

Calculation of Civil Damage Compensation for Data Monopoly

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For the damage caused by data monopoly, there are difficulties in determining the amount of damages with current Chinese law. The specific manifestations are: the unclear damage scope, the unestablished damage quantification method, and the unreasonable damage standard. Firstly, what should be refined in China's anti-monopoly legislation are damage compensation rules, ranges, and types clarification of indirect losses; secondly, formulate guidelines for the quantification of anti-monopoly civil damage compensation, and then improve the existing methods of loss quantification from summarization; finally, reconstruct the calculation and proof standards of civil damage compensation in anti-monopoly law to ensure the effective realization of the anti-monopoly civil damages system.

Keywords: loss quantification, data monopoly, damages compensation

Introduction

It is specifically stipulated in Article 50 of the Anti-monopoly Law of the People's Republic of China and Article 14 of the Supreme People's Court's Provisions on Several Issues Concerning the Application of Law in the Trial of Civil Disputes Caused by Monopolistic Behaviors (hereinafter referred to as "the Regulations") about the provisions on civil liability for anti-monopoly. However, the way to calculate the anti-monopoly civil damages still remains confusing. The principles of "full compensation" and "prohibition of profit" for civil damages is regulated in Article 584 of the Civil Code of the People's Republic of China (hereinafter referred to as "the Civil Code"). Whereas, the uncertainty of how to calculate the amount of damages leads to extremely difficult calculation of anti-monopoly civil damages in judicial practice, such as the unclear scope of compensation, unreasonable proof standards, and ambiguous calculation methods. The determination of the damages compensation amount has an important impact on the interests of both the plaintiff and the defendant. In the absence of definite legal calculation standards, it is of great significance to explore how to calculate the compensation amount of anti-monopoly civil damages. Platform monopoly has become a prominent emerging monopoly mode. The intervention of data, algorithms, Internet, etc., makes the calculation of anti-monopoly civil damage compensation more complicated, thus becoming a puzzling question. Therefore, in this article platform monopoly is within the scope of discussion to investigate the calculation method of damages compensation.

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The Scope of Compensation of Data Monopoly

The Scope of Indirect Losses Has Not Been Clarified

Theoretically, according to the “full compensation” rule of current law, indirect loss should be part of the loss and also within the scope of civil damage compensation. Nevertheless, when there is a claim for the loss of obtainable interests in breach of contract in judicial practice, the courts basically take a very cautious attitude; or to say, in most cases the claim for the loss of obtainable interests of the non-breaching party will not be supported (Liu, 2013). The main reason is that, the unclear scope of indirect losses tends to cause unjust enrichment, which violates the principle of “comprehensive compensation”. The imprecise terms of indirect losses extent in the law cause easy infinite expansion when it comes to the calculation of indirect losses. If the infringed party’s valuation area of indirect losses is too large, it is very likely to become a means for the infringed party to demand excessive compensation. This leads to violation of the principle of “full compensation”, resulting in appearance of unjust enrichment and damage to the infringed party; in turn cause undermining to the authority and stability of the law.

The Scope of Compensation for Indirect Losses Should Be Limited to the First Result Cycle of the Damage

Regarding the scope of compensation for indirect losses, the author believes it should be limited to the first result cycle caused by the damage. For losses within this cycle, the infringer should pay compensation; and compensation for losses outside the first cycle shall not be required in the law (Qin & Yan, 2004). The main reason is to forbid the occurrence of unjust enrichment. Limiting the scope of indirect losses to the first result cycle is beneficial to prevent the infinite expansion of the scope of loss calculation and ensure the balance of interests between the infringer and the infringed party. In the context of Internet platform enterprise data monopoly, the scope of indirect losses should be limited to the reduction of advertising business and other profit losses and the interest need to be paid, which cannot be extended to other losses indefinitely.

