

Coase and the Problem of Social Cost

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Abstract

In the view of many, Coase (Coase, 1960) overcame and supplanted Pigou (Pigou, 1932) in terms of the sophistication and accuracy of the law and economic analysis of social cost. It is the task of the present paper to main that the same fate should befall Coase. We have, through our paper, tried to redefine the problem, showing that social cost is the problem of violation of private property rights which in policy and judicial implementation becomes the problem of establishing the harm done and holding the damaging party responsible for the violation.

Keywords: *Coase; Pigou; social cost.*

Introduction

Ronald H. Coase, with his groundbreaking paper on the problem of social cost (1960),¹ provides a break with the earlier tradition of how economists dealt with the problem when actions of business firms or individuals have harmful effects on others. Earlier, the standard approach employed by economists had been in line with Pigou in *The Economics of Welfare* ([1920,1932]), where since there is a difference in private and social costs and because private actors fail to take into account the social cost of their actions, the quantity of output produced is sub-optimal. This can be illustrated when the factory owner does not consider the social cost of his action in terms of pollution due to smoke. As a result, it leads to him overproducing output (W. Barnett & Block, 2009; Block, 1994, 1998, 2011b, 2011a; DiLorenzo, 1990; Horwitz, 1977; Lewin, 1982; McGee & Block, 1994; Rothbard, 1982).

Therefore, it would be desirable to have the owner of the factory pay for the damage to the injured, which is caused by the smoke or to introduce a tax on the owner of the factory, which varies with the amount of smoke produced and equivalent in money terms to the damage it would cause. This would allow the producer to materialize the social cost as a part of his private cost or, finally, to exclude the

¹ Unless otherwise indicated, all references to Coase in this paper are to this one article of his

factory from residential areas.²

Coase's breakthrough lay in the conception of the problem. Earlier the conception had been that A has hurt B; therefore, it is A who will pay the damages, and then the question had been how much would compensation which has to be paid so that the damages restrict their actions.

Coase maintained that there was a reciprocal nature of the problem where the question becomes, Given the knowledge that A's action will harm B, Should A be allowed to inflict harm on B or should B be allowed to inflict harm on A by not allowing the first act to take place. Let us take, for example; A wants to punch B in the nose. Before Coase, the focus was on stopping A from engaging in this act of initiatory violence. The effects of Coase's contribution have been such that we now realize that stopping A from so doing is a matter of economic efficiency where if the harm done to A were economically efficient, it could be allowed. We must now ask which reduces economic welfare more, allowing A to molest B in this manner or not allowing this to occur.

Literature Review

Coase Essential Point

The essential point for Coase was to avoid more severe economic harm to take place. This is illustrated by his choice rule, where the decision to allow the harm of one over another must be looked at in total and at the margin, i.e., what is the total market value of action which causes damage on the margin in comparison to the total market value of the damage caused at the margin. The decision will be undertaken where the benefactor will be more than able to compensate the injured party for the marginal value of his loss.

While the logic of economic efficiency used by Coase may seem sound, it misunderstands the nature of the problem at hand, and therefore the application of overall economic efficiency becomes misguided. If the choice rule dictates that more serious (costly) economic harm is to be avoided, then it follows that the choice-maker

² The main drawback of interpreting this as the market failure of external diseconomies is that the smoke particles are trespassing on private property. Thus, it is, rather, a failure of government, which seizes upon a monopoly of legal violence and yet does not stop this trespass, and clear violation of private property rights.

must have at his availability the real impact that a product has on the economy. Nevertheless, since production activities do not take place in isolation, the entire thread of knowledge and effects of each product and service impacted by the product must also be determined.

This is because each product becomes a part of the production structure, which is used as input by many competing producers. Therefore, the total economic impact of a good is the value of the total economic activities, which would be lost if the product did not exist. This calculation, to a large extent, is impossible since it involves calculating what does not exist.

One of the major insights which follow from Hayek's classic 1945 paper "the use of knowledge in society" lies in the understanding that pieces of information about prices and quantities in the market are discovered and interpreted in the market by firms to form an existing knowledge structure based on which they take their respective decisions, where at any instance an individual actor has only had a small part of it. Therefore, a product's total impact on the economy is epistemologically unknowable.

