# Economic Analysis of Law as Doctrinal Study of Law

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## 1. Introduction

In this age of globalization and science, the economic analysis of law has become dominant and the doctrinal legal study has been sidelined. This paper argues that the prevailing approach of economic analysis of law is either incentive-based or distribution-based, therefore it is not a scientific theory of law because it cannot empirically explain the law. The law is a system of legal doctrines. A scientific theory of law has to take legal doctrines seriously. The traditional legal doctrine study, however, mostly is just descriptive which is lacking of explanative power. This paper would argue contractual economics based on Ronald Coase (1988) and Steven N. S. Cheung (1992) should be the foundation for scientifically analyzing the law.

There will be four main parts of this paper. The first part will expose the abuse of Coase theorem by legal economists. Legal economists invoke the theorem to justify the law's direct intervention when positive transaction costs exist. This would be resurrection of Pigovian externality approach -- the law would intervene everywhere due to the inevitable transaction costs in the real world -- which has been demonstrated to be wrong by Coase.

The second part will take the economic analysis of tort law as example to show the deficiency of the incentive-based model. In the law, tort liability is an ex post compensatory institution while the incentive-based model sees it as an ex ante deterrent instrument. The analyses of incentive-based model have to either resort to ad hoc assumptions to save the theory or ignore the inconsistences within the legal

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system in the name of modelling.

The following part will investigate the distribution claim proposed by Guido Calabresi. As a legal realist, Calabresi twists the no transaction cost assumption of Coase theorem to argue the inevitable distribution effect of the law. He sneaks a public law value into the private tort law. Legal system collapses, therefore.

The final part will develop a law–as–contractual–arrangement theory. As Coase said: “The delimitation of rights is the essential prelude to market transactions.” And Cheung said rights arise to reduce the dissipation of rents resulting from competition or rent-seeking. The law, therefore, evolves to minimize the costs of delimiting rights. The reduction of dissipation of rents would benefit everybody and therefore the law -- as contractual arrangements -- emerges.

## 2. Coase Theorem

The Coase theorem as formulated by George Stigler has always been invoked as the foundation of economic analysis of law. However, most legal economists have derived wrong implications from it. The theorem says that with certainty of rights and no transaction costs, the result of the assignment of right would be both efficient and the same regardless to whom the right was initially assigned. That would be a logical error of denying the antecedent to derive from the theorem that with positive transaction costs the certainty of rights would not lead to efficiency and thus the law should correct this deficiency – the resurrection of Pigovian externality approach!

In the article “The Federal Communications Commission” (Coase 1959) previous to the article “The Problem of Social Cost” (Coase 1960) from which the Coase theorem being extracted, Coase said that “the delimitation of rights is the essential

prelude to market transactions." Obviously, he intended to say that it is impossible to have a market without certainty of rights. No law, no market! In "The Problem of Social Cost", Coase assume no market transaction costs to avoid unnecessary disruption for demonstrating the certainty of rights to facilitate market transactions leading to efficient allocation of resources. This assumption of no transaction costs could be seen from marginal perspective – transaction costs as given, the more certain the rights are, the more efficient the market is.

Coase's following message might be confusing and need to be clarified: "Of course, if market transaction costs were costless, all that matters (questions of equity apart) is that the rights of the various parties should be well defined and the results of legal actions easy to forecast. But as we have seen, the situation is quite different when market transactions are so costly as to make it difficult to change the arrangement of rights established by the law. In such cases, the courts directly influence economic activity. It would therefore seem desirable that the courts should understand the economic consequence of their decisions and should, insofar as this is possible without creating too much uncertainty about the legal position itself, take these consequences into account when making their decisions. Even when it is possible to change the legal delimitation of rights through market transactions, it is obviously desirable to reduce the need for such transactions and thus reduce the employment of resources in carrying them out." (Coase 1988: 119)

Firstly, "insofar as this is possible without creating too much uncertainty about the legal position itself" of the message should be taken seriously. Combined with the abovementioned assumption of *marginal* zero transaction costs, this means that just increasing amount of transaction costs is not enough to justify the new law -- another *kind* of transaction costs has to be discovered. Secondly, "these consequences" of "[the courts should] take these consequences into account when

making their decisions" are systemic consequences of the ruling, such as "Was that the case, there could be no great towns; and I must grant injunctions to all the new buildings in the town."(Coase 1988: 121), not balancing conflicting values in the individual cases. Thirdly, it is under the context of common law that the courts as legal innovator should take these consequences into account. Statutes, however, have been enacted to relieve the courts' duty as such (Coase 1988: 126-131). Fourthly, in the previous section "VI. The Cost of Market Transactions Taken into Account" (Coase 1988: 114-119), Coase had already pointed out that firms (big landowners or owners' associations) or governmental regulations would do away market transaction costs and thus (section VII.) legal delimitation of rights are not necessary.