The Classification of Losses Should Be Clearly Defined as Actual Losses, Profit Losses, and Interest Losses

The classification of indirect losses is conducive to further clarifying the scope of compensation for indirect losses, and can make the compensation for indirect losses more reasonable. Certain Rules Concerning Compensation for Damages Violating the Competition Laws of Member States and the European Union in Accordance With National Laws issued by the European Union (hereinafter referred to as “Directive 2014/104”) can be referred to specifically. In Directive 2014/104, the scope of losses is specified as actual loss, profit loss, and interest loss. Actual loss refers to the reduction of assets caused by the infringement; profit loss refers to the increase in asset interests when the infringement did not occur. Clarifying the specific types of damage compensation is beneficial to realize the principle of “comprehensive compensation”. The author believes that in the context of Internet platform enterprise data monopoly, the actual loss is a direct loss in nature, like the loss of data assets and other property reductions of Internet platform enterprises due to the suffering of data monopoly. Profit loss includes direct loss and indirect loss. The direct loss refers to loss of profit reduction caused by the data monopoly of Internet platform enterprises that prevent other Internet enterprises from providing valuable data products or data services with charges. The indirect loss refers to less profit loss from advertising revenue and other property income caused by the data monopoly of Internet platform enterprises that prevent other

Internet enterprises from providing free data products or data services. Essentially, interest can be classified as indirect losses. By clarifying the classification of damages, claims for indirect losses to be compensated in judicial trials can be positively improved, thereby realizing the principle of “comprehensive compensation” and ensuring judicial justice.

Damage Quantification Method for Data Monopoly

The Method for Quantifying the Damage of Data Monopoly Has Not Been Established

In the case of data monopoly, it is difficult to calculate the damage amount due to the lack of a formula for quantifying damages, which is mainly reflected in the following two aspects:

1. The absence of rules and guidelines for systematic quantitative loss calculation methods makes it difficult to evaluate the amount of damages. In China, there are no systematic quantitative guidelines for anti-monopoly civil damages currently. The insufficiency of a data model may lead to the fact that when appealing a claim for damages, the most common argument used by infringing parties is that the model employed by the claimant is incorrect. And the correct market analysis cannot be determined if no infringement has occurred. This has caused judges and state courts to conclude the damage estimates falling between that of defendants and claimants (Bovis & Clarke, 2015).

2. Data characteristics and evaluation methods have not been completed, which results in inaccurate valuation of data assets. On the one hand, as an intangible object, data cannot be monopolized by a specific subject. It is difficult to directly work out the amount of damages based on the quantity through property rights pricing. The value of data will vary according to different application scenarios and usage time, and there are certain difficulties in using the traditional method of direct losses calculation; on the other hand, it is hard to use a unified measurement unit to measure data, and work of data standardization will be tough.

Formulating Quantification Guidelines for Anti-monopoly Civil Damage Compensation

The deficient of domestic calculation method guidelines for the quantification of anti-monopoly civil damage compensation will make it difficult to systematically and operationally quantify the losses in anti-monopoly civil damages in practice. The guidelines for constructing calculation methods for loss quantification are advantageous to the solution of quantification loss problems in action. On the basis of summarizing the practical experience of anti-monopoly damage compensation domestic and abroad, as well as relevant legislation outside the region, combining the characteristics of data monopoly, the guidelines for the quantification of civil compensation losses in the anti-monopoly law can be formulated, to play a role in guiding practice in Chinese law system.

