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**An Economic Analysis of Compromise and Litigation**  
— An Approach to the Economic Analysis of Law —

**Yoshihiro Kobayashi**

**Preface**

The objective of this paper is to clarify what is called Japan-specific-character, seen among law-related affairs, from the viewpoint of economic rationality. One example of Japan-specific-character is seen in the overwhelming majority of civil affairs being settled amicably before being brought into a lawsuit. Various reasons for this have been discussed so far. Ramseyer\(^1\) classified those discussions into three types and pointed out the "Legal Mind of the Japanese," a classic masterpiece by Takenori Kawashima,\(^2\) as a typical example of a stand seeking its basis in Japanese cultural and historical elements. According to Ramseyer, who named this the Doctrine of Culture and criticized it, the reasons for so many cases of compromise in Japan are the following three. 1. The Doctrine of Culture, which is represented by Kawashima; 2. The Doctrine of Cost Factor, an explanation that compromise is chosen in most of the cases because a lawsuit costs too much; and 3. The Doctrine of Forecastability, an explanation that most cases are settled amicably because the amount of money by judgment is forecastable. Among these three, he himself supports the third, the Doctrine of Forecastability. This is the doctrine that explains the reason why compromise is chosen using economic rationality, and this idea parallels a recent stream of "Economic Analysis of Law."

The economic analysis of law which has become prominent recently attempts to analyze the legal system corresponding to Optimal Resource Allocation, applying the framework of the Neoclassical school. Ramseyer's discussion also goes along this stream. It tries to explain the behavior of people related to law by rational behavior in the field of economics, the behavior best expressed as "wealth maximizing behavior." On the other hand, he regards what is called the Doctrine of Culture to be in the opposite position from economic rationality.

I am basically trying to explain people's legal mind by rationality, which seems to be the same as Ramseyer's position but differs in the following points. Although Japan-specific-characters have been treated as manifestations of pre-

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1) J. Mark Ramseyer; *Law and Economics* (Ho to Keizaigaku-Nihon ho no Keizaibunseki), Kobundo, 1990.
modern irrationality, they were rather rational from the viewpoint of saving social cost and effective allocation of resources. This is my interpretation and the purpose of this paper is to clarify that point. This is based on an awareness of the following problems.

In the field of economics, especially in the field of labor economics and theory of the firm, the seniority-order wage system, lifetime employment, and labor immobility — which used to be considered Japan-specific-characters — have been explained as examples of pre-modern irrationality. From around the 1970s, however, they started receiving better credit as a cause of growth and the stable industrial relations of Japanese firms — and in turn, as an element of the great success of Japanese firms. Along with this, the rational aspects in Japan-specific-characteristics are being analyzed.

A study in the field of phenomena observable in Japan, even if it cannot necessarily be regarded as Japan-specific character, is developing in the study field of economics. For example, implicit contract and continual transaction are included. Continual transaction, especially, is said to be characteristic of Japan-specific transaction custom. They at least have a rational basis for the individual organization or person concerned. The point is whether each of them could be said to have social rationality or not. For instance, continual transaction has rationality for the parties concerned but it will be the cause of a disturbing new entry and it might not be desirable from the viewpoint of industrial organization. Parent company-subcontract relationship and transaction within Keiretsu, which are also seen conspicuously in Japan, are typical examples of continual transaction, and there are many problems from the standpoint of the policy of industrial organization. I would like, however, to treat these separately on another occasion.

Also with respect to the issues related to law, I would like to clarify that those which have been regarded as Japan-specific were not only rational but also effective in reducing social cost, and they should never be explained as pre-modern or lacking of consciousness of what is right. My position is to analyze the rational basis of “Japan-specific character,” which is hard to fully explain in the framework of economic analysis, from the viewpoint of economic rationality.

The law and its institutional basis reflect the idea of any society. Although Japan built her legal system following the examples of the modern laws of the West after the Meiji Era, there probably had been some deviation between the law and people’s legal mind. Probably, as seen from the standpoint of economic analysis, the legal system of Western society was a world which the neo-classical model would best fit. There must have been deviations in various aspects when people tried to apply the system as it is into Japanese society. This deviation seems to be explainable not by irrationality but on a rational basis.

From the viewpoint of the character of markets, a case in which the world of
the Neo-classical school is best realized is the market of perfect competition. Besides, perfect competition will be best realized when the transaction is one-shot, participants are irrelevant to each other, and transactions occur in the world of anonymity. On the other hand, negotiated transactions and continual transactions are with some kind of modification to simple models, and they are closer to imperfect competition. The negotiated transaction is, in a sense, the transaction with nameplates put up. Although the continual transaction is not necessarily peculiar to Japan, it is a distinctive feature especially in Japan. The Neo-classical model is a purely individualistic world and it could best function on the premise of one-shot transaction between utter strangers. On the other hand, in Japan where a group oriented tendency is seen, there is a slight difference from the world of the Neo-classical school, and as a result, the difference must be reflected in behaviors related to the law.

The outline of this paper is as follows: Section 1 is a brief survey of the direction of development and general features of the recent economic analysis of law. In Section 2, the Japanese people’s legal mind (which was named the Doctrine of Culture by Ramseyer) is examined, centered around Kawashima’s discussion. In Section 3, the basis of so many civil affairs being settled with compromise is analyzed. In Section 4, the rational basis seen in Japan-specific transaction custom is examined. In Section 5, my interpretation is developed and a tentative conclusion is presented.

1. The Development of the Economic Analysis of Law

   - A Survey -

The application of the theory and knowledge of economics to law was already seen in antimonopoly law and tax law. A recent characteristic is the application of the method of economic analysis to the law of tort and to the law of contract as an individual and concrete solution.

