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Research on Influencing Factors of Economic Compensation Amount in Enterprise Data Disputes

-- Statistical Analysis based on 297 Judgment Documents

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Abstract

Economic compensation is one of the most common remedies in the judicial field. It is of great significance to clarify the influencing factors of the amount of economic compensation in related cases for enriching the way of determining the amount of compensation in enterprise data infringement cases and solving the problem of lack of operability in determining the amount. Taking 297 cases of enterprise data disputes in China from 2010 to 2020 as samples, through econometric analysis, it is found that the amount of economic compensation in enterprise data disputes will be significantly affected by the amount of the litigant's claim, the behavior type of the infringer, the behavior purpose of the infringer, the data type and other factors. In the follow-up work, we should clarify the discretionary factors affecting the amount of compensation, reasonably define the ownership of data, and implement the data development and data governance policies with regional characteristics, so as to achieve the fairness and efficiency of dispute resolution.

Keywords

Corporate Data; Economic Compensation; Discretionary Factors; Empirical Research; Computational Law.

1. Introduction

With the advent of the era of big data, data has gradually become an important resource for enterprise development. Data disputes involving unfair competition and intellectual property infringement have become unique legal problems in the era of big data[1]. Data disputes between enterprises and between enterprises and third parties are not uncommon, and they are even gradually increasing. The continuous growth of enterprise data disputes will encourage enterprises to resist data risks by increasing operating costs. This will force companies to make decisions about cost transfer or exit from the market. It is foreseeable that the degree of corporate data protection will affect corporate operations and investment decisions. Fully protecting the data rights of enterprises is conducive to promoting the healthy and orderly development of the data industry. The protection of corporate data has therefore become an important topic of concern from all walks of life.

Judicial protection of corporate data is the most deterrent way of protection. However, my country's current laws and regulations do not clarify the rights and interests of corporate data, and cannot directly protect the interests of corporate data subjects. In judicial practice, it is mainly based on the existing laws and regulations to rule on enterprise data disputes. Review the results of corporate data disputes. Whether it is the most frequent intellectual property and competition disputes or other civil disputes with a smaller frequency, the frequency of economic compensation far exceeds other remedies. It can be said that economic compensation is the most common method of corporate data protection in the judicial field. In recent years,

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in the context of the ever-increasing number of corporate data disputes, the upper limit of the amount of compensation has also been increasing. This not only makes people reflect on whether the amount of compensation in my country's judicial ruling is compatible with the actual degree of damage. At the legislative level, the law generally stipulates the amount of compensation. For example, Article 49 of the Copyright Law stipulates: "The infringer shall pay compensation based on the actual loss of the right holder; if the actual loss is difficult to calculate, it may be compensated based on the infringer's illegal income." However, limited by the complexity of reality, It is difficult for the court to scientifically calculate the specific amount of compensation in enterprise data disputes. Therefore, an accurate analysis of the factors affecting the amount of economic compensation is particularly important for judicial practice and corporate decision-making. This article will use the econometric model to explore the influencing factors of the compensation amount, and conduct an empirical test based on the data disputes of Chinese enterprises from 2010 to 2020.

2. Literature Review

Due to the property attributes of data and the close relationship between data protection and intellectual property and other legal systems, domestic and foreign scholars' discussions on data disputes are mainly placed in the relevant context of contract law, intellectual property law and anti-unfair competition law. Explore the scope of data and the protection path of enterprise data from the system level.Ji Hailong believes that data as a manifestation of information is more like a carrier, and the information it carries can be processed by corresponding equipment and is non-competitive in the economic sense[2].Mei Xiaying believes that it is difficult to explore the legal attributes of data in the context of traditional folklore, but the current dispute judgment results and theoretical research are more inclined to treat data separately as objectification and property[3].Long Weiqiu explored the path of property rights protection of corporate data, and pointed out that the design of property rights protection mechanism is extremely complicated, and it is necessary to design a complex structure with a private interest structure as the core, multi-layer restrictions as a package, and a high degree of coordination[4].Xu Shi believes that the protection of corporate data mainly relies on the copyright law, patent law and anti-unfair competition law in the current intellectual property system[5].Most foreign scholars also regard the intellectual property system as the main way to protect corporate data. According to the research of Alhuwail Dari, US Internet companies (such as Google) mostly rely on patents to protect their core algorithms, and then monopolize the data resources obtained by the algorithm to grab more economic benefits[6].At the same time, the data protection laws promulgated in Europe, the United States and other countries and regions (such as the Federal Data Protection Act in Germany and the Consumer Privacy Act in the United States) have also injected new blood for scholars to explore the protection of corporate data.