We can take the example of a factory that pollutes the pond due to which several fishes die. In the standard Coasean framework, if the monetary market value of the total production from the factory exceeds the total monetary value of the fish which die, the factory should not be forced to compensate the owner of the pond. Remember, for Coase, and these effects are reciprocal. It is not that the economic loss is a one-way street: the polluter harms the fishing operation; instead, each negatively impacts the other in an economic sense. Yes, to be sure, the polluter kills the fish. Nevertheless, reciprocally, the fishermen harm the factory owner. If the former were not in existence at that geographical locale, there would be no pollution problem.

If the total enterprise of fishing in that pond were to be abandoned, it would mean a fall in the supply of fish which would increase its price in the market; this, in turn, would increase the cost of producers who use parts of the fish for their products as competition would increase accounting for the increase in scarcity, it would further reduce the consumer's welfare owing to increase in final goods prices. Therefore, keeping this in mind, if you are concerned with total economic efficiency, an abandonment of the total contribution of a product becomes a vital consideration in the analysis.

Discussion

A Thought of Coase Construction

When the overall monetary value of a product through its various contributions to the economy cannot be gauged, it becomes a problem of preserving the coordination in the structure of production and subsequent violations of private property rights. In this light, we subject Coase's understanding of the problem to criticism.

Coase constructs a thought experiment to highlight the economic efficiency of allocating property rights in a costless transaction world. He creates two different cases of a farmer and a cattle raiser where the cattle raiser's steer cause damage to the property of the farmer. In the version where the adverse party is responsible for the payment, the case of property rights violation is solved through a process of bargaining whereby the cattle raiser pays the farmer the adequate amount if the value of adding steer for the cattle raiser is greater than the loss it causes to the farmer.

Alternatively, in the case where the cattle raiser is not responsible for the damage done to the farmer, the property rights allocation still maximizes the value of production as if the value of the damaged crops is greater than the value of the value added by an additional steer, the farmer would compensate the cattle raiser whereby the more significant value-adding production activity is not hindered.

Coase maintains that under this zero-transactions costs assumption; it matters not one with what is the judicial finding, at least not in terms of resource allocation.³ Let us offer a numerical example to illustrate this point. Posit that the cattle will gain \$100 from their destruction of the crops, which will cost the farmer only \$10. If the court awards the decision to the rancher, the cattle will eat the vegetables since the farmer not be able to bribe the grower. However, if the decision goes the other way, the cattleman will still be able to prevail over the farmer. This is because the former can offer a bribe of \$60. The latter will accept it since he can earn \$50; that is, the \$60 he takes in from the rancher, minus the \$10 loss in crops (Block, 1977, 2000; Coase, 1960; Demsetz, 1979, 1997; Walter Block, 1995).

³ The decision of the judge will indeed impact wealth distribution between the plaintiff and the defendant, a point to be explained below.

Coase then argues that these results flow naturally due to the costless nature of bargaining, and the results would not be as efficient if there are positive costs to engage in exchange, which has been termed as the course of developments in the literature “transaction costs.”

Coase says, “Once the costs of carrying out market transactions are taken into account, it is clear that such a rearrangement of rights will only be undertaken when the increase in the value of production consequent upon the rearrangement is greater than the costs which would be involved in bringing it about. When it is less, the granting of an injunction (or the knowledge that it would be granted) or the liability to pay damages may result in an activity being discontinued (or may prevent it from being undertaken) which would be undertaken if the market transactions were costless” (Coase, 1960, pp. 15–16).

This is Coase’s suggestion regarding how market behavior regarding property rights violations ought to be generated in the presence of positive transaction costs; as a result, this takes place in the absence of any profitable bargaining exchanges. Coase further builds on this by maintaining that while costless bargaining allocation of property rights does not affect the allocation of property,⁴ in situations where there are costs to transacting the allocation of property rights, the judicial finding most certainly affects the outcome.