A start to such studies was given by Coase’s paper in 1960, which has become a classic on economic analysis of law. It was Posner’s Economic Analysis of Law.


   The famous theorem named the Coase Theorem was proposed in this article. His position can be said to be based on the neo-classical background.


   This book is the first systematized economic analysis of law. Recently, many introductory books have been published and some of them translated into Japanese. See J. M. Oliver: *Law and Economics*, Allen and Unwin, 1979. (Ho to Keizaigaku Nyumon translated by Shoji Kawakami and Takehiko Musashi),
that organized the economic analysis of law systematically. Relying on the Neoclassical school, this analysis tries to solve legal problems using the criterion of effective resource allocation based on market rules. That is to say, in thinking of what the ideal law is, he is seeking its criterion of judgment in effective resource allocation. The idea of settling disputes by market rule has the following strong point. There are various discussions in applying law to settling disputes and each standpoint has its counter argument. Market solution, on the other hand, could possibly seek only one solution. This is because effective resource allocation could bring about the optimum solution as long as thinking is based on efficiency.

Application of the market rule is, in other words, application of the rule of exchange, and it is necessary that the right of ownership is determined as a prerequisite of exchange. Therefore, determination of authorization is necessary for a market solution. Let us take the Coase theorem as an example. Suppose there is a factory causing air pollution and the inhabitants around it are injured by that pollution. The optimum production level which will maximize a net profit will be attained in either of two possible cases. One is when the factory pays compensation to inhabitants to continue production to a level which maximizes profits. The other is the reverse case, when inhabitants request the factory to reduce production and compensate for the loss caused by that reduction.

The choice is made based on whether to admit the factory's right to pollute the air or to admit the inhabitants' right to breathe clean air. In other words, this is the issue of authorization. Which right to admit is a matter of income distribution and it had been proved that it will not effect resource allocation regardless of which right is admitted. Unless the authorization is determined, however, the actual problem will not be solved.

In order to solve the problem, it is necessary that authorization is not only determined but also protected. If the injured party is the authorized party, the assaulter could buy up the injured party and the cause damage. If the assaulter is the authorized party, the injured party will have to buy up the assaulter. The optimum solution will be attained by buying up i.e., transaction. This is the implication of market determination. 3)

Dobunkan, 1986, translators listed up books and articles related to the law and economics.
Who to establish as the authorized party and how to protect the established authorization is the basic problem of tort law. In the case where transaction cost is “zero,” effective production level is determined regardless of whatever authorization or remedy is chosen. However, in the case of transaction cost, i.e., negotiation cost between parties concerned, it will effect the behavior of the parties concerned and as a result, the optimum solution will change depending on the rule to be applied. The Coase Theorem holds good only when transaction cost is "zero," but actually the overwhelming majority of cases requires transaction cost, and this produces complications in establishing the rules. That is to say, resource allocation will be affected depending on how the authorization is determined. Even in that case, however, the criterion for judging which side should be given authorization or which side should be responsible for compensation is still the optimum resource allocation. There are two conditions for applying thought patterns of economics when transaction cost is required. 1. Firstly, authorization which will correspond to effective resource allocation should be chosen. 2. Even so, there might be some strategic behavior on the part of the parties concerned. In order to overcome this strategic behavior, it is necessary to bring the amounts of responsibility equal to the amounts of injury, under the remedy of compensation by the court. Nevertheless, a new problem will arise because of this. It is the imperfection of information, a problem of how accurately the court knows the exact amount of injury.

A determination based on optimum resource allocation, i.e., a solution applying the market principle, has problems mentioned above. They are: 1. Existence of transaction costs, and 2. Imperfection of information. If the transaction cost exists, negotiation between the parties concerned will not bring about optimum resource allocation. In order to avoid that, remedy by the court is necessary, but there are cases in which the optimum solution will not be attained because of the imperfection of information. Conversely speaking, this means that the more accurate the information, the closer it will be to the optimum resource allocation. If information is well passed on not only to the court but also to the parties concerned, it might reduce the transaction cost. Whether information is perfect or not is not a matter of legal institution but a matter of social state. In other words, it depends to what extent information is open to the public, education, common sense, and the degree of deviation of awareness of the parties concerned, etc.

The economic analysis of law aims at establishing a legal system as a rule for attaining optimum resource allocation. It means establishing a rule which mini-

4) If there exist transaction costs, the situation may be changed by the strategic behavior of the party concerned. See Mitchell Polinsky: An Introduction to Law and Economics, 1983, Chapt. 3 and Chapt. 4.
5) Polinsky, ibid., Chapt. 4.
mizes social cost. In order to attain this aim, however, it is desirable not only to settle the dispute but also to reduce the number of disputes or crimes. The main subject of the economic analysis of law so far has been finding the ideal legal system. It is the normative economic analysis of law which contains two objectives. One is settling disputes closest to the optimum resource allocation, while the other is reducing the number of disputes. The latter means to seek incentives for reducing the dispute by law. Although the former had been emphasized so far, a socially desirable legal system includes the incentive mechanism as well. The requisites to the law includes two aspects. One is the system which can achieve allocative efficiency called the optimum resource allocation. The other is the function as an incentive mechanism for reducing the number of crimes or disputes (this corresponds to "X-efficiency" in the terminology of economics).