Only a few scholars have discussed the factors affecting the amount of fines and compensation under the perspective of Chinese law. For example, Feng Bo analyzed the influencing factors of the amount of fines in the context of anti-monopoly French and found that when illegal companies have illegal income but have not been confiscated, the proportion of fines will be significantly higher than in the case of non-confiscation[7].Wang Qidi conducted an empirical test on the factors that influence the amount of insider trading fines and found that the SFC's penalties for insider trading fines are mainly determined by the identity of the parties, the specific behavior of insider trading, the amount of illegal gains, the amount of losses, and subjective factors[8].There are also scholars who pay more attention to the quantitative analysis of the influencing factors of the compensation amount, but they are mainly placed in the context of specific legal categories such as criminal law, anti-monopoly law, and patent law.

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For example, Gordon V. Smith and Russell L. Parr believe that the loss compensation for intellectual property infringement is positively related to the lost profit, and the size of the lost profit is determined by the output, size and cost[9].Up to now, Chinese scholars have mainly conducted research on related issues of corporate data in a standardized research method. Normative research is conducive to detailed discussion of basic value issues such as the concept and attributes of data, but it is slightly insufficient in exploring the causal relationship between the amount of compensation for enterprise data disputes and other factors. Therefore, this article will use empirical methods to explore the factors affecting the amount of compensation in my country's corporate data disputes.

3. Research Hypothesis

3.1. The Impact of the Amount of the Petition on the Amount of Compensation

The litigation request is a concentrated expression of the interests of the parties, and the amount of the litigation is a direct quantification of their damaged interests. For the court, the amount of the litigant's appeal is an important reference for the court to determine the amount of compensation. Taking copyright disputes as the specific context, in judicial practice, Article 48, paragraph 2, and Article 49, paragraph 1, of China's Copyright Law, as well as the Supreme People's Court's Interpretation on Several Issues Concerning the Application of Law in Trial of Copyright Civil Dispute Cases, are mainly used in judicial practice. Article 24 and Article 25 are the main legal basis for determining the amount of compensation. The amount of compensation should include the actual loss and reasonable expenses of the right holder. The actual loss is the reduction in the circulation of copyright copies due to infringement or the infringing copy and the copy of the distribution. The product of product unit profit. In view of the peculiar nature of data, it is difficult for the court to accurately assess the actual losses and reasonable expenses of the parties involved in enterprise data disputes, and it is necessary to include the amount of the parties' appeals as auxiliary discretionary factors.

In order to verify the impact of the amount of claims on the amount of compensation in enterprise data disputes, the following hypotheses are proposed:

Hypothesis 1: Under the circumstance that other factors remain unchanged, an increase in the amount of the petition will increase the amount of compensation.

3.2. The Impact of the Type of Perpetrator on the Amount of Compensation

In reality, the infringers of enterprise data disputes include natural persons, legal persons and other unincorporated organizations. The perpetrator will affect the purpose and behavior of the tort due to the difference in his own organizational form, thereby affecting the amount of compensation. Therefore, the perpetrators are divided into two categories according to whether they are legal persons and other organizational forms, one is legal persons and other unincorporated organizations, and the other is natural persons, which are used as research indicators.

In order to test whether the compensation amount will be affected by the actual classification of enterprise data, the following assumptions are made:

Hypothesis 2: Under the circumstance that other factors remain unchanged, the amount of economic compensation for the perpetrator is a legal person and other unincorporated organizations is lower than if the perpetrator is a natural person.