He points out, “In these conditions (positive transaction costs), the initial delimitation of legal rights does affect the efficiency with which the economic system operates. One arrangement of rights may bring about a greater value of production than any other. Nevertheless, unless this is the arrangement of rights established by the legal system, the costs of reaching the same result by altering and combining rights through the market may be so great that this optimal arrangement of rights, and the greater value of production that it would bring, may never be achieved”. (Coase, 1960, p. 16).

We have already discussed the futility of using the measure of the more excellent monetary value of production as the deciding factor in terms of solutions to property rights violations. What remains to be shown is if there is any solution to the problem of conflict created due to property rights violations and how must that be resolved by the market, which turns out to be a negation of

⁴ In our example, whether or not the cattle are allowed access to the corn

what Coase held the markets would do in the presence of positive transaction costs.

Zero transaction costs are compatible with the theory of perfect competition via the assumptions built into the model of perfect foresight and knowledge (Stigler, 1957). In contrast, positive transaction costs do not arise within the perfect competition. Therefore, the market process solution to the property rights violation problem occurs in a setting where producers have some market power and face inelastic demand curves (W. I. Barnett et al., 2005).

Let us take the same example of a farmer and a cattle raiser in a world with positive transaction costs. We come to the case of a world with positive transaction costs; let us imagine the same scenario. Coase's focus is on increasing the GDP. Given that the cattle benefit is to the tune of \$100, and it only costs the farmer \$10, it is now imperative that the court make the "correct" decision. No longer can we count upon Coase's insight that the judicial finding is irrelevant to resource allocation. Remember, in the zero transactions costs model; it did not matter what the judge ruled; either way, the cattle would eat the crops. Nevertheless, now, there is no possibility of bargaining.

The high transaction costs render that an impossibility. If the court rules in favor of the rancher, all is well. GDP rises by $\$100 - \$10 = \$90$. However, if the judge finds for the farmer, GDP takes a tumble of $\$10 - \$100 = -\$90$. So what is Coase's recommendation to the court? It is that it is a rule for the cattleman. Then, all would be well. Note that Coase is asking the judge to make a determination based on what will and will not occur in the future. That is, down one path into the future lies a positive \$90; down the other, a negative of this amount. Coase favors the former.

Compare and contrast this with the ordinary, non-Coasean judge. He will not at all ask what the future will bring. Instead, his sole focus will be on the past. That is, he will determine the present owner of which facility, which will be a historical phenomenon. Once he learns that the farmer has title to his property, a title he earned in the past, that will be the end of his deliberations. He will toss the plaintiff's case out expeditiously.⁵

⁵ If justice is to be done, he will accuse the cattleman plaintiff of launching a frivolous lawsuit, and penalize him severely. Imagine, demanding the right to trespass on someone else's land on the ground that you value the use of it more than does the rightful owner.

The pragmatic or utilitarian point against Coase is that his solution will not maximize wealth. Yes, it is difficult to argue with the numbers given above: the difference between a plus and a minus \$90 is \$180; that is a hunk of change. However, once it gets bruited about that people may demand other people's property on the ground that they value it more than the present owners, that will all but end civilization. Lawsuits will pile up, and mass starvation will become a real threat. (W. Block, 2020; W. E. Block, 1977, 2000, 2003, 2006a, 2006b, 2010b, 2010a, 2011b, 2011a, 2014; W. E. Block et al., 2005; R. Cordato, 1998, 2000; R. E. Cordato, 1989, 1992a, 1992b, 1997; DiLorenzo, 2014; Fox, 2007; Hoppe, 2004; Krauss, 1999; Krecke, 1996; Lewin, 1982; North, 1990, 1992, 2002; Rothbard, 1982, 1997; E. Stringham, 2001; E. P. Stringham & White, 2004; Terrell, 1999; Walter Block, 1995, 1996).

The market process that Hayek (1968), Mises (1990), Kirzner (1992), and other authors have emphasized is a multi-time systematic process where the behavior of the individual actors adjusts to the economic environment and where in turn, the economic environment gets affected by the actions of these actors. Precisely. If the Coase Theorem were incorporated into the law, chaos would ensue.

