The 3rd Conference of World Interdisciplinary Network for Institutional Research
Seaport Boston Hotel, Boston, Massachusetts, USA, 2–5 September 2016

Coasean View of Human Behavior within the Institutional Context*

Masahiro MIKAMI
Senior Assistant Professor, Meiji University
mmikami@meiji.ac.jp

Abstract

Since Ronald Coase laid the groundwork for new institutional economics (NIE), the concept of transaction costs has been widely accepted as the primary explanatory factor of institutions. However, whether and how real people actually conceive and deal with transaction costs has rarely been examined. This paper reviews Coase's original ideas and reexamines the validity of NIE, which relies on the notion of transaction costs and assumption of rational human behavior. It shows that Coase departed from the assumptions of maximizing and opportunistic behavior and acknowledged the elements of human behavior outside pure rationality. Hence, his theory of costs, the platform of which was set in the 1930s, provides the perspective to understand the relevant costs of human behavior within the institutional context. In summary, this paper explains why Coase had to break away from the theoretical core of NIE to pursue his initial goal of institutional analysis.

JEL Classification: B25, B41, L20
Key words: Ronald Coase, Transaction Cost, Opportunism, Rational Utility Maximizer, Accounting System

1. Introduction

Ronald Coase laid the groundwork for new institutional economics (NIE) in his seminal articles "The Nature of the Firm" (1937) and "The Problem of Social Cost" (1960), for which he received the Nobel Prize in Economic Sciences "for his discovery and clarification of the significance of transaction costs and property rights for the institutional structure and functioning of the economy" (Nobel Prize Organization, 1991). Indeed, the major areas of NIE such as transaction cost economics, the economics of property rights, and law and economics owe much of their development to Coase's original ideas. Hence, Coase's contribution to NIE,

* The drafts of this paper were presented at the 25th conference of the History of Economic Thought Society of Australia and at the 27th annual conference of the European Association for Evolutionary Political Economy.

and perhaps to institutional research in general, is unquestionable.

However, the relationship between Coase as the founder of NIE and his new institutional followers is not so straightforward. Coase (1984) characterized new institutional economists as those using and modifying standard economic theory to analyze the workings of institutions instead of introducing a new economic theory. While he encouraged this development path for NIE, he considered the behavioral assumptions of opportunism and rational utility maximizers to be unnecessary and misleading (Coase, 1977, 1984, 1988a, 1988b, 1993). In this respect, he seemed to depart from some aspects of the thoughts of his new institutional followers. Although this discontinuity has been rarely taken seriously by other new institutional economists, it is crucial given the new institutional approach to explaining institutional structures.

The concept of transaction costs is widely accepted as the primary explanatory factor of institutions. As Coase argued, the existence of transaction costs would lead people to engage in practices that reduce them, which may include the establishment of firms as well as changes in the manner of transaction. Thus, according to NIE, including the original theory put forward by Coase himself, institutional structures are explained as the products of rational and intentional human behavior. However, Coase's above-mentioned objection to the rationalist view of human behavior might undermine the new institutionalist explanation of the existence of institutions. Given that Coase also acknowledged different elements of human behavior from rationality, it is therefore worth reexamining the extent to which his view of human behavior differs from that of NIE.

Given Coase's criticism of these points, this paper argues that the key factor to shedding light on this tension within NIE lies in Coase's view of costs. Although Coase's seminal works in 1937 and 1960 relate to his notion of transaction costs, his 1938 study of costs has received far less attention from economists. Even after Coase reiterated the importance of the study (Coase, 1990), only Buchanan (1969) and a few surveys of Coase's work (e.g., Medema, 1994, 1995) have taken the time to comment on his proposals.

To bridge this gap in the body of knowledge on this topic, I review Coase's study of costs in relation to his subsequent publications as well as his new institutional followers in order to show that his view of costs, combined with his focus on accounting, illuminates his understanding of human behavior within the institutional context. In this sense, this article agrees with Medema (1998), who discusses the importance of assessing "the development of, tensions within, and prospects for Coasean Economics—those aspects of economic analysis that have evolved out of Coase's path-breaking work" (xi).

The remainder of this paper is organized as follows. In the next section, I review Coase's seminal articles and explain the theoretical need for rational behavioral assumptions in NIE.

Section 3 deals with Coase's criticisms of the assumptions of maximizing and opportunistic behavior, revealing why he rejected those assumptions. Section 4 reviews Coase's view of human behavior and its relation to his theory of costs. Section 5 concludes.