A situation where the law functions as the incentive mechanism is more distinct in the case of criminal law. To inflict punishment means to give incentive for deterring crime — one of the ideas embraced in penalties such as corporal punishment, monetary penalty, etc. The aim of monetary penalty is to apply economic loss as an incentive to reduce the number of illegal acts. On the other hand, the attempt to reduce the number of crimes by applying corporal punishment is a remainder retributionism as well, which uses the threat of punishment in restraint of crimes. Nevertheless, the incentive mechanism in restraint of crimes is not necessarily successful. This is because many of the crimes do not actually pay, and it seems to be very rare that crime is committed on the basis of rational calculation.

The incentive mechanism might function a little better in the area where the law of nuisance is applied. At present, compensation for damages of traffic accidents in Japan is treated by the principle of liability arising from negligence. In computing the amount of compensation, the misfeasance of the injured party is taken into consideration even when the driver is responsible for the accident, and the amount of compensation will be reduced depending on the degree of misfeasance. Thus, the assaulter will be considered as liable for damages if he was found responsible for the misfeasance, and if the injured party was found to have any negligence, the amount of compensation will be reduced accordingly.

There are two reasons for instituting of liability arising from negligence as applied in the conduct of traffic accidents. Firstly, it is useful in reducing the number of traffic accidents. Both parties will become more careful so as not to commit any misfeasance or negligence because the assaulter is not responsible for damage compensation liability if he had no misfeasance, and the amount of compensation for the injured party will be reduced if there should be any negligence. Secondly, the retributioanal thought that it is justice for the assaulter who killed or injured others by negligence to be charged with the corresponding
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Among these two, the first is the incentive mechanism based on economic motivation.

This is a rational system as long as people's behavior is based on economic rationalism. Actually, however, there exists an institution of insurance and the compensation will be paid within the coverage of insurance, as the insurance company is the party concerned in many lawsuits. As a result, the rule of negligence liability will not function as an incentive for preventing drivers' accidents. There are three objectives in the system of traffic accident control. One is to reduce the number of traffic accidents. The next is to provide relief for the victim. The third is to reduce the cost necessary for the enforcement of this system. The first objective actually loses its meaning in light of the insurance system. What about the second? If the injured party was found to have been negligent, the amount of compensation will be reduced. But the second objective intends to relieve the injured party from economic difficulty regardless of the presence of negligence. This objective will be attained only imperfectly under the rule of negligence liability. As for the third objective, this rule does not serve to reduce the social cost because it actually requires time and money for finding the negligence. Moreover, the first and second objectives are contradictory. The institution of insurance is effective for the second objective but the first objective, i.e., the incentive mechanism, will not function. Thus, the present institution of the law is insufficient.

The area of illegal acts given in the examples above is the area in which economic analysis will be as easily adapted as the antimonopoly law. It requires the effort trying to clarify what kind of legal system is desirable using the market principle and efficient resource allocation as criteria. It could be called the normative study of law. After looking at examples of rules related to the conduct of illegal acts, the following points became clear. 1. The legal system for the conduct of an illegal act is made with efficient resource allocation as criterion. 2. It is easy to establish rules when the transaction cost is “zero,” but it will affect the behavior of the parties concerned when the transaction cost is required. 3. In order to achieve the optimum solution when a transaction cost exists, the court should carry more accurate information. 4. It is desirable to reduce transaction cost and the cost for the lawsuit from the viewpoint of optimum resource allocation. Besides, it is desirable to reduce the number of crimes or disputes. On the whole, this could be called the reduction of social cost. 5. It is desirable that the incentive mechanism

7) The institution of insurance influences the driver's behavior. It is also regarded as a moral hazard.
for that purpose be included in the legal system. 6. Moreover, there is a problem of realizing social equity such as relieving the injured party from economic difficulty. This objective is incompatible with efficient resource allocation. 7. Especially, introduction of the insurance system obstructs the function of the incentive mechanism.

The above listed are major problems in the normative study of law. On the other hand, recent study is expanding its sphere from the normative study to the empirical study. Those are, for example, problems such as how people would react against the legal system, and how to utilize the legal system.

Methods taken in the normative analysis of law in the field of economics are as follows: First, the behavior pattern, which is exactly the same as economics assumes, is set forth as a premise and then, the rule which would bring about the optimum resource allocation is established. This is what is called the hypothesis of Homo Economicus. To analyze people's actual behavior by empirical analysis in the field of law means there is a possibility that people might act differently in a sense from what was planned by the law. In that case, if the legal system is established to bring about optimum resource allocation, the closer the people's behavior is to that planned by the law, the more efficient it becomes.

Nevertheless, even if people's behavior follows social custom or norm, apart from the legal system and different from what was planned by law, it might reduce the social cost. For instance, if there is a tendency to settle a dispute by compromise and try to avoid litigation or the dispute itself, it might be more rational in the sense of reducing social cost. This is exactly the point which I would like to touch upon in this paper. Ramseyer pointed out the fact that there are so many cases of compromise regarding Japanese people's behavior related to the legal field. He tried to prove that this fact cannot be explained by "Japanese people's cultural and traditional characteristics" shown in Kawashima's classic masterpiece but explained on a rational basis. Although he is trying to explain it by paying attention to the legal system, I would like to explain it by using a rationality which is peculiar to the culture itself. This means that we must pay attention to the rational aspect contained in what is called Japan's cultural character. I consider that this aspect has something in common with Japan-specific management, the Japanese firms' behavioral pattern and economic performance which will be brought about as a result.

