DSA, which came into effect in 2021, is not specifically aimed at online car retailing, but its established "gatekeeper" obligations and hierarchical attention mechanism have a direct radiation effect on online car retailing platforms. According to Article 6 of the DSA, platforms providing online transportation services are included in the scope of online intermediary services and must take reasonable measures to review illegal content and transactions.

In the exclusive field of online car hailing, France Loi d'Orientation des Mobilités (LOM) has taken the lead in clarifying the carrier attributes of online car hailing platforms, requiring them to purchase commercial insurance and assume joint liability for passenger damages. In 2021, Germany revised the Passenger Transport Act (PBefG) to include online car hailing in public transportation regulation, and platforms must purchase liability insurance of no less than 750000 euros for each order. The Directive on Improving Working Conditions in Platform Work, released by the European Commission in 2024, further introduces rebuttable employment presumptions and

strengthens the platform's alternative liability for driver infringement.

3.3 China: Insufficient Current Regulatory Framework and Institutional Supply

The current system in China is centered around the tort liability section of the Civil Code, supplemented by departmental regulations such as the Interim Measures for the Administration of Online Reservation Taxi Operation Services (2016). However, the current framework faces three challenges: firstly, the legal positioning of the platform is vague, and the interim measures do not clarify whether the platform is a carrier or an information intermediary; Secondly, there is a lack of unified standards for driver identity recognition, and the judgment standards of courts in different regions vary. Some recognize labor relationships, while others recognize contracting relationships; thirdly, the scope of compensation for damages is mainly limited to personal injury and property damage, and there is a lack of clear regulations for new types of damages such as data privacy infringement and algorithm discrimination. The typical cases related to platform economy released by the Supreme People's Court in 2024 have guiding significance, but have not yet formed a systematic institutional supply.

The comparison overview of the three method domains is shown in Table 2. Based on the experience of the three methods, the following insights can be extracted: firstly, the trend of "de intermediation" of platform identity is obvious, and European and American legislation tends to strengthen the carrier attributes or duty of care of platforms. China should also clarify the responsibility subject status of platforms in legislation; Secondly, the identification of driver identity should introduce rebuttable presumption rules to avoid platforms evading responsibility through standard contracts; Thirdly, the scope of compensation for damages should keep up with the times and include data breaches, algorithmic discrimination, and other issues in the compensation system; Fourthly, the institutional design of compulsory insurance and compensation funds is an effective tool for sharing damages. China can learn from the German compulsory insurance model and establish a special protection mechanism for online car hailing platforms.

Table 2. Comparison of three method domains

Comparative dimension	United States	EU	China
Legal positioning of the platform	Technical intermediary, employee/independent contractor dispute	Carrier/Online Intermediary Service Provider	Fuzzy positioning of information intermediaries and carriers
Driver identification	The dispute between ABC testing and independent contractors has led to significant differentiation in state legislation	Disposable employment presumption, inclined to recognize employment relationship	The judgment standards of courts in different regions are inconsistent, and there is a lack of unified rules
Platform responsibility foundation	Negligence liability is the main responsibility, and alternative liability depends on one's identity	Parallel joint liability, vicarious liability, and presumption of fault	The general principle of fault liability makes it difficult to determine the platform's fault
Scope of compensation for damages	Covering personal, property, and some mental damages, data infringement is gradually being included	Personal, property, mental damage and data protection	The compensation rules for data privacy infringement are insufficient, mainly focusing on personal and property matters
Insurance/fund mechanism	Commercial insurance is the main focus, and some states have established online car hail accident compensation funds	Compulsory commercial insurance	Compulsory Traffic Insurance+Commercial Insurance, Platform Mandatory Insurance System is not yet perfect
Core legislation/policies	California AB5, Proposal 22	DSA, French LOM, German PBefG, Directive on Improving Working Conditions in Platform Work	Civil Code, Interim Measures, and Typical Cases of the Supreme People's Court

4. COUNTERMEASURE AND SUGGESTION

In view of the above-mentioned outstanding problems in online car-hailing tort compensation, such as vague identification of the responsible subject, unclear compensation standard and scope, difficulties in evidence collection and proof, and conflicts in cross-border legal application, this paper puts forward the following countermeasures and suggestions, combined with foreign legislative experience:

4.1 Clarifying the Status of the Platform's Responsible Entity and Refine the Rules for sharing Responsibilities

In view of the ambiguity of the identification of the responsible subject, it should be made clear that online car-hailing platform has the dual legal attributes of carrier and organizer at the level of legislation or judicial interpretation, so as to change the current ambiguous position of "information intermediary" [8]. Platform control standards can be introduced to dynamically allocate responsibilities based on the platform's actual level of control over driver dispatching, pricing, service rules, and reward and punishment assessments; Introduce rebuttable presumption rules for driver identity recognition to prevent platforms from evading obligations through standard contracts. At the same time, the application conditions for joint and several liability, proportional liability, and supplementary liability between the unified platform and drivers will be unified to eliminate the phenomenon of different judgments in the same case.