Robert Cooter and Thomas Ulen put forward an analytical framework of Normative Coase Theorem and Normative Hobbes Theorem (Cooter & Ulen 2012: 91-94). They proposed that "structure the law so as to remove the impediments to private agreements" as Normative Coase Theorem; that "structure the law so as to minimize the harm caused by failures in private agreements" as Normative Hobbes Theorem. They further argued: when the courts' information costs are *smaller* than transaction costs of private agreements (*IC* < *TC*), the courts should "allocate the legal right initially to the person who values it the most while when the courts' information costs are *larger* than transaction costs of private agreements (*IC* > *TC*), strictly follow precedent. This formalization, however, would leave no room for law's existence. On the one hand, the courts have to incur extra costs to know both the information costs of the courts and the transaction costs of private agreements. On the other hand, the courts would and should make decisions totally based on which party values it more without any consideration of following the precedent once the courts know the transaction costs and the respective values of both parties.

Theoretically, this formalization is unsound. Practically, it is unworkable.

# 3. A Critique of Regulatory Model of Tort Law

Tort law is *ex post* compensation mechanism in nature. The standard economic models of tort law, however, are *ex ante* regulation-based. These economic models assume that both the injurer and the injured are capable of taking precaution measures to reduce the accident loss (Brown 1973; Cooter & Ulen 2012). Whereas precaution measures are not of no costs, to minimize the social costs (precaution costs and expected accident costs), the injurer and the injured, respectively, should take the level of precaution at which marginal precaution costs are equal to marginal expected accident costs. These models would assign capability rather than action as the base for cost calculation -- the less capable a person is, the more precaution costs he would incur. This would lead to an absurd result – the less capable a person is, the less likely he will be liable for the damage. The legal doctrine of reasonable person standard in common law and negligence liability rule in civil law would say this is not so. To put forward additional conditions, such as the courts incurring additional costs to investigate the parties' capabilities (Landes & Posner 1987) or the less capable persons' benefits derived from the activity are less (Shavell 1987), would make the model either logically inconsistent or practically irrelevant. The same problem arises that the standard models treat level of care and level of activity differently (Shavell 1987) and thence get wrong analysis of strict liability contrast to negligence.

More than that, these models would prohibit the injurer even the injured insuring their liability or damage because the insurance would dilute the injurer's and the injured's incentives to take precaution measures. In reality, the liability insurance is not only allowed but sometimes is compulsory. To further disprove these

models, criminal punishments usually would not be imposed on those injurers who are not intentional but just negligent. Finally, it is theoretically impossible to model ex post compensation as instrument to ex ante deter those negligent activities. To ex ante deter means that those accidents should not happen should not happen while ex post compensation means those accidents did happen. To ex ante deter requires that there is no negligent accidents. But if there is no negligent accidents, there would be no ex post compensation!

As the Hand formula shows: the injurer would be liable for the damage if the benefits (B) forgone due to his not engaging in the activity is smaller than the therefore reduced expected accident loss (PL). In the formula, the riskiness of the activity is the key point. Contrast to standard economic models, the less capable the person is, the more risky the activity he is engaged in. This means that a less capable person would not be immune from the liability due to his less capability. This does not deviate from law, therefore, ad hoc theories are not needed.

# 4. A Critique of Distributive Model of Tort Law

Contrast to standard models of tort law, in which transaction costs drive law to adopt ex ante regulations, Guido Calabresi proposed that ex post compensation should be distribution-based (Calabresi 1991; Calabresi 2006). Calabresi said that it is pointless for law to pursue Pareto efficiency due to the inevitable transaction costs existing in the real world. He said there will be no social movement to the production possibility frontier; each social movement has to be on the frontier or a shift of the frontier which inevitably involves distribution. Calabresi has characterized tort law as “liability rules” (Calabresi & Melamed 1972), meaning that the state can take individuals’ rights without consent of right holders although with some

compensation. This is not law, anyway.