2. On Legal Mind of the Japanese

In this section, I would like to examine what Kawashima tried to say in "Legal Mind of the Japanese" from the viewpoint of economics. The gist of his discussion is as follows:

The system of a modern code of law in the Meiji Era was made following the
examples of Western society, but there was a big gap between this system and the actual life of the nation. The objective of his book was to clarify what kind of gap it was and how it had been transformed.1) According to Kawashima, Japanese are traditionally lacking the sense of right. In the West, on the other hand, two words, namely “right” and “law” refer to one single phenomenon, just like looking at one object from different aspects and calling it by two different names.2) Even during the Tokugawa Era, the individual was allowed to own land and house (therefore, there is no wonder even if a concept of property right had occurred...the author). There also was lending-borrowing of money (there could have been the concept of a claim right...the author). In spite of that, the right as a concept which is common to all this was not established at that time. He pays attention to this point.3) Traditional Japanese consciousness of the norm is not the Western type of concept focused on right, but rather, it is based on the concept of duty, which is indeterminate and unlimited.4) Jointly with such a consciousness of norm, Japanese linguistic custom is also indeterminate. As a result, what is prescribed by the law in also indeterminate and the normality itself prescribed by the law is indeterminate as well.5) In the West, the meaning of the words used in laws are determinative by nature and the range of interpretation is also limited.

The Japanese judicial system which was established following the example of the West aims at clarifying the facts of dispute and makes the right and duty of the parties concerned deterministic, based on these facts. In Japan, however, bringing an affair before the court to inquire which is right or wrong is considered as destroying the basis of amicable communal relationship, and therefore litigation is avoided. Such a legal mind is seen as the distinctive Japanese feature and this legal mind has not changed even after the War.6)

The above are the main points of Kawashima’s discussion. Is the legal mind Kawashima expressed in “Legal Mind of the Japanese” peculiar only to Japanese? There is a comparative study of law focusing on the difference between the legal notion in the West and in the East. Masao Ohki, for instance, indicates that scholars of the West have one common recognition against the legal mind of the Far East.7) While constitutionalism, supremacy of the law, and governing by the law are

1) Kawashima: The Legal Mind of the Japanese (Nihonjin no Ho Ishiki), Iwanami, p.5.
2) Ibid., p.15.
3) Ibid., p.16.
4) Ibid., pp.32–36.
5) Ibid., p.37.
6) Ibid., p.38.
7) Masao Ohki: The Legal Concept of the Japanese — A Comparison with the Legal Concept of Western Society (Nihonjin no Hokannen), Tokyo University Press.,
ideals in the West, the law is regarded as a mending technique for cultivating the savages of the East, and sound citizens keep away from the law or the court of justice. He regards that this is why citizens choose the way of settling disputes without relying on litigation. Although the cause for this effect is sought in Confucianism, Ohki tries to make clear that it is not something which could be so simplified.

According to Ohki, while legal concept in the West has Christianity as its spiritual support, it is characterized rather by the coexistence or mixture of various religious thoughts in the Far East, mainly from China and Japan. Therefore, he says it cannot be explained only by the effect of Confucianism which scholars of the West commonly point out. Rather than that, Ohki points out that historically, the idea of constitutionalism was often seen in Japan as well, and that the idea was born of necessity in each case. Besides, Ohki indicates that Eastern viewpoints idealize the constitutionalism of the West too much, just like Western viewpoints put too much emphasis on Confucianism as the factor affecting the East. While highly evaluating Kawashima's achievement, Ohki indicates the following points: Firstly, there is a tendency to incline to monistic understanding when scholars of comparative study of law in the West regard the Far East. Secondly, there is a danger of putting too much emphasis on the peculiarity of the Japanese in discussing the legal mind of Japanese. Moreover, by analyzing history empirically, a high sense of right and wrong was found among the Japanese general public. Also, it was quite recently — after the Meiji Era — when the Japanese sense of right started shrinking.

According to my understanding, Kawashima's work was originally written in the so-called "Post War" or 1950's era, a special time as a background, and if the fact that during this time it was rather common to focus on Pre-modernism or backwardness of Japanese society compared to that of the West, this cannot be regarded as such a distorted view. Life-time employment, the seniority system, and the Japanese way of transacting business played certain roles in the stable growth of Japanese economy. Likewise, interesting that the effect of "Japan-specific-character," which used to be explained as irrationality in Japan, has been credited with Japan's economic growth so far. I would like to focus on the aspect that the legal mind of the Japanese, which is characterized by a low degree of litigation and a high degree of compromise, contributes effectively to the reduction of social cost. One of the reasons for this idea is an awareness of the problem of a possible change of these Japan-specific-phenomena along with a change of objective conditions.

1983, Chapt. 1.
8) Ibid., Chapt. 5, pp.216-217.
9) Ibid., p.252.
3. Choice between Compromise and Litigation

The deliberative Council of Legislation, an advisory committee of the Minister of Judicial Affairs, is tackling the fullscale overall amendment work of the Civil Proceedings Act at present. This is based on the idea that people do not rely on litigation because the civil trial in Japan requires a complicated procedure and too much time and cost. The number of civil cases is less than that of around 1930 and the share of the judicial budget in the national budget has declined to the one-third that of 1960.