2. Rational behavior as an explanatory factor of institutional structures

In "The Nature of the Firm," Coase (1937) offered "a definition of a firm ... which is not only realistic in that it corresponds to what is meant by a firm in the real world, but is tractable by two of the most powerful instruments of economic analysis developed by Marshall, the idea of the margin and that of substitution, together giving the idea of substitution at the margin" (386–387). On the one hand, his proposed definition is realistic in that it reflects the direction and legal relationship between employer (entrepreneur) and employee (factor of production) (*ibid.*: 404). On the other hand, it is also tractable in that the size and boundary of a firm is determined at the margin, where the costs of organizing within the firm are equal to either the costs of organizing in another firm or the costs of using the price mechanism (*ibid.*).

Thus, at least in the 1930s, his theory of the firm was a static analysis, focusing only on the equilibrium between the firm and market. While he recognized that dynamic factors were also important and that an investigation of their effect on marketing and organizing costs would explain why firms become larger or smaller, he did not formally develop such "a theory of moving equilibrium" (*ibid.*: 405). Therefore, Coase's theory of the firm in 1937 was, at least on the surface, compatible with neoclassical economics. Although his notion of transaction costs opened the neoclassical "black box" of the firm, his theory of the firm still had the neoclassical marginalist feature and thus deepened the neoclassical analysis of resource allocation instead of requiring a completely different approach from that of neoclassical economics.

Coase's theory of social costs also encouraged the neoclassical approach. In "The Problem of Social Cost," he expanded his institutional analysis to "those actions of business firms which have harmful effects on others" (Coase, 1960: 1). He argued that "[i]t is always possible to modify by transactions on the market the initial legal delimitation of rights," arguing that "if such market transactions are costless, such a rearrangement of rights will always take place if it would lead to an increase in the value of production" (*ibid.*: 15). In other words, if the transaction cost is zero, that is, markets are universal and efficient, the initial arrangements of property rights do not matter and the Pareto-efficient allocation of resources will be voluntarily realized by transactions between interested parties. This part of his reasoning, named the Coase theorem by Stigler (1966), worked to the advantage of neoclassical or Chicago economics, which promotes free transactions in the market rather than government intervention.

Therefore, mainstream economists had great affinity with Coase's ideas in "The Nature of

the Firm" (1937) and "The Problem of Social Cost" (1960), although the former article only captured their attention several decades after its publication. No doubt Coase himself aimed to complement, rather than supplant, neoclassical economics by analyzing institutions. In his later article "The New Institutional Economics," he argued, "Nothing is perfect and we should not abandon an old theory in favor of a new one merely because the old has defects but because we believe the new to be better. If we think, ... that the New Institutional Economics should replace the existing approach of economists, it is necessary to specify in what ways it is preferable" (Coase, 1984: 229). Then, he argued that the dissatisfaction of modern institutional economists is not with basic economic theory but with how it is used by most economists (*ibid*.: 230).

Then, how can we understand this relationship between neoclassical economics and NIE? As Eggertsson (1990) maintained, NIE ("neoinstitutional economics," in his terminology) can be defined as a modification of the protective belt of neoclassical economics by introducing information and transaction costs and the constraints of property rights, while the microeconomic paradigm comprises stable preferences, rational choices, and the equilibrium structures of interaction (5–6). Accordingly, Coase's findings served to protect the neoclassical research body, defending the rational behavior of economic agents as the neoclassical theoretical core and expanding its scope of analysis to institutional structures.

Both the above theories derive from a single crucial finding by Coase: the existence of transaction costs would lead people to take into account the existence of institutions and to choose or establish different institutional structures. Hence, the outstanding issue is how and to what extent people would actually follow the existence of transaction costs and then realize the efficient arrangements of institutional structures. At least in either of the above-mentioned articles, Coase did not provide further details on this issue (although I will show that he actually did on other occasions in his career).

One possible solution is simply to assume the maximizing behavior of economic agents as the neoclassical read of Coase (1937) implies and then suppose the marginal point lies "where the costs of organizing within the firm will be equal to either the costs of organizing in another firm or the costs of using the price mechanism" (*ibid*.: 404). That is, if we assume the maximizing behavior of economic agents, the existence of transaction costs would immediately lead to their minimizing of transaction costs, which then ensures the efficiency of the resultant institutional structures.

Another possible solution, which is more common under NIE, is to suggest that economic agents behave opportunistically. Indeed, it was Williamson who coined the term "new institutional economics" as well as introduced the notion of opportunism into the augmented version of Coase's theory of the firm. In his *Markets and Hierarchies*, criticizing Coase's

discussion as incomplete, Williamson maintained as follows:

> Coase contends that the firm serves to economize on transaction costs … The underlying factors that explain how and why these economies are realized are not worked out, however, and Coase's discussion of why internal organization does not fully displace the market is even less complete. … I submit that a more complete theory of firms and markets than Coase was able to forge in this seminal study awaits more self-conscious attention to the ramifications of the elementary attributes of human decision makers—of which opportunism is one, and bounded rationality is another. (Williamson, 1975: 4)

Here, in line with the issue pointed out above, to develop Coase's argument, Williamson (1975) proposed an "organizational failures framework" that delves into human factors (opportunism and bounded rationality) and environmental factors (uncertainty/complexity and small numbers of traders), a combination of which causes market and organizational failures (8–10).