3.3. The Impact of the Perpetrator's Use of Corporate Data for Different Purposes on the Amount of Compensation

In various disputes, the different purposes of use by the perpetrator of illegally obtaining enterprise data reflect the degree of maliciousness of the perpetrator, and to a certain extent

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affect the perpetrator's damage to the data subject and even the harm to the entire industry's economic environment. . The different purposes of actors using corporate data can be divided into five types according to the degree of maliciousness from small to large. They are data collection for reprocessing without any profit purpose, indirect profit by increasing traffic, and direct profit. , And malicious competition. The different purpose of use of the perpetrator will affect the nature of the behavior and the specific circumstances such as the consequences of the behavior, thereby affecting the amount of compensation.

In order to observe whether the difference in the use of the actor affects the amount of compensation, the following assumptions are made:

Hypothesis 3: Under the circumstance that other factors remain unchanged, the increase in the malicious degree of the actor's purpose of use will increase the amount of compensation for enterprise data disputes.

4. Model Design and Description

In order to verify the above research hypothesis, the following benchmark model is designed:

$$lncompensa\quad tion_{i} = \alpha + \beta_1 lnclaimamo\quad unt_{i} + \beta_2 infringety\quad pe_{i} + \beta_3 purpose_{i} + \beta_4 X_i + \varepsilon_i \tag{1}$$

Among them, the subscript i represents the case, α is the intercept item.

$lncompensa\quad tion_{i}$ is the logarithm of the compensation amount in the enterprise data dispute. $lnclaimamo\ unt_{i}$ represents the logarithm of the amount of claims in a corporate dispute, and β_1 is its parameter to be estimated.

$infringety\quad pe_{i}$ is a dummy variable, which represents the type of the perpetrator. When the perpetrator is a legal person or other unincorporated organizations, the value is 1, and the value is 2 for a natural person, and β_2 is its parameter to be evaluated.

$purpose$ represents the different behavioral purposes of the actor to obtain enterprise data, and β_3 is its parameter to be estimated.

X_i is the control variable. Specifically, it includes the duration of the case, the location of the court, the type of industry the subject of the enterprise data belongs to, the actual classification of the enterprise data, whether the content of the enterprise data is directly charged to the public, whether the data subject is the original producer of the enterprise data, and the enterprise data the dispute type of the dispute.

β_4 is the parameter to be estimated of the control variable. ε_i is the random error term.

4.1. Variable Description

The variable types of this experimental model are explained variables, explanatory variables and control variables. The following will explain each variable in the model based on this classification basis.

The logarithm of the compensation amount (explained variable): This article is to study the influencing factors of the compensation amount in enterprise data disputes, and the compensation amount is used as a measurement index. However, in order to make the model more linear and more credible, the compensation amount is smoothed, and finally the logarithm of the compensation amount is used as the explained variable.

The logarithm of the amount of the claim (explanatory variable): The amount of the claim is the amount of compensation requested by the party for the damaged benefit. Generally speaking, the higher the amount of compensation requested by the party, the greater the loss it suffered. In order to reduce the difference, the amount of the petition is also smoothed, and the logarithm of the amount of the petition is used as an explanatory variable.

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Type of infringer (explanatory variable): Hypothesis 2 believes that the type of actor will affect the amount of compensation for enterprise data disputes. Specifically, if the perpetrator of data infringement is a legal person or other organization form, the value is 1; if it is a natural person, the value is 0.

Purpose of the infringer (explanatory variable): The different purposes of the infringer's use of corporate data will affect the nature of the behavior and the consequences of the behavior and other specific circumstances, thereby affecting the amount of compensation. Specifically, assign a value of 1 without any profit purpose, assign a value of 2 for data collection for reprocessing, assign a value of 3 for indirect profit by increasing traffic, assign a value of 4 for direct profit, and assign a value of 5 for malicious competition.

Case duration (control variable): The case duration in this study refers to the time from the acceptance of the case to the end of the case, and the unit is month.