As was already mentioned, while Kawashima sought the reason for so many compromises seen in Japan in the "Legal Mind of the Japanese," Ramseyer classified the explanation for the high rate of compromise into three types as follows: 1. The Doctrine of Culture, an explanation of which is represented by Kawashima. 2. The Doctrine of Cost Factor, an explanation that the high cost of lawsuits is the cause. 3. The Doctrine of Forecastability, an explanation that compromise is chosen because the amount of money by judgment is forecastable. He indicated that the third doctrine is the most appropriate among them. The recent tone of argument in Japan is close to the second. The deliberative Council of Legislation's tackling of the amendment work of the Civil Proceedings Act is based on the judgment that complicated judicial proceedings and too much cost are keeping people away from taking this cases to court. Ramseyer is not necessarily denying the Doctrine of Cost Factor but indicating that the Doctrine of Forecastability is appropriate in understanding the high rate of compromise in Japan.\(^1\)

He insists that compromise is not the result of the Japan-specific cultural background but that it is chosen as a result of advantageous rationality. According to his opinion, it is not necessarily specific in Japan to reach compromise without contending at law.\(^2\) He is not trying to explain legal phenomena by cultural background or state of consciousness, but persistently trying to analyze it according to economic rationality. This means clarifying law-related phenomena empirically from the standpoint of economic analysis. Also, concerning how law is recognized in actual economic activities, he is trying to exclude the stand of putting too much emphasis on Japanese cultural peculiarity by the following opinion.\(^3\) It is generally

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2) The essential characteristic of his work can be found in the assertion that there must be a rational basis in people's law-relating behavior, which might be seen as irrational at a glance. See ibid., pp.22-23.
3) Ramseyer refers to Professor Macauley's empirical study which investigated the transaction custom of the U.S. firms.

He concluded that U. S. businessmen relied on implicit contract rather than
recognized that while transactions in the United States are based on a clear-cut written contract made according to laws and rules, transactions in Japan are based on the faith and implicit promises between the parties concerned which are not related to the law. Actually in the United States, however, this form of transaction is not so different from business transaction in Japan.

Ramseyer supports the Doctrine of Forecastability, but even if the decision made in court is predictable, the possibility for success of the compromise depends on whether or not the estimation made by the plaintiff contradicts the estimation made by the defendant. It might also differ depending on the risk attitude of both parties toward the estimation. The higher the probability of the estimation of the expected value of judgment becomes equal between both parties in Japan, the more feasible compromise becomes, and the lower the rate of utilizing judgment becomes. If compromise is advantageous for the parties concerned, litigation will be avoided both in Japan and in the United States. The high rate of compromise in Japan shows that a rational basis for choosing compromise is stronger in Japan. This is exactly the point which Ramseyer is emphasizing. That is to say, a high rate of compromise does not mean that the nation is not relying on the law but compromise was chosen as a result of the behavior of the parties concerned, according to economic rationality. In the sense that it brings about the same result as when they relied on the law, the law becomes practically effective. 4)

I would like to show this a little more analytically in the following part.

The reservation price of the plaintiff, the minimum price or amount of compensation which will be advantageous for him in case he agrees, is expressed by $R_p$. The reservation price of the defendant, the maximum price to which he can agree, is expressed by $R_d$. Costs of the lawsuit for plaintiff and defendant are expressed by $C_p$ and $C_d$ respectively. On the other hand, bargaining costs for reaching compromise are expressed by $S_p$ and $S_d$ respectively.

The expected value of decision which the plaintiff estimates he could receive by the lawsuit, i.e., the expected value which will be decided by the judge is expressed by $E_p(v)$ and $E_d(v)$ respectively.

Reservation price $R_p$, $R_d$ will be expressed respectively as follows:

$$R_p = E_p(v) - C_p + S_p$$
$$R_d = E_d(v) + C_d - S_d$$

4) Ramseyer, op. cit., pp.22-23.

The plaintiff will choose compromise when at least revenue expressed by $R_p$ seems to be attained. In other words, he will not choose compromise until he seems to be able to receive the minimum amount gained by adding bargaining costs to the remainder and subtracting costs of the lawsuit from the expected value of the decision. The defendant, on the other hand, tries to work out a compromise if the amount he is prepared to pay is less than the amount subtracted for the costs of bargaining for compromise from the amount gained, by adding the expected value of the decision to the judicial costs. The condition for the compromise to be effected is:

$$R_p < R_d$$ (2)

Therefore, (1) can be substituted for (2)

$$E_p(v) - E_d(v) < (C_p + C_d) - (S_p + S_d)$$ (3)

The right side of expression (3) relates the difference between judicial costs and bargaining costs, while the left side relates the difference of the expected value of the decision. If $E_p(v)$ will become higher and $E_d(v)$ will become lower if both parties are aggressive, and conversely, $E_p(v)$ will become lower and $E_d(v)$ will become higher if both parties are faint-hearted. The higher the judicial costs are and the lower the bargaining costs are, the higher that the probability of expression (3) will be effective. Likewise, if $E_p(\bar{N})$, $E_d(\bar{N})$ is closer to 1 respectively (in other words, if the value of decision could be estimated more accurately), the possibility of compromise being chosen will be stronger. Ramseyer's Doctrine of Cost Factor could be partly explained from expression (3) as well.

Then, why are there more cases of compromise in Japan compared to those in the United States? Ramseyer indicates four reasons. 1. Because the United States adopts the jury system and juries are made up of laymen, the possibility exist that the result will be different from the estimation of the parties concerned. 2. In the Japanese case, there are many meetings with the judge and parties concerned before reaching a compromise. In the United States, on the other hand, settlement comes within a short period, which makes it difficult to guess the result of the decision. 3. In the Japanese case, the means of estimating the price of compensation for damage is announced to the public. The parties concerned will be able to estimate the expected value of decision from the publicly announced data.

5) Ibid., p.24.
4. While there is only one law in Japan, there are more than 50 in the United States, which will cause manifold interpretations and will make it difficult to guess the result.\(^6\) In Japan, concerning "2." above, judges themselves try to persuade reconciliation in the case of civil action. Judges make effort in settling more cases with reconciliation because time and trouble required for judgment is enormous. This will also serve as reduction of the judicial costs. While Japanese courts try to settle minor cases with reconciliation, American courts have a tendency to give judgment even in minor cases.