By introducing the assumption of opportunism, NIE began to emphasize the self-interest of economic agents, which was stronger than that assumed in traditional neoclassical economics. Williamson explained that opportunism is more than simple self-interest seeking: "It is self-interest seeking with guile: agents who are skilled at dissembling realize transactional advantages. Economic man, assessed with respect to his transactional characteristics, is thus a more subtle and devious creature than the usual self-interest seeking assumption reveals" (*ibid.*: 255). Such an opportunistic view of economic agents enabled Williamson to establish alternative modes of organization. Although their neurophysiological and language abilities are limited by the assumption of bounded rationality, efficient institutional structures can nonetheless be established because of this strong self-interest seeking by agents.

Klein and colleagues, who took Coase's and Williamson's views as precedents for their argument, clarified this point and extended the argument to probe the possibility of post-contractual opportunistic behavior:

> After a specific investment is made and such quasi rents are created, the possibility of opportunistic behavior is very real. Following Coase's framework, this problem can be solved in two possible ways: vertical integration or contracts. The crucial assumption underlying the analysis of this paper is that, as assets become more specific and more appropriable quasi rents are created (and therefore the possible gains from opportunistic behavior increase), the costs of contracting will generally increase more than the costs of vertical integration. (Klein *et al.*, 1978: 298)

By introducing asset specificity under the assumption of opportunism, it was argued that the possibility (not the actual pursuit) of opportunistic behavior by economic agents would lead

other economic agents to choose vertical integration. In a later article, Williamson detailed the theoretical necessity of the notion of opportunism:

> [H]uge numbers of interesting problems of economic organization are missed or misconstrued if opportunism is ignored or suppressed. But for opportunism, most forms of complex contracting and hierarchy vanish. … My insistence that opportunism be accorded coequal status with bounded rationality does not imply that I believe that most economic agents are engaged in opportunistic practices most of the time. Rather, most economic agents are engaged in business-as-usual, with little or no thought to opportunism, most of the time. (Williamson, 1993: 97–98)

He concluded that the application of bounded rationality and opportunism to all forms of organization helps expose core issues, to which economizing analyses can then be applied (*ibid.*: 105). Therefore, by adopting the notion of opportunism, we can expect the establishment of optimal institutional structures regardless of whether economic agents pursue opportunistic behavior.

Hence, whether maximizing or opportunistic, the assumed behavior of economic agents is highly rational, and this plays a decisive role in determining institutional structures and ensuring their efficiency. The question to be asked here is to what extent these arguments by new institutional economists have followed Coase's original ideas. In the next sections, I will show that they have followed only a part compared with the later development of Coase's theory.

3. Coase's criticism of maximizing and opportunistic behavior

The curious fact is that Coase started to break away from the rationalist view of human behavior in the 1970s. However, his criticisms of maximizing and opportunistic behavior have not been taken sufficiently seriously by other economists because the rejection of those behavioral assumptions would mean the rejection of the theoretical core of NIE, undermining the entire body of research. Reviewing the following criticisms by Coase will thus illuminate the discontinuity between Coase and NIE and help explain why he departed from his earlier assumptions.

The first criticism by Coase concerns the assumption of maximizing behavior, especially in the context of consumers. In the 1970s, Coase started to express his dissatisfaction with the mainstream view of economic agents. Discussing Adam Smith's view of man in "The Wealth of Nations" and "The Theory of Moral Sentiments," he questioned the assumption of rational utility maximizers:

> It is wrong to believe, as is commonly done, that Adam Smith had as his view of man an abstraction,

> an "economic man," rationally pursuing his self-interest in a single-minded way. Adam Smith would not have thought it sensible to treat man as a rational utility-maximiser. He thinks of man as he actually is—dominated, it is true, by self-love but not without some concern for others, able to reason but not necessarily in such a way as to reach the right conclusion, seeing the outcomes of his actions but through a veil of self-delusion (Coase, 1976: 545–546).

Indeed, Coase appreciated Smith for his well-balanced and realistic view of human nature and proposed studying "man as he actually is." According to him, this is the only instance where he objected to the use of standard economic theory for institutional analysis:

> I have said that to a large extent modern institutional economists use standard economic theory. Nor do I think that it is wrong for them to do so. But there is one respect in which I hold a heretical view. Most economists make the assumption that man is a rational utility maximiser. This seems to me both unnecessary and misleading. I have said that in modern institutional economics we should start with real institutions. Let us also start with man as he is. (Coase, 1984: 231).