The location of the court (control variable): In order to clarify the impact of the level of digital economy development on the amount of compensation for enterprise data disputes, the location of the court is selected as a specific indicator and set as a dummy variable. Specifically, when the trial courts are located in Beijing, Shanghai, Guangdong, and Zhejiang, the four provinces and cities with a higher level of digital economy development, the value is 1, and the value is 0 when located in other provinces and cities.

The type of industry to which the data subject belongs (control variable): assign a value of 1 to culture, sports and entertainment industries, assign a value of 2 to scientific research, technical services and geological survey industries, assign a value of 3 to information transmission, computer services and software industries, and assign a value to manufacturing It is 4, the financial industry is assigned a value of 5, and the leasing and business service industry is assigned a value of 6.

Realistic classification of enterprise data (control variables): assign text works as 1, music, drama, folk art, and dance works as 2, art and photography works as 3, film, television, and video works as 4, engineering design, Product design drawings and descriptions are assigned a value of 5, computer software is assigned a value of 6, data information is assigned a value of 7, enterprise trademarks and reputation are assigned a value of 8, and other categories are assigned a value of 9.

Whether the content of the enterprise data is directly charged to the public (control variable): If the data is charged to the public, it is assigned a value of 1, and if the data is not charged to the public, it is assigned a value of 0.

Whether the data subject is the original producer of the enterprise data (control variable): If the data subject is the original producer of the enterprise data, the value is 1; if the data subject is not the original producer of the enterprise data, the value is 0.

Dispute types (control variables): Assign a value of 1 for copyright disputes, assign a value of 2 for disputes over unfair competition, assign a value of 3 for patent disputes, assign a value of 4 for reputation disputes, assign a value of 5 for contract disputes, assign a value of 6 for disputes over trademark infringement, and others Intellectual property and competition disputes are assigned a value of 7.

4.2. Basic Statistical Analysis of Each Variable

The statistical indicators and descriptive statistics of the relevant variables in the full text are shown in Table 1. The data comes from more than 560 cases involving enterprise data disputes in China from March 2010 to December 2020. Through the study and analysis of all cases one by one, repeated cases, cases lacking relevant information, cases without compensation, etc. are eliminated. In the end, 297 relevant cases were selected as samples for this study. And in these 297 cases, the amount of compensation, the amount of the appeal, the location of the court, the

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purpose of the actor's behavior, the duration of the case, the type of industry the data subject belongs to, the actual classification of enterprise data, and whether the content of the enterprise data is directly charged to the public , Whether the data subject is the original producer of the enterprise data, whether the infringer is a legal person or other unincorporated organization, or whether it is an individual, or the type of dispute for enterprise data disputes. Finally, SPSS26 software is used for data entry, and data processing and analysis are completed by Stata15.

Table 1. Descriptive statistical analysis of each variable

Variable	Mean	Standard deviation	Min	Max
duration	8.510	7.628	0.500	37
region	0.818	0.386	0	1
industry	2.455	1.291	1	6
datatype	4.101	2.109	1	9
charge	0.434	0.497	0	1
productor	0.455	0.499	0	1
infringertype	0.919	0.273	0	1
purpose	3.152	0.731	1	5
dispute	2.172	1.926	1	7
lnclaimamount	11.61	1.971	7.003	17.22
lncompensation	10.64	2.031	5.991	14.61

5. Benchmark Regression Analysis and Analysis of the Difference of Court Area

Column 1 and column 2 of Table 2 are the regression results of the benchmark model based on the full sample. Column 1 is the result of OLS regression analysis according to formula (1). Column 2 is the result of regression of the data with a robust standard deviation in order to overcome the influence of the heteroscedasticity of the data. According to the results of column 1 and column 2, it is found that when the control variables are added, the coefficient of lnclaimamount is 0.847 and is significantly positive, indicating that the amount of claims is the most important factor in determining the amount of compensation for enterprise data disputes. Under the circumstance that other factors remain unchanged, the amount of compensation for enterprise data disputes generally increases with the increase in the amount of the petition, which validates Hypothesis 1.