This tendency is also seen in the area of conflict between capital and labor. In the case of bringing suit against a labor union, many will be brought into reconciliation in Japan, while judgment will be given to many in the United States. To begin with, there are only limited cases of bringing suit against labor union in Japan, and the number of suits brought against labor unions each year in the United States is 40 times as many as that of Japan.

Let us examine the reason why there are so many cases of compromise in Japan from the meaning implied in expression (3). The probability of compromise will be higher if the difference of Ep(v) and Ed(v) is small or the expression Ep(v) < Ed(v) will be effective. The fact that the difference between the expected value of decision for both parties is very small means that the information they have is almost common. E(\(\bar{N}\)) = 1 will be effective in the case of perfect information and the value of the left side will be zero. As a result, compromise will be chosen as long as the judicial costs are higher than the bargaining costs. Also, if Ep(v) is low and Ed(v) is high, it means both parties are non aggressive, or in other words, they are concessive. Compromise will be attained in the case of Ep(v) < Ed(v), even if bargaining costs for compromise are the same as judicial costs. Probably the bargaining cost will also be less if both parties are concessive. If both parties are aggressive, on the other hand, the expression will be Ep(v) > Ed(v), and it is more likely to result in a lawsuit. Even if a compromise is sought for, the bargaining costs seem to be expensive in such a case. Being concessive might be explained as having a weak consciousness of right indicated by Kawashima, although there should be many other elements present as well.

In the area of economic analysis, aggressiveness or concession of the parties concerned is premised on a priori, for example, like the risk attitude of individuals. But if the premise has a general tendency, moreover, it will bring about a rational result, and we cannot simply call this Doctrine of Culture a vague expression.

If Japan-specific-character has a significant influence, we can see it reflected in various aspects including the concessive attitude and the tendency that parties

\(^6\) Ibid., pp.25–26.
concerned will have a common view because of widespread information.

4. An Economic Analysis of Law and Japan-Specific Character

I have been examining that Japan-specific-character is not simply the weak consciousness of right and irrational constraint by the community but that it has a rational basis. Although Ramseyer substantially explained the high rate of compromise in civil cases by forecastability, this is the application for recent empirical studies relating to the economic analysis of law which emphasizes a desired legal system based on the neo-classical market principle.

I must note that phenomenon which is called Japan-specific-character slightly differs from the ideal type of the Neo-classical school, but this difference brings about an efficient resource allocation as a result.

A condition under which the market mechanism shown in the textbook of the Neo-Classical School would be the best function is perfect competition. The market of perfect competition is represented by a spot market typically shown by the auction. There, participants for the transaction take part in a one-shot transaction and they are not associated with each other. In a way, they are premised on the world of anonymity. For instance, the most simplified ideal type of Neo-classical school is, as is seen in production theory, participating by each factor of production, each economic unit showing the wealth maximizing behavior himself, and the optimum resource allocation being attained at the time of a one-shot arrangement of production. This is, at the same time, methodological individualism. The Japanese custom of transaction, on the other hand, is shown by a continual transaction, a transaction within the Keiretsu, and a transaction within the group.

Compared to the ideal type of the Neo-classical school, this is an imperfect competition and a discriminative transaction. Furthermore, new entry is not easy in the Japanese case. Therefore, it seems to bring about an undesirable performance from the viewpoint of industrial organization. Actually, however, there are some aspects which bring on an effective result as well.

Of course, "The Nature of the Firm," a classical article by Coase, influences the economic analysis of internal organization today, and the study is one step advanced from the abstract world of the Neo-classical school.

1) The continual transaction or transaction within the Keiretsu, is a typical example of the Japan-specific custom of transaction. Problems in this type of transaction should be studied from the viewpoint of industrial organization or antimonopoly, policy, but such a study cannot be implemented and carried out sufficiently — another interesting issue.

2) Many types of the studies in internal organization are more or less based on R. H. Coase's famous work, The Nature of the Firm.
based on the Neo-classical school also no longer stays within methodological individualism. Nevertheless, even in the area of analysis of the firm, behavior patterns differ between Japanese firms and Western. In Japan, firms follow object maximization in the long term and workers follow utility maximization behavior (including life-time income and future status) rather than the utility maximization of each moment. This is why the seniority wage system started and functions. It seems possible to explain the seniority wage system using the model of life-time income maximization. A worker will receive a wage below his marginal productivity when he is young and a wage over his marginal productivity after he reaches middle age. In a way, it can be regarded that the difference between productivity and wage rate during his early years can be regarded as an investment in his firm, and the difference between productivity and wage rate after middle age can be regarded as the dividend on his investment. This interpretation will rationally explain the low rate of occupation change, i.e., immobility of labor in Japan.\(^3\)

On the other hand, it can be regarded that a firm is thus conducting maximization of total income or maximization of income per worker. This is a kind of model for the employee-managed type of firm.\(^4\)

It can be considered that workers are future-oriented and that business behavior is also long-term growth-oriented, which is the conducting of over-time income maximization after the model of Japanese firms. A model like this will be a slight modification of the typical profit maximization model of the Neo-classical school. Not only corporal behavior but also the business transactions show some Japan-specific characteristics. They are continual transactions, transactions within

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3) This kind of capital subscription can be called “invisible capital subscription.” It differs from regular stocks in the following point, namely it cannot be sold, and if workers leave their firms, the value of the capital becomes zero. This is one of the reasons why Japanese workers are immobile.