Therefore, Coase thought that NIE, the modified version of standard economic theory, could survive without the assumption of rational utility maximizers and still analyze the working of economic institutions. In his article "Economics and Contiguous Disciplines" (1977), which is significant in that it deals with the scope of economics, Coase opposed Becker and Posner's so-called economic imperialism:

> I take it to be the view of Becker and Posner that the decisive advantage which economists possess in handling social problems is their theory of, or approach to, human behaviour, the treatment of man as a rational, utility-maximiser. ... But ... [i]n these different fields, the purposes which men seek to achieve will not be the same, the degree of consistency in behaviour need not be the same and, in particular, the institutional framework within which the choices are made are quite different (Coase, 1977: 488).

Instead, Coase suggested that an understanding of these various purposes and the character of the institutional framework requires specialized knowledge within a particular discipline and that an appropriate theory of social systems is thus needed to deal with their specific interrelationships (*ibid.*). Thus, he opposed the versatility of economics as a science of choice, as derived from Robbins' definition of the subject (*ibid.*: 487–488), insisting, "To say that people maximize utility tells us nothing about the purposes for which they engage in economic activity and leaves us without any insight into why people do what they do" (*ibid.*: 488). In contrast to the views of Stigler, Becker, and Posner (and in line with those of Frank

Knight), Coase referred to his own perspective as "an unmodern Chicago view," in that he believes that people's behavior is more irrational within the family and as consumers than in firms (Coase, interviewed in Hazlett 1997: 42). In this regard, Coase clearly departs from the economic imperialism of Chicago.

The second criticism by Coase concerns the other type of behavioral assumption in NIE, that of opportunistic behavior. Indeed, Coase actually expressed his disagreement with the notion of opportunism, referring to Klein *et al.*'s (1978) article:

> Today many of the economists who write about the problems of the firm seem to believe that vertical integration comes about mainly when there is asset-specificity, because of the incentive for opportunistic behavior to which this gives rise ... the conclusion they draw from this assumption, if not error, is, I believe, misleading. What decides whether vertical integration or a long-term contract represents the more efficient solution depends on the absolute relation of the costs of these alternative arrangements. ... In any case, I am very doubtful whether there is such a systematic relationship as that described. (Coase, 1988b: 42–43)

He asserted that "vertical integration will not displace the long-term contract unless the costs of contracting become greater than the costs of vertical integration" (*ibid.*: 43). According to Coase, opportunism does not offer a special justification for vertical integration. Demsetz rightly speculated why Coase opposed the notion of opportunism:

> Coase believes that there is a wide variety of coordination problems, of which opportunism is only one, and that all of these are candidates for resolution through managed coordination *or* through contractual arrangements made across markets. Which institutional arrangement seems best requires a judgment about the tradeoff between transaction and management costs, even in the case of opportunism. (Demsetz, 1997: 20; emphasis in the original)

In other words, according to Coase, although opportunistic behavior may encourage vertical integration, we must still examine transaction and organizing costs to explain alternative institutional structures. Therefore, Coase maintained the importance of analyzing these institutional costs, but not under the assumption that a special type of behavior is occurring, as other new institutional economists did. It is also worth noting that Coase was dissatisfied with Williamson's treatment of opportunism:

> I was also doubtful about the validity of Williamson's treatment of "opportunism" as a significant rationale for vertical integration (not, of course, as an explanation of other contractual arrangements). But these are differences that will be cleared up by further discussion and, above all, by more

> empirical work. Whatever the result, Williamson's basic approach will be unaffected. (Coase, 1993: 98).

Although Coase seems optimistic about Williamson's approach and finds sufficient room for the development of NIE, he is patently aware of his divergence from other new institutional economists in regard to the pervasive notion of opportunism. Here, opportunism is not the normative proposition that economic agents should seek self-interest with guile. Nor is it the positive proposition that economic agents would behave so. It is the positive proposition that any possibility of opportunism by economic agents would establish such institutional arrangements that could avoid opportunistic behavior and economize the relevant transaction costs. This notion is hypothetically introduced to predict alternative modes of organization; whether people actually adopt opportunistic behavior is not questioned. As such, any costs of alternative institutional structures are not necessarily observed by on-site economic agents. In this sense, the use of opportunism as an analytical tool in NIE often seems to obscure the problems of how and by whom these costs are to be found and to what extent they exist in the real world.