The coefficient of infringertype is significantly negative, indicating that the type of infringer is also one of the main factors affecting the amount of compensation for enterprise data disputes. When other factors remain unchanged, the amount of economic compensation will be reduced when the infringer is a legal person or other unincorporated organization, which verifies Hypothesis 2.

The coefficient of purpose is positive, and it is more significant on the basis of overcoming the heteroscedasticity of the data, indicating that when determining the amount of economic compensation, although the purpose of the behavior is not a factual basis for directly assessing the actual loss and reasonable expenses of the right holder, it still influences the behavior Specific circumstances such as the nature and consequences of the behavior, which in turn affect the amount of compensation. Under the circumstance that other factors remain the same, the amount of compensation for enterprise data disputes will increase as the perpetrator's malicious degree increases, which validates Hypothesis 3.

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The coefficient of datatype (control variable) is significantly positive, indicating that the data type will also directly affect the amount of economic compensation for enterprise data disputes. The duration (control variable) coefficient is also significant, but only -0.024, with a low degree of influence. This shows that under the circumstance that other factors remain the same, the longer the trial period for enterprise data disputes, the lower the amount of compensation to a certain extent.

Other control variables, such as region, industry, charge, productor, dispatch are not significant, and the absolute value of the correlation coefficient is low, indicating the court area, the type of industry the data subject belongs to, whether the corporate data is charged to the public, and whether the data subject is an enterprise Factors such as the original producer of the data and the type of dispute have a relatively small impact on the amount of compensation for enterprise data disputes.

Table 2. Analysis of the difference between the regression results of the benchmark model and the court region

	Benchmark regression analysis		Analysis on the regional differences of courts	
	(1)	(2)	(3)region=1	(4)region=0
VARIABLES	lncompensation	lncompensation	lncompensation	lncompensation
lnclaimamount	0.847***	0.847***	0.845***	0.829***
	(24.98)	(20.53)	(19.68)	(12.01)
infringertype	-0.843***	-0.843***	-0.946***	-0.459***
	(-3.08)	(-4.63)	(-3.29)	(-3.49)
purpose	0.160*	0.160**	0.188**	-0.475**
	(1.77)	(2.14)	(2.21)	(-2.25)
duration	-0.024**	-0.024**	-0.040***	-0.019
	(-2.58)	(-2.10)	(-2.71)	(-1.59)
region	-0.142	-0.142		
	(-0.75)	(-0.91)		
industry	-0.013	-0.013	0.009	0.033
	(-0.24)	(-0.26)	(0.15)	(0.66)
datatype	0.137***	0.137***	0.179***	-0.499***
	(3.72)	(3.84)	(4.59)	(-8.27)
charge	-0.157	-0.157	-0.090	0.216*
	(-1.10)	(-1.21)	(-0.59)	(1.92)
productor	-0.054	-0.054	-0.004	1.784***
	(-0.35)	(-0.36)	(-0.03)	(6.46)
dispute	-0.038	-0.038	-0.113**	0.336***
	(-0.80)	(-0.87)	(-2.44)	(11.39)
Constant	1.043*	1.043**	0.948	3.777***
	(1.90)	(1.99)	(1.59)	(6.24)
Sample	297	297	223	74
R-squared	0.851	0.851	0.763	0.949

*** p<0.01, ** p<0.05, * p<0.1

In order to explore the difference in the amount of economic compensation for enterprise data disputes in the spatial dimension, the court area is used as the spatial dimension classification index, and the experimental samples are divided into enterprise data disputes where the trial courts are located in Beijing, Shanghai, Guangdong, and Zhejiang, and Trial of enterprise data

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disputes in other provinces and cities where courts are located, and then perform regression analysis. The results are shown in columns 3 and 4 in Table 2.

Compared with the analysis results of the full sample, when region is 1, the significance and correlation coefficient of each variable did not change significantly. But when the region is 0, the productor and dispatch variable coefficients are suddenly significant, and the values also increase. This shows that the courts in underdeveloped areas of the digital economy pay more attention to factors such as the type of dispute and whether the data subject is the original producer of the enterprise data when determining the amount of compensation for enterprise data disputes. This may be because data transactions in underdeveloped areas of the digital economy are not frequent, and whether they are the original producers of corporate data plays an important role in determining data ownership. The same, clarifying the types of traditional disputes that corporate data disputes belong to is also critical for the courts of underdeveloped digital economies.