4) A simple theoretical model of the Japanese firm can be shown as follows:

\[
\begin{align*}
X & : \text{Output} \\
P & : \text{Price of Output} \\
L & : \text{Number of Employees} \\
W & : \text{Wage Rate} \\
r & : \text{Rate of Profit} \\
K & : \text{Amount of Capital Used}
\end{align*}
\]

Now let \( \beta \) indicate the rate of the employee’s receipt from profits and \((1 - \beta)\) the stockholder’s receipt from profits. The employee’s total income and the stockholder’s total revenue are as follows;

\[
\begin{align*}
W &= \beta (PX - wL - rK) + wL \\
R &= (1 - \beta) (PX - wL - rK) + rK
\end{align*}
\]

The employee would include not only workers but also managers. The object of the firm’s behavior is to maximize \( W / L \), namely, income per employee. Such a model was shown by Imai and Komiya in *Japan’s Firm*.
Keiretsu, and so on. Japanese firms have long-term relationships with suppliers which provide raw material and parts, etc., maintaining a continual transaction relationship. According to a survey conducted by the Fair Trade Committee, 97.8% of the companies which produce producer goods and 80.4% of companies which produce capital goods have had continual transactions for more than 5 years. As opposed to this, American firms usually do not purchase raw material and parts etc. from one particular supplier, but purchase from whoever offers the lowest price every year. Comparing the two cases, the American case is more rational as a corporate behavior and at the same time, brings on better performance.

Why do we conduct continual transaction in Japan? Again, according to the survey conducted by the Fair Trade Committee, many Japanese companies attach importance to a stable supply, low price, high quality, and to a reliable relationship. But few companies indicated the reason for a continual transaction within the group. This shows that it is not because of giving priority to the companies in the same group or excluding foreign companies either. Continual transaction enables the common use of information which makes application to the economic environment including technological innovation etc., and most substantially, reduces the transaction costs. There are some works of financial transaction analysis in which continual transaction with an eye on reducing transaction costs.

In Japan, “the lender equals the bank” means a close relationship with the borrower. This is symbolized by the main banking system. In lending funds, it is necessary for the bank to collect detailed information on the transaction partner. Necessary information costs for obtaining this information will be reduced by repeating the transactions. Information quality differences existing between the bank and the firm will be smaller by investigation, and these investigating costs will be reduced, furthermore, by the repetition of transactions (although the firm has information on the management situation of the firm itself, the quality of products,

This essentially differs from the auction market, which is the ideal type in price theory. If the transaction has continuity, the initial costs of investigation can be regarded as a kind of investment, because it will reduce the costs of further investigation. Thus, past performance will become transaction-specific assets for the parties concerned. If either the bank or the firm should change the partner of transaction, this asset will lose its value. For this reason, both parties will probably try to continue the transaction. If such a continual transaction is called the customer relationship, it will work for the benefit of their common interest. 7)

Ikeo refers to such a relationship between the bank and comments that it has exactly a common structure with the typical hypothetic bargaining problem in the two-party, co-operative game theory. He regards this bargaining game as a co-operative game. The reason for this is because it is a multi-staged game being repeated continuously and because it can be expected to hold the restraint for agreement which is a necessary condition for the co-operative game. 8)

Nevertheless, if the transaction is a continual one, it is a multi-staged game, in which case the necessary restraint for agreement will be obtained, but it is a matter of whether it is explainable by the theory of bargaining to discover why it could be a continual transaction.

Ramseyer compared the transaction between bank and firm to "prisoner's dilemma" and indicated that, the utilization of a legal system would be necessary in order to be free from this dilemma. At the same time, he suggests the probability of it being a co-operative game, in the case of the transaction being repeated. 9)

Indicated below is the "prisoner's dilemma" expressed by the payoff matrix.

<table>
<thead>
<tr>
<th>Strategy of A</th>
<th>Keep the Agreement</th>
<th>Break the Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keep the Agreement</td>
<td>(b - c  b - c)</td>
<td>(b - c)</td>
</tr>
<tr>
<td>Break the Agreement</td>
<td>( - c  b)</td>
<td>(0  0)</td>
</tr>
</tbody>
</table>

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7) Ikeo, op. cit. Chapt. 5, pp.120-121.
8) Ikeo, Ibid., p.122.
Table 1 is a payoff matrix of a game played by two players, A and B. If B plays with a co-operative strategy, A’s profit will be “b” and B’s loss will be “−c” (b > c > 0). If both of them are co-operative, they will gain the profit of (b − c) but profit will be zero if they do not co-operate with each other.

Let us assume, under this situation, that both are thinking of continuing the transaction. Although Table 1 only shows each transaction, suppose they choose the strategy used continuously. It will be a one-shot transaction if they were to choose the partner of transaction each time. In the case of a continual transaction, however, it is not necessarily advantageous to choose non-co-operative strategy.

One of the practical strategies for using co-operative means effectively is the strategy called “tit or tat.” This is the most likely strategy and it will be a co-operative game if both parties chose this strategy.

The possibility of co-operative work advantage will be stronger when the following three conditions are fulfilled.\(^{10}\) 1. The probability of long-term transaction with a newly acquainted partner should be high.
2. The discount rate for computing the present value of future yield should be low.
3. The value of “b” should be lower than “c”.

The above conditions are how Remseyer analytically indicated pre-conditions of the co-operative game. According to my view, however, his indication in this case also shows the Japan-specific character in the intention of the firm itself to continue the transaction.

Remseyer’s thought is based on the idea that continual transaction will be a co-operative game because there is legislation behind it, and there is no guarantee that the co-operative transaction will be conducted regardless of restraint by law. That is to say, punishment would follow breach of contract, and the bank could not only stop lending money but seize the firm for security when it is impossible to repay. Therefore, the co-operative game does not work regardless of law, even in Japan. In the sense that it indicates the effectiveness of law, it is just like settlement by compromise where civil cases use the value of a decision made by the court as criterion. If there should be a co-operation which does not rely on legislation, would be a case where both parties belong to the same club.