The common reason for Coase rejecting the assumptions of maximizing and opportunistic behavior can be found in his criticism of the use of unrealistic assumptions. Although Coase's methodological speculations, which are partly assembled in his *Essays on Economics and Economists* (1994), are crucial for his theory of institutional structures, they have received far less attention than his theoretical contributions in *The Firms, The Market, and The Law* (1988). Only a handful of economists have paid special attention to his methodology (e.g., Coase, 1993; Foss, 1994; Mäki, 1998; McCloskey, 1998; Medema, 1994, 1995; Posner, 1993, 1993a, 1993b; Wang, 2003; Zerbe and Medema, 1998). Indeed, Coase (1988a) questioned how economists select the theories they espouse and found Friedman's (1953) methodology unsatisfactory. Instead, he asserted the significance of realistic assumptions:

> The view that the worth of a theory is to be judged solely by the extent and accuracy of its predictions seems to me wrong. Of course, any theory has implications … But a theory is not like an airline or bus timetable. We are not interested simply in the accuracy of its predictions. A theory also serves as a base for thinking. It helps us to understand what is going on by enabling us to organize our thoughts. (*ibid.*: 64)

For him, a theory that provides insight into the operations of a system but predicts weakly is preferable to a theory that predicts accurately but provides little insight (*ibid.*). Thus, he advocated a realistic methodology, arguing that "realism in our assumptions is needed if our

theories are ever to help us understand why the system works in the way it does" (*ibid.*: 65). Despite acknowledging that our assumptions may not be completely realistic in that we may exclude some factors if they are completely irrelevant or if their inclusion is not worth the costs involved in including them (e.g., due to greater complexity), "this does not mean that we should lose touch with reality" (*ibid.*).

Given such a methodological attitude, it is understandable that Coase rejected the assumptions of maximizing and opportunistic behavior, which are hypothetically rather than realistically introduced to predict the establishment of institutional structures. Coase (1998) argued, "Mainstream economics, as one sees it in the journals and the textbooks and in the courses taught in economics departments has become more and more abstract over time, and although it purports otherwise, it is in fact little concerned with what happens in the real world" (72). His strong concern with realistic theories would thus gradually drive him from a pro-neoclassical to an anti-neoclassical stance, encouraging his departure from the theoretical core of NIE.

4. Coase's view of human behavior and the accounting system

Then, what tools remain available to illuminate "man as he is" if the assumptions of maximizing and opportunistic behavior no longer hold? Coase revealed his most radical and challenging view of human behavior in his discussion with biologist Michael Ghiselin, who proposed synthesizing economics and biology into one discipline (Ghiselin, 1978). While Coase emphasized that all social institutions are the result of purposeful human activity, which should be therefore clearly distinguished from the product of natural selection, he believed that sociobiology could provide a comprehensive view of human nature:

> Human nature is here seen as *the product of evolution over a long period* and is genetically determined. The structure of human nature includes *learning rules*, and what is particularly important in economics, *the way in which we translate experience into expectations*. Human nature is what it is because it contributed to human survival in the conditions in which human beings developed … (Coase, 1978: 244; emphases added).

Because human beings are, not analogically but factually, the products of long-term evolution, as Coase argued, we might be able to learn an enormous amount about what determines human behavior from biological research. It is also interesting that Coase referred to rule learning and expectation as inherent in the nature of human beings, which suggests that human nature is deeply intertwined with the human use of institutions. Invoking Adam Smith, he deduced the following consequence of the sociobiological approach:

> This [sociobiological] approach downplays the rational element in human behavior. ... Thus, as Adam Smith said in 1759 when discussing self-preservation and the propagation of the species (both essential to survival), they are so important that they have not been "entrusted to the slow and uncertain determinations of our reason" but to "*original and immediate instincts*" (*ibid.*: 244–245; emphasis added).

In this way, Coase acknowledged the role of instinct as well as reason in human behavior, and furthermore implied that the former has the larger role in long-term evolution. As argued elsewhere (Mikami, 2011), there is thus room for Coasean economics to develop as evolutionary economics. However, to our knowledge, Coase did not incorporate these considerations into his institutional analysis and go on to develop such an evolutionary approach. Moreover, even if we emphasize the evolutionary aspects of human behavior and downplay its rational elements, we must still keep in our assumptions some rationality in order to explain institutional structures as the result of intentional human behavior.

In *The Firm, the Market, and the Law*, Coase sought to reassert his previously proposed ideas of human behavior more clearly in order "to persuade [his] fellow economists to change the way they analyze a number of important questions in micro-economics" (Coase, 1988: vii). Even as late as 1988, Coase's view was that mainstream economics had not achieved what he had in mind. He observed that as a result of the divorce of theory from its subject matter, entities in modern economics such as consumers, firms, and markets all lack substance (*ibid.*: 3). Specifically, his criticism of consumers is important here. In particular, he criticized the mainstream behavioral assumption that cements normal price theory:

> The analysis is held together by the assumption that consumers maximize utility (a nonexistent entity which plays a part similar, I suspect, to that of ether in the old physics) and by the assumption that producers have as their aim to maximize profit or net income (for which there is a good deal more evidence) (*ibid.*: 2).

In fact, the rational utility maximizer of economic theory bears no resemblance to ordinary individuals (*ibid.*). Although he envisaged that the study of sociobiology will eventually illuminate the whole picture of human nature (*ibid.*: 4), we must be satisfied with limited knowledge for now:

> In the meantime … we must be content with the knowledge that for groups of human beings, in almost all circumstances, a higher (relative) price for anything will lead to a reduction in the amount demanded. This does not only refer to a money price but to price in its widest sense (*ibid.*: 4–5).