Summarize the quantification methods of existing antitrust civil damage compensation. Nowadays, the insufficient calculation method guidelines for the quantification of anti-monopoly civil damage compensation losses in China will make it difficult to systematically and operationally quantify the losses in anti-monopoly civil damages in practice. The guidelines for constructing calculation methods for loss quantification are advantageous to the solution of quantification loss problems in action. The author believes that specific quantification methods can be divided into contrastive and non-contrastive methods:

The primary theory of contrastive method is to collect data during the non-infringement period, by comparing the status under infringement and non-infringement, ultimately to acquire the losses suffered due to

anti-monopoly infringement. Establishing a non-infringement status is usually done by taking data from other time markets, geographic markets, product markets, and time geographic markets that have not been affected. There are three specific operating modes: The first mode is to obtain the average value of the data as sample data through a large amount of data observation and collection. The second mode is to fill in the missing data via linear interpolation. The method of linear interpolation is more accurate than that of averaging number, for it can describe the price development trend in the case of no infringement in a more objective way. The third mode is regression analysis, in which to formulate relevant assumptions based on the characteristics of the industry initially, and to construct the regression equation; then through a large amount of data analysis, to clarify the relationship between economic variables; finally, through data analysis to measure the amount of damage. Non-contrastive methods mainly include simulation model method, cost method, financial analytical method, and other methods. The main principle is investigating the state of non-infringement through ways of economic model, cost analysis, and financial analysis, to compare the state of being infringed with the state of not infringing, and then gain the losses caused by monopoly infringement.

The application and improvement of the loss quantification method for Internet platform enterprises.

Summarizing the existing quantification methods of anti-monopoly civil damage compensation, different loss quantification methods should be adopted for various of Internet platform loss types with the action improved.

Application of the loss quantification method for Internet platform enterprises. About direct losses, in the case of data monopoly of Internet platform companies, the method of data asset evaluation shall be specifically adopted in the reduction of data assets caused by data monopoly behaviors. For Internet platform companies not being able to provide valuable chargeable data products and services due to data monopoly behaviors, it should be obtained by using the comparison method and non-comparison method mentioned above. About indirect losses, under the situation of data monopoly by Internet platform companies, for Internet platform companies that cannot provide free data products and services caused by data monopoly, their profit loss should be clarified through the above-mentioned comparative method and non-comparative method. The interest losses result from the infringement should be implemented according to the interest calculation provision in the civil law.

Perfection of direct loss assessment method. The specific ideas for improving the data asset evaluation method and its application are: one side, adjusting the original evaluation method; on the other side, establishing a new data asset evaluation method.

1. Improve the application of data evaluation methods:

The original data asset evaluation methods include “cost method”, “income method”, and “market method”. Although there are certain defects with these three methods, it can be made up by reasonable using. The correct sequence of utilizing the three methods lies in: First, when there are enough comparable objects in the market, the market method should be applied first; second, when the income of data assets can be determined, the income method comes first; finally, the cost method should be applied as basic for general scenarios. In addition, the three methods can be checked against each other to ensure the correctness of data asset valuation.

2. Establish other data evaluation methods:

The method means to establish a big data asset decomposition valuation, and to correct the price of digital assets via usage of Shapley value method and bankruptcy distribution method. For situations where the rationality of the valuation result basic valuation method cannot be effectively guaranteed, however, the conditions are met,

bringing the big data asset decomposition method into the price correction of some big data assets, thus to improve the rationality of the valuation results (Zuo & Liu, 2019).

3. Establish a third-party data asset value evaluation mechanism:

Through the evaluation mechanism of a third-party organization, it is profitable to evaluate the value of data assets objectively and neutrally, also to prevent the problem of one-size-fits-all pricing of data assets, therefore to ensure the pricing of data assets to be in line with application scenarios and value requirements. By eliminating information gaps between buyers and sellers, it is conducive to balancing the relationship between costs and benefits, and clarifying the value of data assets. Nevertheless, for the evaluation mechanism of third-party institutions, it is necessary to exclude the power rent-seeking problem while ensuring the neutrality, fairness, and objectivity of the evaluation from third-party institutions.