6. Regression Test

Table 3. Regression results and robustness test results of the benchmark model

	(1)	(2)	(3)
VARIABLES	lncompensation	lncompensation	lncompensation
lnclaimamount	0.847***	0.853***	0.847***
	(20.53)	(25.08)	(25.46)
infringertype	-0.843***	-0.863***	-0.843***
	(-4.63)	(-3.19)	(-3.14)
purpose	0.160**	0.164**	0.160**
	(2.14)	(2.03)	(1.99)
duration	-0.024**	-0.025***	-0.024**
	(-2.10)	(-2.71)	(-2.06)
region	-0.142	-0.138	-0.142
	(-0.91)	(-0.74)	(-0.76)
industry	-0.013	-0.012	-0.013
	(-0.26)	(-0.23)	(-0.25)
datatype	0.137***	0.141***	0.137***
	(3.84)	(3.87)	(3.80)
charge	-0.157	-0.146	-0.157
	(-1.21)	(-1.03)	(-1.12)
productor	-0.054	-0.072	-0.054
	(-0.36)	(-0.48)	(-0.36)
dispute	-0.038	-0.038	-0.038
	(-0.87)	(-0.82)	(-0.82)
Constant	1.043**	0.963*	1.043*
	(1.99)	(1.76)	(1.94)
Sample	297	297	297

*** p<0.01, ** p<0.05, * p<0.1

In order to avoid the occurrence of pseudo-regression, this article will use the restricted regression analysis of dependent variables to test the robustness of the regression model. Specifically, column 2 is the result of tail-breaking regression analysis, and column 3 is the result of truncated regression analysis. Column 1 is for the convenience of comparison with the robustness test results, and the robust standard deviation is used to perform the benchmark

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regression results on the data. The results show that there is no significant difference in the value and significance of the correlation coefficient of each variable in column 1, column 2 and column 3, indicating that there is no significant change between the results of the benchmark regression analysis and the results of the robustness test. The experimental hypothesis and the above conclusions are still valid. , Which proves the robustness of the regression results.

7. Further Analysis and Suggestions

The regression results of the benchmark model verified the above assumptions, and found that the amount of economic compensation in enterprise data disputes will be affected by the amount of litigation by the parties, and shows a trend of marginal increase; the type of infringer's behavior will also affect the determination of the amount of compensation Under the condition that other factors remain unchanged, natural persons generally have to bear more economic compensation than legal persons and unincorporated organizations; the infringer's behavioral purpose will be condemned by a higher degree of law due to the increase in maliciousness in the nature and consequences of the behavior. And was sentenced to a higher amount of compensation. In addition, different types of data will also significantly affect the amount of compensation for enterprise data disputes. This is also one of the main differences between enterprise data disputes and other traditional disputes. Factors such as the location of the court, the type of industry the data subject belongs to, whether corporate data is charged to the public, whether the data subject is the original producer of corporate data, and the type of dispute have a relatively low impact on the amount of compensation for corporate data disputes. Based on the above empirical research results, the following suggestions are made regarding the trial of enterprise data disputes:

7.1. Clarify Data Ownership

The actual classification of data is one of the significant factors that affect the amount of compensation, and clarifying the right boundary of the data subject has a positive effect on determining a reasonable interval for the amount of compensation. In current data disputes, judicial trials mainly use data sources and data functions to determine data as a specific type of reality, and then regulate and protect it in accordance with existing laws. However, due to the diversity and complexity of data content and nature, it is difficult to accurately clarify the nature of data rights in a case in practice. Specifically, the approach should be to define the content of data rights and resolve conflicts with other rights, clarify data ownership and the legal positioning of various types of data at the judicial level, and strengthen my country's existing legal system to deal with new disputes.