Offering the example of people crossing a dangerous thoroughfare to reach a restaurant, he inferred that fewer people would do so if it became more dangerous; contrarily, more people would do so if the gains from crossing became more attractive (or if less dangerous alternatives such as a pedestrian bridge became available). According to Coase, a generalization of such knowledge is sufficient to constitute price theory; therefore, the assumption that economic agents are rational utility maximizers is "unnecessary and sterile" (*ibid.*: 3–5).

What he instead presupposed is a weak behavioral assumption that "by and large, people choose to perform those actions which they think will promote their own interests" (*ibid.*: 27). As in the case of the consumers considered above, Coase also assumed that producers (entrepreneurs) make decisions according to "prices in its widest sense," as highlighted in the following passage:

> The existence of transaction costs will lead those who wish to trade to engage in practices which bring about a reduction of transaction costs whenever the loss suffered in other ways from the adoption of those practices is less than the transaction costs saved (*ibid.*: 6–7).

Such practices may include the establishment of the firm as well as changes in internal and external relations, type of contract, and kind of product or service supplied (*ibid.*: 7). In this manner, Coase clarified his cost-based perspective of the previously insufficiently explained relationship between economic agents and institutions, identifying human beings, led by costs, as the prime producers of change in institutional structures and not as mere cost minimizers, in contrast to the view of mainstream economists.

Coase's perspective of "prices in its widest sense" can be traced back to the opportunity cost theory espoused since the 1930s, where the monetary and non-monetary characteristics of costs and receipts are considered in relation to a firm's decision-making. His educational background at the London School of Economics (LSE) was rooted in accounting rather than economics. Indeed, his degree in commerce at the LSE featured courses in cost accounting and financial accounting (he also evinced some interest in business and industry), but not one course in economics.

As a result, in the 1930s, he came to work on both accounting and the theory of the firm (Coase, 1990: 3). One of his works was "Business Organization and the Accountant" (1938), which appeared in *The Accountant* as a weekly series of 12 articles. In this series, Coase discussed the problems of business administration from an accounting perspective by emphasizing that "attention must be concentrated on the variations which will result if a particular decision is taken, and the variations that are relevant to business decisions are those in

costs and/or receipts" (Coase, 1938: 470). He elaborated on this point thus:

> In these articles, the notion of costs which will be used is that of "opportunity" or "alternative" cost. The cost of doing anything consists of the receipts which could have been obtained if that particular decision had not been taken. When someone says that a particular course of action is "not worth the cost," this merely means that he prefers some other course—the receipts of the individual, whether monetary or non-monetary does not matter, will be greater if he does not do it. This particular concept of costs would seem to be the only one which is of use in the solution of business problems since it concentrates attention on the alternative courses of action which are open to the business man. (*ibid.*: 560)

Later in the series, after expounding the importance of opportunity costs for such business problems, Coase reached the problem of make-or-buy decisions, which involve the costs of organizing transactions in the firm and making transactions in the market. Hence, Coase's thorough application of the opportunity cost concept was the foundation of the theoretical construction of his two seminal papers. Given the development of Coase's theory as reviewed in Section 2, we can see that his view of costs led him to study the nature of the firm and, later, that of property rights. Although he did not use the term "opportunity cost" in "The Nature of the Firm" (1937), his latent perspective of opportunity costs paved the way for analyzing the substitutional or alternative institutional structure of production.

According to Coase's later reflections, the approach to costs presented in the series was an exposition of the common views of economists at the LSE, not his own personal view. The definition of opportunity cost developed at the LSE was, according to Coase, derived from Frank Knight and Phillip Wicksteed, as expounded by Lionel Robbins, and also influenced by Friedrich Hayek, who added an Austrian flavor (Coase, 1990: 7–9). His view of costs was characterized by its subjectivist character, as Buchanan pointed out:

> Coase quite explicitly ties cost to choice, and he rejects any attempt to classify costs into categories—e.g., fixed and variable—independently of the identification of the decision under consideration. … Any profit opportunity that is within the realm of possibility but which is rejected becomes a cost of undertaking the preferred course of action. Despite the necessity of accepting this straightforward result of apparently consistent opportunity-cost reasoning, economists were—and are—extremely reluctant to take this step. (Buchanan, 1969: 28)

This perspective of costs is founded on Coase's view of economic agents, which incur opportunity costs stemming from alternative institutional structures within their abilities of perception and calculation. Hence, Coase's view of costs such as opportunity costs offers

normative and positive propositions. As a normative proposition, Coase asserted that any economic agent, especially a businessperson, must consider *all* the relevant opportunity costs when decision-making in order to account for *all* the relevant effects of his or her possible courses of action. As a positive proposition, Coase asserted that economic agents choose their courses of action according to their receipts and to the existence and extent of costs, thus explaining the establishment of particular institutional structures.