One of the major implications of Coase's analysis of market behavior in the presence of high transaction costs lies in his apparent acknowledgment that property rights matter and their allocation should be changed under their effects on the economic outcome; he says:

"In these conditions, the initial delimitation of legal rights does affect the efficiency with which the economic system operates."

This provision, however, becomes meaningless once we acknowledge that to determine which product generates the maximum economic value, we would need to calculate the total economic value, which would be lost in the entire structure of production through rising costs, lack of inputs, etc. Then a comparison must be made regarding which adds the most economical value. This is impossible to determine as one would have to conduct an actual experiment where that product would have to be purposefully withheld from the market, and then the total expenditure was calculated incurred to produce the goods produced in the last period. Thus, the Coasean judge becomes an all-knowing central planner (Hayek, 1935).

Here is one way of interpreting Coase. In his approach, the solution to the problem of the violation of property rights has two

significant components; The first is the decision rule for making changes to current property rights allocation (Coase, 1960, pp. 1–2) and a normative explanation of why property rights should be changed for economic efficiency (Coase, 1960, p. 16).

We have already tried to show why the first question is an illegitimate one in cases of property rights violation as well as with examples of situations where despite favorable transaction cost and unfavorable initial property rights allocation, the market process comprising of individuals pursuing their ends provides a solution without the need for abandonment of either of the production activities.

The improvement of our approach lies in disturbing the natural coordination mechanism of the market as little as possible while removing the violation caused by two economic activities. Coase himself undoubtedly makes the same point “Even when it is possible to change the legal delimitation of rights through market transactions, it is desirable to reduce the need for such transactions and thus reduce the employment of resources in carrying them out” (Coase, 1960, p. 20).

However, there is a more critical way of interpreting Coase. In this view, for him, there is no such thing as a violation of private property right. All is “reciprocal.” It is not the case that the wandering cows trespass on the farmer’s property, thus violating the latter’s rights. For Coase, there are no “rights.” There is only a positive analysis of his theorem, not a normative one. The sole issue is how to maximize wealth.

Furthermore, this can be done by looking to the future: which judicial interpretation will maximize economic well-being? His answer is to make awards to increase GDP. In sharp contrast, the more traditional perspective is past-looking and deontological: who has previously garnered rights. We contend that this legal viewpoint will paradoxically maximize wealth, given that Coase’s solution will bring chaos to the law. Everyone will be suing everyone, and judges will have no unambiguous way of settling any of these cases.

The References

Block, W. (2020). *Response to Selgin on Coase*.

Block, W. E. (1977). Coase and Demsetz on Private Property Rights. *The Journal of Libertarian Studies: An Interdisciplinary Review*,

- I(2), 111–115.
- Block, W. E. (2000). Private Property Rights, Erroneous Interpretations, Morality and Economics: Reply to Demsetz. *Quarterly Journal of Austrian Economics*, 3(1), 63–78.
- Block, W. E. (2003). Private property rights, economic freedom, and Professor Coase: A Critique of Friedman, McCloskey, Medema and Zorn. *Harvard Journal of Law and Public Policy*, 26(3), 923–951.
- Block, W. E. (2006a). Coase and Kelo: Ominous Parallels and Reply to Lott on Rothbard on Coase. *Whittier Law Review*, 27(4), 997–1022.
- Block, W. E. (2006b). Contra Watermelons. *Ethics, Place & Environment*, 12(3), 305–308.
- Block, W. E. (2010a). A Response to Brooks' Support of Demsetz on the Coase Theorem. *Dialogue*, 2. <http://archive.lewrockwell.com/block/block189.html>
- Block, W. E. (2010b). Rejoinder to Brooks on Coase and Demsetz. *Quarterly Journal of Austrian Economics*, 13(4), 56–73.
- Block, W. E. (2011a). Rejoinder to Bertrand on lighthouses. *Romanian Economic and Business Review*, 6(3), 49–67.
- Block, W. E. (2011b). Review essay of Ostrom. In Elinor (Ed.), *Governing the commons: The evolution of institutions for collective action* (1990th ed., Vol. 3). Cambridge University Press.
- Block, W. E. (2014). Coase and the Chicago School. *Coase and the Chicago School*.
- Block, W. E., Barnett, W. I., & Callahan, G. (2005). The Paradox of Coase as a Defender of Free Markets. *NYU Journal of Law & Liberty*, 1(3), 1075–1095.
- Coase, R. H. (1960). The Problem of Social Cost. *The Journal of Law & Economics*, 3, 1–44.
- Cordato, R. (1998). Time Passage and the Economics of Coming to the Nuisance: Reassessing the Coasean Perspective. *Campbell Law Review*, 20(2), 273–292.
- Cordato, R. (2000). Chasing Phantoms in a Hollow Defense of Coase. *The Review of Austrian Economics*, 13(2), 193–208.
- Cordato, R. E. (1989). Subjective Value, Time Passage, and the Economics of Harmful Effects. *Hamline Law Review*, 12(2),