The current practice of obtaining data ownership by data processors will also incentivize data production and prosper digital trade. Data transactions preceded the emergence of the data property rights system. The self-development of industries such as big data, Internet of Things, and databases forced legislation, and stakeholders required the law to participate in the process of benefit distribution. Determining the ownership of rights and interests through the law means that the rights and interests have legal legitimacy and a high degree of national recognition, and all operators can legitimately and securely pursue data business interests. The merchant industry needs to invest huge costs to produce effective data results. If the property rights system does not guarantee the contingent profits of the relevant platforms and enterprises, data production will stagnate and the market will slump, which runs counter to the starting point of the data right confirmation system. However, the establishment of the data platform and the data processing made by the enterprise are not necessarily based on their own wishes, that is, the data processor is not necessarily the ultimate actual controller of the data. The processor may only process the data out of duty behavior or contractual agreement. The actual decision-making, cost input, and use of the data product are all the ultimate data

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controllers. At this time, the ownership of the data should belong to the entity and the principal , Which is the actual controller of the data.

In addition, while data rights are open to enterprises, they must also pay attention to the protection of citizens' privacy rights. The data collected by the enterprise with the permission of citizens, whether it is "strong data" such as the name, age, contact information, home address, religious beliefs of natural persons, or "weak data" such as behavior trajectory, consumption tendency, web browsing traces, etc., have already involved citizens Privacy field. After processing and forming data results, the data transaction and data transfer activities between the owner of the data right and other subjects do not re-inquire the original data subject's wishes, but transfer the data containing personal privacy to a third party. The personal and property interests of the original data subject pose a major threat. To resolve the conflict dilemma between the economic interests of data and citizens' privacy rights, it may be alleviated by establishing the principle of informed consent in the data field and the principle of fair use. The principle of informed consent means that companies and other data operators should inform data subjects of the scope, destination, and purpose of the data collected, and obtain and use data under legal contracts with permission. However, this principle is still controversial because it is difficult to implement: major Internet companies have used complicating user agreements and privacy policies to increase the time and energy cost of users to read the agreement, or semi-mandatory that does not grant data rights and does not allow the use of software The permission method makes the user's right of informed consent useless.

7.2. Determine Discretionary Factors

China's current relevant laws mainly determine the amount of economic compensation for disputes according to the types of rights, the nature and circumstances of violations and other factors. For example, Article 65 of the patent law stipulates that "the amount of compensation may be determined according to factors such as the type of patent right, the nature and circumstances of infringement". However, the determination and value evaluation of many plots are easily affected by the subjective factors of judicial personnel.

This also makes it difficult for judges to exercise their discretion reasonably, lack of sufficient research and understanding, and the lack of relevant systems and norms often leads to the suspicion that judges violate the bottom line of the public when exercising their discretion. For example, there are some embarrassing situations from time to time in judicial practice, that is, between superior and subordinate courts, between courts at the same level but with different jurisdictions, between different trial chambers within the same court, and even between different collegial panels of the same trial chamber, making different judgments on the same type of cases. The existence of these phenomena not only seriously affects and damages the authority and credibility of justice, but also refreshes the bottom line of public cognition of law and justice again and again. Therefore, how to reasonably and effectively regulate the exercise of judges' discretion has become the focus of legal theory research and legal practice departments.

Looking at 297 samples in the experiment, the amount of compensation for enterprise data disputes is usually lower than the amount of claims by the parties. However, according to the research results, under the condition that other factors remain unchanged, the amount of compensation for enterprise data disputes generally increases with the increase of the amount of claims. It can be seen that the application strategies of the parties in enterprise data disputes will affect the actual results of judicial decisions to a certain extent. This will lead the parties to choose to increase the amount of their claims in order to obtain greater litigation benefits, and then increase the judicial cost and waste legal resources. Therefore, it is very important to determine the discretion factor of the amount of economic compensation for enterprise data disputes. This not only increases judicial transparency and prevents the parties from

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maliciously claiming a higher amount of claims, but also improves judicial efficiency and saves legal resources.