Computational Proof Standard for Data Monopoly

The Proof Standard for Damage Compensation Is Unreasonable

Regarding the question of how to prove the loss caused by monopolistic behavior, presently it's regulated in the law that there must be relevant evidence to support the claim for the amount of damages. However, without specified term for the extent of the proof, after all, increased standard of proof means that more criteria need to be met to determine the responsibility of the accused (Cosnita-Langlais & Tropeano, 2018). This may raise the question about whether the standard for proving the amount of damage compensation is the same as the standard for proving damage. If the standard for proving the amount of compensation for damages is higher or equal to damage proving, the plaintiff's burden of proof might be increased on the basis of the difficulty in giving evidence and proving; hence the anti-monopoly civil litigation will be more difficult to be carried out. On the contrary, if the standard for proving damage amount is too lower than proving damages, it may lead to arbitrariness in determining the amount of damages, thereby affecting judicial justice.

Reconstruct the Calculation Proof Standard of Data Monopoly

As mentioned above, attributing to the data advantages abusing in competition among Internet platform companies, compensation for indirect losses caused by data infringement will become a normality. However, in Chinese judicial practice, many claims for indirect damages will not be supported by the court due to the uncertainty of the evidence. The defendant can defend the evidence presented by the plaintiff based on the uncertainties, such as operational risk, market risk, and the development level of Internet platform companies, with which the burden of proof for the plaintiff will be increased.

To avoid the breaching party gaining improper benefits from the burden of proof and the breach of contract, it seems that the scope and standard of the proof for the non-breaching party should not be too high. Instead, to reduce profit loss and proof standard appropriately, only in this way can the interests of the non-breaching party be fully protected and the interests of both parties can be balanced. To this end, we should improve the standard of proof with the main thought of lowering the standard. The reason is that the lowering of the standard is conducive to reducing the burden of proof on the plaintiff. The difficulty of proving evidence has always been the main problem restricting anti-monopoly civil litigation, which can even be seen as the source of defendant benefiting from litigation system. The setting of the burden of proof in anti-monopoly civil litigation should not only conform to the basic principles of the civil procedure law, but also conform to the legislative goal of the

anti-monopoly law. In other words, it should be conducive to maintaining the order of market competition. Based on China's anti-monopoly civil litigation judicial practice and the legislative purpose of the Anti-monopoly Law, in order to ensure the balance of the litigation status of the plaintiff and the defendant, the adjustment of the standard of proof in the Anti-monopoly Law is justified.

In terms of reducing the standard of proof, it should be established with rationality rather than certainty. Since the loss that should be compensated for data monopoly infringement is indirect loss, it is difficult to be measured and evaluated through certain evidence and precise calculation methods. With reasonable standard of proof, the problem of actual damages compensation affected by the lack of definite evidence and precise calculation methods can be solved. A rational standard of proof should be established in two aspects: (1) the amounts and facts can be distinguished. The plaintiff only needs to prove the losses suffered due to the defendant's data monopoly infringement truthfully, rather than proving the specific amount of damages very precisely. And the standard should be reduced to the preponderance evidence standard. In this way, both parties have the same possibility of getting a correct or wrong judgment, so to seek various evidence to support their claims actively. So the facts of the case can be found to the greatest extent with fair (Zhong, 2021). (2) For amount of damages cannot be proven precisely by the method of judging through discretion or out-of-court settlement, but the factors considered when deciding the judgment should be clarified.

Conclusion

The perfection of the legal system for determining the amount of damage compensation is conducive to ensuring that the damage compensation system plays its due function and realizes judicial justice. In order to give full play to the function of the damage compensation system and improve the corresponding damage compensation determination system, it mainly starts from three aspects: First, make clear the classification of losses and the scope of indirect losses. The classification and scope of the loss are clear, which is conducive to ensuring that the loss compensation is supported. Second, construct quantitative guidelines for anti-monopoly civil damages, summarize the existing quantitative methods of anti-monopoly damages, and establish different quantitative methods according to the characteristics of Internet platform enterprises and loss classification. Third, reconstructing the proof standard for the calculation of anti-monopoly civil damages is beneficial to balance the burden of proof of both parties, and is more conducive to the realization of judicial justice.

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