229–244.

Cordato, R. E. (1992a). Knowledge Problems and the Problem of Social Cost. *Journal of the History of Economic Thought*, 14, 209–224.

Cordato, R. E. (1992b). *Welfare Economics and Externalities in an Open-Ended Universe: A Modern Austrian Perspective*. Kluwer.

Cordato, R. E. (1997). Market-Based Environmentalism and the Free Market: They're Not the Same. *The Independent Review*, 1(3), 371–386.

DiLorenzo, T. (2014). *When Did Ronald Coase Become the Ayatollah of Economic Theory?*

Fox, G. (2007). The Real Coase Theorems. *The Cato Journal: An Interdisciplinary Journal of Public Policy Analysis*, 27(3), 373–396.

Hayek, F. A. (1935). *Collectivist Economic Planning*. Routledge and Sons.

Hoppe, H.-H. (2004). *The Ethics and Economics of Private Property*.

Krauss, M. (1999). Tort Law, Moral Accountability, and Efficiency: Reflections on the Current Crisis. *Markets and Morality*, 2(1).

Krecke, E. (1996). Law and the Market Order: An Austrian Critique of the Economic Analysis of Law. *Journal Des Economistes et Des Etudes Humaines*, 7(1), 19–37.

Lewin, P. (1982). Pollution Externalities: Social Cost and Strict Liability. *Cato Journal*, 2(1), 205–229.

North, G. (1990). *Tools of Dominion: The Case Laws of Exodus*, Tyler. Institute for Christian Economics.

North, G. (1992). *The Coase Theorem*, Tyler. The Institute for Christian Economics.

North, G. (2002). Undermining Property Rights: Coase and Becker. *The Journal of Libertarian Studies: An Interdisciplinary Review*, 16(4), 75–100.

Rothbard, M. N. (1982). Law, Property Rights, and Air Pollution. In *Cato Journal* (Vol. 2, Issue 1, pp. 233–279). The Fraser Institute.

Rothbard, M. N. (1997). *Value Implications of Economic Theory* (Logic of Action I). Edward Elgar.

Stringham, E. (2001). Kaldor-Hicks Efficiency and the Problem of Central Planning. *Quarterly Journal of Austrian Economics*, 4(2),

41–50.

- Stringham, E. P., & White, M. (2004). Economic Analysis of Tort Law: Austrian and Kantian Perspectives. In M. Oppenheimer & N. Mercurio (Eds.), *Law and Economics: Alternative Economic Approaches to Legal and Regulatory Issues*. M.E. Sharpe.
- Terrell, T. D. (1999). Property Rights and Externality: The Ethics of the Austrian School. *Journal of Markets and Morality*, 2(2).
- Walter Block. (1995). Ethics, Efficiency, Coasean Property Rights and Psychic Income: A Reply to Demsetz. *Review of Austrian Economics*, 8((2)), 61–125.
- Walter Block. (1996). O.J.'s Defense: A Reductio Ad Absurdum of the Economics of Ronald Coase and Richard Posner. *European Journal of Law and Economics*, 3, 265–286.