7.3. Implement Supporting Policies for the Data Industry

Promoting the development of big data industry has a positive effect on local economic growth. Compared with provinces without big data development policies, the contribution of provinces and cities that encourage the development of big data industry to actual economic development increases every year. Based on their national conditions, countries point out that economically underdeveloped provinces can make top-level design and overall planning to support the development of big data industry in combination with their own industrial policies, formulate forward-looking big data development and application outline and specific policies, accelerate the development and utilization of big data resources and constantly promote high-quality economic development. Secondly, underdeveloped provinces should speed up the establishment of a big data technology innovation system with enterprises as the main body, market orientation and the combination of industry, University and research, and adjust the industrial structure of the province. Take big data as the industrial empowerment and make use of the advantages of natural resources in the province to innovate and develop emerging industries. Finally, underdeveloped provinces should firmly grasp the two main lines of innovation driven and investment driven, improve information infrastructure, improve relevant industrial supporting facilities and optimize the investment environment. Technological innovation led by big data will optimize resource allocation and promote economic growth.

However, the big data development incentive policy should also be implemented in conjunction with the big data governance policy. The spatial heterogeneity of enterprise data disputes is mainly reflected in the differences in the number of cases and the amount of compensation. Beijing, Shanghai, Guangdong, Zhejiang and other provinces and cities have a high level of digital economy development, as well as corresponding digital industry development policies and local laws on data protection. While other provinces and cities lack relevant policies supporting the regional economic structure and the development of data industry. This makes it difficult for the trial courts in other provinces and cities to make results that are not only in line with the case justice, but also conducive to the development of the local data industry. Therefore, the implementation of supporting policies for the development of digital economy at the local level plays an important marginal role in the trial of data disputes by local courts. Specifically, it is suggested to formulate and improve relevant supporting policies in two aspects of data development and data governance. In the context of the big data era, the implementation of data development and data governance policies with regional characteristics can better reflect the constraints on data infringement and is conducive to the settlement of enterprise data disputes.

8. Conclusion

This article uses all 297 judgment documents involving corporate data disputes in China from March 2010 to December 2020 as a sample, and conducts an empirical analysis of the main factors affecting the amount of compensation. The research results show that the amount of economic compensation in enterprise data disputes will be affected by the amount of litigation by the parties, and shows a trend of marginal increase; the type of infringer's behavior will also affect the determination of the amount of compensation, and other factors remain unchanged. Under the circumstances, natural persons generally have to bear more economic compensation than legal persons and unincorporated organizations; the infringer's behavioral purpose will be condemned by a higher degree of law for the nature and consequences of the behavior due to the increase in maliciousness, and then be sentenced to a higher amount of compensation. In

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addition, different types of data will also significantly affect the amount of compensation for enterprise data disputes. This is also one of the main differences between enterprise data disputes and other traditional disputes. Factors such as the location of the court, the type of industry the data subject belongs to, whether corporate data is charged to the public, whether the data subject is the original producer of corporate data, and the type of dispute have a relatively low degree of influence on the amount of compensation for corporate data disputes. Finally, based on the above conclusions, the author puts forward specific suggestions in three aspects: clarifying data ownership, determining discretionary factors, and implementing supporting policies. In general, the future of data security and sensitive information protection should be based on the perspective of enterprise-level data sharing and application, based on compliance requirements, based on data applications, and driven by meeting business data requirements, and transforming from technology orientation. Carry out overall planning for business and management orientation. Of course, because various data application scenarios are relatively complex, you can start with the management framework, first build a special mechanism for data security and sensitive information protection based on regulatory compliance requirements, and select several key business application pilots as the entry, sort out and formulate Data protection requirements at the level of business processes and application scenarios (the other side of protection is the need to allow the use of data), and gradually incorporate various different business application scenarios to form a complete system. Based on this, we can consider advancing simultaneously with enterprise-level data governance work, through top-down data governance to solve data requirements and accountability management, as an important business and management input for data security and sensitive information protection, and proceed based on this Carrying out special security work is designed to facilitate the proper settlement of data disputes among Chinese companies.

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