In short, Ramseyer emphasizes that the co-operative game not only has a Japan-specific character but also has a rational basis with the effectiveness of law as its background.\(^{11}\)

Studies done so far, on the other hand, indicate that transactions in the Japanese banking system are conducted by an agreement not enforced by legal

\(^{10}\) Ramseyer, ibid., p.90.
\(^{11}\) Ramseyer, ibid., Chapt. 4 and Chapt.5.
Comparing Ramseyer's opinion, which indicate that legal regulations have effectiveness, with what is insisted on by Japanese scholars, I wonder which opinion is right. The main banking system as an example affirms this. The significance of this system is that the firm can rely on financial assistance from the bank when management deteriorates. The work by Horiuchi and Fukuda substantiates this point.\(^{12}\) Also, Tsutsui indicated that there is implicit risk sharing in the continual transaction between bank and firm.\(^{13}\) In opposition, however, Ramseyer disproves this, taking for example that the main bank is not so fixed.

He also points out that the bank requests legal means such as real right of security or guarantee, and that the bank will make the firm, its customer, go bankrupt in many cases when the firm is in economic crises, although it sometimes gives assistance. Therefore, according to Ramseyer, the firm which is a borrower is also cautious and disperses its main banks to avoid falling a victim to one bank.

My viewpoint follows. In Japan there are behaviors which cannot be explained by short run profit maximization, not only in the case of continual transaction between bank and firm, but also in the relationship between firms. There are many clubs in Japan as typical examples of co-operative behavior. Among the Big Six group of firms, mutual holding of stocks is applied among firms in the group as a means of union, in which case behavior of the firm as a shareholder is by no means that of revenue maximization behavior. Shareholders inside the same group are stable shareholders for the firms in the group, and those stocks are never sold or bought regardless of market fluctuation. The firm could sell stock any time to raise revenue anytime or, on the other hand, it could plot a takeover and buy out the stocks for that purpose. However, it keeps on being a stable shareholder also because it is advantageous in the long run to maintain the unity of the group. Mutual holding of stocks among mutually stable shareholders could be regarded as a typical example of co-operative behavior. The main banking system is a system weaker than the mutual holding of stocks, but still an example of co-operative behavior.

Concerning the relationship between bank and firm, there are, of course, transactions in which the legal rule plays an important role. Especially, such is the case when the bank loans funds to small firms. But, in the Japanese case, there is a ranking of financial intermediaries who have been generally classified by four ranks until recently, when they were changed into three. They were city bank,

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regional bank, mutual loan and savings bank, and credit association (mutual loan
and savings bank is now classified as a regional bank). The sizes of firms which
cconduct transactions with the banks correspond to these four ranks. A bank
classified in the higher rank does not regard a firm classified in the lower rank as
its partner for continuous transaction. Therefore, co-operative relationship
between bank and firm never means a relationship with any partners. The lower
the rank of the bank, the higher the risk is, and it might be difficult to have any
c·operative behavior with the firm. Thus, as a short term capital lender, banks
classified by the lower rank will conduct transactions with city banks.

Depending on the type of industry, there are certain kinds of firms with which
a stable transaction relationship hardly occurs. Most of these companies belong to
the tertiary industry, where new entry is easy, but there are many bankruptcies.

Co-operative relationship does not fit all kinds of firms. It might be hard to
cjudge from the data of all types of business that Japanese business transactions
between firms are especially co-operative. However, it can be said that behaviors
which are especially Japan-specific are common among the dominant firms and
groups.

These kinds of behavior patterns in the main banking system have something
in common with the high rate of compromise in civil affairs. There is a possibility
that it is a co-operative game among partners of continual transaction.

5. Concluding Remark

Economic analysis law which was mainly developed in the United States for
the past 20 years is methodologically based on the Neo-classical school, and it
considers the ideal legal system using optimum resource allocation as a criterion. It
searches for a rule which gives the most desirable judge as a means for settling
disputes. In order to minimize social cost, it is desirable that the law not only fit
into the optimum resource allocation but also possess the incentive which will reduce
the number of disputes themselves. It is very hard, in fact, to realize these two at
the same time.

Normative economic analysis of the law has been conducted actively so far,
but recently, empirical analysis of people's reactions to the law and the legal mind
are also being developed. One is analysis of the fact that there are so many cases
of compromise in Japanese civil affairs. There is a discussion which seeks for this
reason in the legal mind of the Japanese. One representative work is “The Legal
Mind of the Japanese” by Kawashima. Ramseyer named this the Doctrine of
Culture, and criticized and explained the high rate of compromise as the result of
rational behavior. The expected value of decision made by the judge in a case of
litigation will be an important factor as the standard for rational behavior. The
fact that the result in a case of relying on the law is predictable will be one cause
for the high rate of compromise. In that sense, the law has an effectiveness.

I myself do not take the same stand with Kawashima, that of explaining the Japanese people's lack of consciousness of right and wrong or their attitude of avoiding conflict in order to maintain a friendly relationship. Although I am closer to Ramseyer's stand in that sense, I indicated that what is called Japan-specific character is seen in behavior related to the law. Moreover, this has rationality. If an analogy of the game is applied to the relationship between individuals and firms, it is likely to be a co-operative game. This is what I have indicated using Japan-specific transaction custom as an example.

My study has arrived at a stage of presenting the idea and I have not yet demonstrated it positively. This will remain as my future task.
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