In addition, a curious argument appeared in "Accounting and the Theory of the Firm" (1990), in which Coase emphasized the role of accounting systems in the firm in relation to the decentralization of decision-making. As Coase indicated, such an internal accounting system replaces the price system of the market; costs do not arise directly out of market operations but are computed and provided by the accounting system. He explained:

> In a firm, men also make decisions independently of those that others are making (there is delegation of responsibility and all decisions are not the product of a single mind) and when people in a firm use its resources, they often need to be given some figure representing their costs, so as to be able to compare it with receipts. Since using a resource denies its use to others, the figure for cost should represent what it would yield elsewhere in the business (Coase, 1990: 11).

Given the multiple individual decision-makers in a firm, an accounting system is not optional; rather, it plays a substantive and crucial role in moderating informational asymmetry and cost uncertainties. Following these two systems, inside and outside the firm, that reflect the opportunity costs of resources, businesspeople make decisions based on costs and receipts, realizing the maximum value of all the used resources. By comparison, in the case of consumer behavior, people without such an accounting system (which mitigates their individual limits of calculation and decision-making) would behave more irrationally. At this point, Coase seemed to provide room for accounting systems to supplement the rationality of economic agents who need to perceive and calculate the relevant costs and receipts. If so, the rationality of economic agents regarding institutional costs should not be assumed solely in themselves, but also in the organization to which they belong.

Thus, Coase's view of costs from the 1930s provides the platform to understand the behavior of economic agents within the context of an alternative institutional structure that involves accounting systems and provides the necessary information on costs and receipts to influence their behavior. Since the 1970s, Coase has rejected the view of humans as rational utility maximizers, revealing his realist inclinations (which were latent in his early studies) behind his commonsense attitude to applying economic theories to reality. However, from the above argument, we see that Coase's disagreements with other new institutional economists are

in line with his theories of the 1930s pertaining to costs and the firm. Therefore, we must now emphasize the different rather than common aspects between Coase and his new institutional followers in order to propagate his true vision of institutional economic analysis, which is based on costs and the accounting system.

5. Conclusion

This paper reviewed Coase's ideas and showed that he viewed human behavior within the institutional context, where institutional structures are explained in terms of rational and intentional human behavior involving the relevant costs. For this purpose, I reviewed Coase's criticisms of maximizing and opportunistic behavior in relation to his theory of costs and showed its importance for his framework of institutional analysis.

In Section 1, I argued that while Coase's contribution to NIE is unquestionable, he has obvious disagreements with new institutional economists with regard to their contrasting views of economic agents. Therefore, Coase does depart from some aspects of the thoughts of his new institutional followers, possibly undermining the new institutionalist explanation of the existence of institutions.

In Section 2, I reviewed Coase's seminal articles (Coase, 1937, 1960), arguing that they worked to the advantage of neoclassical economics instead of requiring a different approach. Coase's finding worked as part of the protective belt of the neoclassical research body, defending its theoretical core of rational behavior by introducing the concept of transaction costs. As for NIE succeeding Coase, it was also shown that two types of behavioral assumptions, namely maximizing and opportunistic behavior, were put forward to explain the establishment of efficient institutional structures.

Section 3, however, showed that Coase departed from these two institutional views of economic agents. Regarding maximizing behavior, it was shown that Coase opposed the versatility of economics as a science of choice and proposed studying man as he actually is. In terms of opportunistic behavior, Coase believed that although opportunistic behavior may encourage vertical integration, we must examine transaction and organizing costs to explain alternative institutional structures. These criticisms can be understood well in relation to his emphasis on the realism of theoretical assumptions.

In Section 4, I dealt with Coase's view of human behavior, highlighting that he acknowledged not only rational elements but also others such as instincts in the hope that sociobiology would illuminate the whole picture of human nature. However, Coase did not incorporate those elements into his institutional analysis to develop an evolutionary approach. By examining Coase's reassertion in his main book, I argued that he assumed a looser tendency

for agents to promote their own interests rather than unrealistic maximizing behavior. I also reviewed Coase's theory of costs and accounting systems and showed its significance for his theory of institutional structures.

Thus, this paper showed that Coase's view of costs provides a consistent perspective with which to analyze alternative institutional structures based on the receipts and costs perceived by economic agents. While such a perspective paved the way for his subsequent studies and ultimately lead to the development of NIE, new institutional followers of Coase ignored his views of costs and economic agents and developed overly strong and unrealistic behavioral assumptions. Therefore, Coase, in the process of persuading mainstream economists to incorporate his ideas, actually had to reject the theoretical core of NIE to pursue his initial goal of institutional analysis. Hence, if we are to understand Coase's true vision of institutional economic analysis, we must emphasize the *differences* between new institutional and Coasean economics.