Tort law is property rules rather than liability rules. The core of tort law is not about compensation; it is about principle assigning which party to bear risk. Outcome liability rule would make courts just instrument to transfer the damages. This rule allows the injurer to take the injured's rights with the damages fixed by the courts without the injured's consent. Outcome liability rule has never existed in the world because if this so there will be no rights as such. Fault principle with various subtypes is the law assigning which party should bear the risk. As abovementioned Hand formula shows, the fault principle is Pareto efficient. Firstly, the injurer's (B) and the injured's interests (PL) are being balanced in the formula. It is not just that B of the formula is the injurer's benefits forgone while the PL is the reduced expected accident loss of the injured but also the value of P is co-determined by both the injurer and the injured – the more negligent the injured is, the more difficult for the injurer preventing the accidents and thus the smaller the value of P is. Secondly, this formula is recognizable for the injurer and the injured because the more risky the activity the more likely people would recognize it. The reason that the injurer nevertheless would take negligent action even the risk is recognizable to him is the nature of human recognition. To survive in the evolution, most of the time human being take actions without deep thinking (Kahneman 2011). This nature of human recognition leads to law not punishing the injurer but compensating the injured.

## 5. The Law as a System

"The delimitation of rights is the essential prelude to market transactions." as Coase said. The implication of this saying is that people would compete to seek the rents without the certainty of rights. The certainty of rights would reduce the

dissipation of rents. A coherent legal system, the independence of the courts, the effectiveness of legal procedures, and other elements of rule of law are necessary for the certainty of rights. Coase also endorsed Cheung's assertion that "the assumption of private property rights can be dropped without in the least negating the Coase Theorem" (Coase 1988: 14-15). This means that property rights arise for reducing transaction costs. The abovementioned Coase's saying "insofar as this is possible without creating too much uncertainty about the legal position itself" cannot be understood without this background. Just an increased amount of transaction costs would not justify the change of legal position because this would make the rights uncertain. A new kind of transaction costs has to be found for the change of law. This general theory of law is that the law as a system to minimize the costs of delimiting rights.

The reason why those cases are tort law cases rather than contract law ones is that tort law cases involve high transaction costs by definition. As abovementioned Coase theorem shows, high transaction costs do not necessarily lead to law's direct intervention otherwise this is a fallacy of denying antecedent. Both regulatory and distributive models of tort law are this kind of "administrative regulation" rather than private law. Tort law is a branch of private law, not public law. Private law is different from public law on institutional capacity for "administration" (Komesar 1994) and prevention of power abuse (Buchanan 1975). Under the cover of tort law as private law, both regulatory model and distributive model of tort law would violate the rule of law.

Negligence rule is the principle of tort law. This rule should be seen as a contractual provision stating that the injurer would compensate the injured the accident loss once the injurer is negligent. Contrast to concrete contractual liability in which the liability of the promisor is derived from the agreed compensation

condition realized, the tortious liability of the injurer is derived from his engaging in the activities causing other's injury. As Hand formula shows, the more risky the activity the injurer engages in or the less the benefits forgone the injurer not engaging in the activity, the injurer is more likely to be liable for the damage. There is no obligation of being a Good Samaritan among strangers. However, if this is true, why accidents still happen despite the injurer taking into account balancing the benefits forgone and the liability for damages. The thinking fast nature of human recognition is the key. However, human being (unconsciously) recognizes this incomplete recognition to have the negligence rule – the injurer would compensate the injured the accident loss if the injurer should have but had not foreseen the accident. Either the regulatory model or the distributive model is set up in wrong directions.

## 6. Conclusion

As Heyek said: "Nowhere is the baneful effect of the division into specialisms more evident than in the two oldest of these disciplines, economics and Law." (Hayek 1973: 4) However, current economic analysis of law is either regulatory approach or distributive approach which is not fit with law in general and private law in particular. The delimitation of rights is law about. A coherent system of legal doctrines, the independence of judicial process, and the effectiveness of judicial procedure are required in the rule of law which make rights certain and thus reduce the dissipation of rents. Rights arise for changed transaction costs. Rights (Law) as contractual arrangements to reduce the sum of "law costs" and the rents unrealized. In the sense of law as contractual (and thus transactional) arrangements, law minimizes (individuals' and thus social) transaction costs.

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