4.2 Improving the Compensation Standards for Damages and Expand the Scope of Compensation

We should adapt to the changes in infringement patterns in the digital economy, include new types of damages such as data breaches and algorithm discrimination in the scope of compensation, clarify the rules for determining causal relationships and quantifying damages, and make up for the shortcomings of current regulations that mainly focus on personal and property damage. Refine the criteria and calculation methods for identifying indirect losses such as shutdown losses, unify the judgment scale, and effectively reduce the threshold for victims to protect their rights. Improve the discretionary norms for compensation for mental damages and non-material damages, and match the compensation mechanism with new forms of damages.

4.3 Establishing Rules for Platform Data Disclosure and Transfer of Burden of Proof

In response to the structural weakness of victim evidence collection, it is necessary to clarify the platform's obligation to provide electronic data in infringement disputes, standardize the scope, time limit, and procedures of disclosure, and impose unfavorable presumptions on platforms that refuse to provide or selectively provide evidence without justifiable reasons. In professional cases such as algorithm infringement, the introduction of rules for reversing or mitigating the burden of proof places the platform's burden of proof on the compliance of its algorithms and the lack of causal relationships for damages. The system of expert assistants can be introduced synchronously to assist the court in determining technical facts and alleviate the application dilemma of the "who asserts, who provides evidence" rule in technical cases.

4.4 Refining Cross-border Infringement Jurisdiction Rules and Strengthen Judicial Cooperation

In response to the contradiction between the boundarylessness of platform operations and the localization of damage results, it is necessary to further clarify the jurisdictional connection points for online car handling infringement disputes, comprehensively determine the closest contact point based on factors such as the actual location of service occurrence and the location of damage results, and reduce parallel litigation and conflict judgments. At the same time, promote the coordination of rules and mutual recognition of judgments with major jurisdictions in areas such as platform liability and data protection, and reduce the risk of "different judgments in the same case" caused by differences in legal application.

4.5 Building a Multi-level Compensation and Protection System

Drawing on the experience of Germany's mandatory insurance system, the platform is required to purchase special liability insurance for each order, consolidating the basis for compensation for damages. Establish an online car

hailing industry damage compensation special fund to advance the losses of victims when the responsible party is unable to compensate or the responsible party cannot be identified, achieving insurance fund fallback. At the same time, we will establish a sound mechanism for the platform to pursue compensation from drivers who have intentionally or grossly negligent behavior, ultimately forming a multi-level compensation system where the platform takes primary responsibility, drivers take additional responsibility, and insurance funds provide support, achieving a balance between risk sharing and accountability.

5. CONCLUSION

Comparative analysis shows that the United States is characterized by disputes over employment status and polarization of state legislation, while the EU has adopted DSA and Directive on Improving Working Conditions in Platform Work Strengthening the platform's duty of care and rebuttable employment presumptions both show a trend of "de intermediation" of platform responsibility. Based on this, China should adhere to the basic principle of fault liability, clarify the dual legal attributes of platform carriers and organizers, and introduce dynamic allocation of responsibility based on platform control standards; Include new types of damages such as data breaches and algorithmic discrimination in the scope of compensation; Establish rules for platform data disclosure obligations and reversal of burden of proof; Improve the cross-border jurisdiction coordination mechanism; Drawing on the experience of mandatory insurance in Germany, we aim to establish a multi-level compensation system where the platform takes primary responsibility, drivers take on additional responsibilities, and insurance funds provide a backup. This will achieve a balance between risk allocation and accountability, and provide institutional support for the rule of law governance of the platform economy.

ACKNOWLEDGEMENTS

Scientific research project of the Jilin Provincial Department of Education+ "A Study on Tort Liability Compensation Issues for Ride-Hailing Services from the Perspective of Digital Economy Law"+(JJKH20260268SK).

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