References

Buchanan, J. M. (1969), *Cost and Choice*, Chicago: Markham Publishing Company.

Coase, R. H. (1937), "The Nature of the Firm," *Economica*, 4(16): 386–405.

—— (1938), "Business Organization and the Accountant I–XII," *The Accountant*, October 1–December 17: 470–835.

—— (1960), "The Problem of Social Cost," *Journal of Law and Economics*, 3: 1–44.

—— (1976), "Adam Smith's View of Man," *Journal of Law and Economics*, 19(3): 529–546.

—— (1977), "Economics and Contiguous Disciplines," in *The Organization and Retrieval of Economic Knowledge*, edited by M. Perlman, Boulder: Westview Press, 481–495.

—— (1978), "Discussion: Economics and Biology," *American Economic Review*, 68(2): 244–245.

—— (1984), "The New Institutional Economics," *Journal of Institutional and Theoretical Economics*, 140: 229–231.

—— (1988), *The Firm, the Market, and the Law*, Chicago: University of Chicago Press.

—— (1988a), "How Should Economists Choose?," in *Ideas, Their Origins, and Their Consequences: Lectures to Commemorate the Life and Work of G. Warren Nutter*, edited by Thomas Jefferson Center Foundation, Washington, D. C.: American Enterprise Institute for Public Policy Research, 57–79.

—— (1988b), "The Nature of the Firm: Influence," *Journal of Law, Economics, and Organization*, 4(1): 33–47.

—— (1990), "Accounting and the Theory of the Firm," *Journal of Accounting and Economics*,

12: 3–13.

—— (1993), “Coase on Posner on Coase,” *Journal of Institutional and Theoretical Economics*, 149(1): 96–98.

—— (1994), *Essays on Economics and Economists*, Chicago: University of Chicago Press.

—— (1998), “The New Institutional Economics,” *American Economic Review*, 88(2): 72–74.

Demsetz, H. (1997), *The Economics of the Business Firm: Seven Critical Commentaries*, Cambridge: Cambridge University Press.

Eggertsson, T. (1990), *Economic Behavior and Institutions*, Cambridge: Cambridge University Press.

Foss, N. (1994), “The Two Coasian Traditions,” *Review of Political Economy*, 6(1), 37–61.

Friedman, M. (1953), *Essays in Positive Economics*, Chicago: University of Chicago Press.

Ghiselin, M. T. (1978), “The Economy of the Body,” *American Economic Review*, 68(2): 233–237.

Hazlett, T. W. (1997), “Looking for Results: Nobel Laureate Ronald Coase on Rights, Resources, and Regulation,” *Reason*, January 1997; 28(8): 40–46.

Klein, B., Crawford, R. G. and Alchian, A. A. (1978), “Vertical Integration, Appropriable Rents, and the Competitive Contracting Process,” *Journal of Law and Economics*, 21(2): 297–326.

Mäki, U. (1998), “Is Coase a Realist?,” *Philosophy of the Social Sciences*, 28(1): 5–31.

McCloskey, D. N. (1998), “The Good Old Coase Theorem and the Good Old Chicago School,” In Medema (ed.) (1998), 239–248.

Medema, S. G. (1994), *Ronald H. Coase*, London: Macmillan.

—— (1995), “Ronald Coase on Economics and Economic Method,” *History of Economic Review*, 24: 1–22.

Medema, S. G. (ed.) (1998), *Coasean Economics: Law and Economics and the New Institutional Economics*, Boston/Dordcht/London: Kluwer Academic Publishers.

Mikami, M. (2011), “Evolutionary Aspects of Coasean Economics,” *Evolutionary and Institutional Economics Review*, 8(1): 177–187.

Nobel Prize Organization (1991), "The Prize in Economics 1991 - Press Release," http://www.nobelprize.org/nobel_prizes/economics/laureates/1991/press.html.

Posner, R. A. (1993), “The New Institutional Economics Meets Law and Economics,” *Journal of Institutional and Theoretical Economics*, 149(1): 73–87.

—— (1993a), “Reply,” *Journal of Institutional and Theoretical Economics*, 149(1): 119–121.

—— (1993b), “Ronald Coase and Methodology,” *Journal of Economic Perspectives*, 7(4): 195–210.

Stigler, G. J. (1966), *The Theory of Price*, Third Edition, New York: Macmillan.

Wang, N. (2003), "Coase on the Nature of Economics," *Cambridge Journal of Economics*, 27: 807–829.

Zerbe, R. O. and Medema, S. G. (1998), "Ronald Coase, the British Tradition, and the Future of Economic Method," In Medema (ed.) (1998), 209–238.

Williamson, O. E. (1975), *Markets and Hierarchies*, New York: Free Press.

—— (1993), "Opportunism and Its Critics," *Managerial and Decision Economics*, 14(2): 97–107.